STaTa®
Statistics/Data analysis

```
1 .
2 . do code/1-clean-main-data.do

3 . cd C:\Users\ecsxn\Documents\repo\rd_spillovers_1433
  C:\Users\ecsxn\Documents\repo\rd_spillovers_1433

4 .
5 . //read in inflation adjustment
6 . import excel data/raw/SeriesReport-20210412000633_ad0ea3.xlsx, cellrange(A12) firstr
  > ow clear
  (15 vars, 9,988 obs)

7 . ren Year year

8 . drop if year == .
  (9,943 observations deleted)

9 . egen dollarvalue = rowtotal(Jan-Dec)

10. replace dollarvalue = dollarvalue / 12
  (45 real changes made)

11. keep year dollarvalue

12. replace dollarvalue = dollarvalue / 255.6574
  (45 real changes made)

13. save data/intermediate/inflation_adjustment, replace
  file data/intermediate/inflation_adjustment.dta saved

14.
15. //-------------read in and standardize FFRDC data---------
16. //seed the append loop
17. clear

18. set obs 1
  number of observations (_N) was 0, now 1

19. gen x=.
  (1 missing value generated)

20. save data/intermediate/ffrdcrd_all, replace
  file data/intermediate/ffrdcrd_all.dta saved

21.
22. //read in and append FFRDC data
23. forvalues yr = 1979(1)2019 {
    2.      display `yr'
    3.      import delimited data/raw/FFRDC/ffrdcrd`yr'.csv, clear
    4.
24.          tostring(questionnaire_no), format(%02.0f) replace
    5.        tostring(inst_zip), format(%05.0f) replace
    6.        tostring(column status), replace
    7.
25.        append using data/intermediate/ffrdcrd_all
    8.      save data/intermediate/ffrdcrd_all, replace
    9. }
  1979
  (15 vars, 449 obs)
  questionnaire_no was byte now str2
  inst_zip was long now str5
  column already string; no replace
  status already string; no replace
  file data/intermediate/ffrdcrd_all.dta saved
  1980
  (15 vars, 696 obs)
  questionnaire_no was byte now str2
  inst_zip was long now str5
  column already string; no replace
  status already string; no replace
  file data/intermediate/ffrdcrd_all.dta saved
```

```
1981
(15 vars, 1,148 obs)
questionnaire_no was byte now str2
inst_zip was long now str5
column already string; no replace
status already string; no replace
file data/intermediate/ffrdcrd_all.dta saved
1982
(15 vars, 994 obs)
questionnaire_no was byte now str2
inst_zip was long now str5
column already string; no replace
status already string; no replace
(note: variable column was str7, now str13 to accommodate using data's values)
file data/intermediate/ffrdcrd_all.dta saved
1983
(15 vars, 1,002 obs)
questionnaire_no was byte now str2
inst_zip was long now str5
column already string; no replace
status already string; no replace
(note: variable column was str7, now str13 to accommodate using data's values)
file data/intermediate/ffrdcrd_all.dta saved
1984
(15 vars, 1,067 obs)
questionnaire_no was byte now str2
inst_zip was long now str5
column already string; no replace
status already string; no replace
(note: variable column was str7, now str13 to accommodate using data's values)
file data/intermediate/ffrdcrd_all.dta saved
1985
(15 vars, 976 obs)
questionnaire_no was byte now str2
inst_zip was long now str5
column already string; no replace
status already string; no replace
(note: variable column was str7, now str13 to accommodate using data's values)
file data/intermediate/ffrdcrd_all.dta saved
1986
(15 vars, 960 obs)
questionnaire_no was byte now str2
inst_zip was long now str5
column already string; no replace
status already string; no replace
(note: variable column was str7, now str13 to accommodate using data's values)
file data/intermediate/ffrdcrd_all.dta saved
1987
(15 vars, 938 obs)
questionnaire_no was byte now str2
inst_zip was long now str5
column already string; no replace
status already string; no replace
(note: variable column was str7, now str13 to accommodate using data's values)
file data/intermediate/ffrdcrd_all.dta saved
1988
(15 vars, 877 obs)
questionnaire_no was byte now str2
inst_zip was long now str5
column already string; no replace
status already string; no replace
(note: variable column was str7, now str13 to accommodate using data's values)
file data/intermediate/ffrdcrd_all.dta saved
1989
(15 vars, 853 obs)
questionnaire_no was byte now str2
inst_zip was long now str5
column already string; no replace
status already string; no replace
(note: variable column was str7, now str13 to accommodate using data's values)
file data/intermediate/ffrdcrd_all.dta saved
1990
```

```
(15 vars, 745 obs)
questionnaire_no was byte now str2
inst_zip was long now str5
column already string; no replace
status already string; no replace
(note: variable column was str7, now str13 to accommodate using data's values)
file data/intermediate/ffrdcrd_all.dta saved
1991
(15 vars, 803 obs)
questionnaire_no was byte now str2
inst_zip was long now str5
column already string; no replace
status already string; no replace
(note: variable column was str7, now str13 to accommodate using data's values)
file data/intermediate/ffrdcrd_all.dta saved
1992
(15 vars, 907 obs)
questionnaire_no was byte now str2
inst_zip was long now str5
column already string; no replace
status already string; no replace
(note: variable column was str7, now str13 to accommodate using data's values)
file data/intermediate/ffrdcrd_all.dta saved
1993
(15 vars, 959 obs)
questionnaire_no was byte now str2
inst_zip was long now str5
column already string; no replace
status already string; no replace
(note: variable column was str7, now str13 to accommodate using data's values)
file data/intermediate/ffrdcrd_all.dta saved
1994
(15 vars, 914 obs)
questionnaire_no was byte now str2
inst_zip was long now str5
column already string; no replace
status already string; no replace
(note: variable column was str7, now str13 to accommodate using data's values)
file data/intermediate/ffrdcrd_all.dta saved
1995
(15 vars, 1,008 obs)
questionnaire_no was byte now str2
inst_zip was long now str5
column already string; no replace
status already string; no replace
(note: variable column was str7, now str13 to accommodate using data's values)
file data/intermediate/ffrdcrd_all.dta saved
1996
(15 vars, 716 obs)
questionnaire_no was byte now str2
inst_zip was long now str5
column already string; no replace
status already string; no replace
(note: variable column was str7, now str13 to accommodate using data's values)
file data/intermediate/ffrdcrd_all.dta saved
1997
(15 vars, 730 obs)
questionnaire_no already string; no replace
inst_zip was long now str5
column already string; no replace
status already string; no replace
(note: variable column was str7, now str13 to accommodate using data's values)
file data/intermediate/ffrdcrd_all.dta saved
1998
(15 vars, 628 obs)
questionnaire_no already string; no replace
inst_zip was long now str5
column already string; no replace
status already string; no replace
(note: variable inst_city was str15, now str17 to accommodate using data's values)
(note: variable column was str7, now str13 to accommodate using data's values)
file data/intermediate/ffrdcrd_all.dta saved
```

```
1999
(15 vars, 697 obs)
questionnaire_no already string; no replace
inst_zip was long now str5
column already string; no replace
status already string; no replace
(note: variable inst_city was str15, now str17 to accommodate using data's values)
(note: variable column was str7, now str13 to accommodate using data's values)
file data/intermediate/ffrdcrd_all.dta saved
2000
(15 vars, 718 obs)
questionnaire_no already string; no replace
inst_zip was long now str5
column already string; no replace
status already string; no replace
(note: variable inst_city was str15, now str17 to accommodate using data's values)
(note: variable column was str7, now str13 to accommodate using data's values)
file data/intermediate/ffrdcrd_all.dta saved
2001
(15 vars, 1,488 obs)
questionnaire_no already string; no replace
inst_zip already string; no replace
column already string; no replace
status already string; no replace
(note: variable inst_city was str15, now str17 to accommodate using data's values)
(note: variable column was str7, now str13 to accommodate using data's values)
file data/intermediate/ffrdcrd_all.dta saved
2002
(15 vars, 120 obs)
questionnaire_no was byte now str2
inst_zip already string; no replace
column was byte now str1
status already string; no replace
(note: variable inst_city was str15, now str17 to accommodate using data's values)
(note: variable questionnaire_no was str2, now str3 to accommodate using data's
      values)
(note: variable question was str6, now str35 to accommodate using data's values)
(note: variable row was str26, now str44 to accommodate using data's values)
(note: variable column was str1, now str13 to accommodate using data's values)
file data/intermediate/ffrdcrd_all.dta saved
2003
(15 vars, 120 obs)
questionnaire_no was byte now str2
inst_zip already string; no replace
column was byte now str1
status already string; no replace
(note: variable inst_city was str15, now str17 to accommodate using data's values)
(note: variable questionnaire_no was str2, now str3 to accommodate using data's
      values)
(note: variable question was str6, now str35 to accommodate using data's values)
(note: variable row was str26, now str44 to accommodate using data's values)
(note: variable column was str1, now str13 to accommodate using data's values)
file data/intermediate/ffrdcrd_all.dta saved
2004
(15 vars, 117 obs)
questionnaire_no was byte now str2
inst_zip already string; no replace
column was byte now str1
status was byte now str1
(note: variable inst_city was str15, now str17 to accommodate using data's values)
(note: variable questionnaire_no was str2, now str3 to accommodate using data's
      values)
(note: variable question was str6, now str35 to accommodate using data's values)
(note: variable row was str26, now str44 to accommodate using data's values)
(note: variable column was str1, now str13 to accommodate using data's values)
file data/intermediate/ffrdcrd_all.dta saved
2005
(15 vars, 122 obs)
questionnaire_no was byte now str2
inst_zip already string; no replace
column was byte now str1
status was byte now str1
```

```
(note: variable inst_city was str15, now str17 to accommodate using data's values)
(note: variable questionnaire_no was str2, now str3 to accommodate using data's
       values)
(note: variable question was str6, now str35 to accommodate using data's values)
(note: variable row was str26, now str44 to accommodate using data's values)
(note: variable column was str1, now str13 to accommodate using data's values)
file data/intermediate/ffrdcrd_all.dta saved
2006
(15 vars, 122 obs)
questionnaire_no was byte now str2
inst_zip already string; no replace
column was byte now str1
status was byte now str1
(note: variable inst_city was str15, now str17 to accommodate using data's values)
(note: variable questionnaire_no was str2, now str3 to accommodate using data's
       values)
(note: variable question was str6, now str35 to accommodate using data's values)
(note: variable row was str26, now str44 to accommodate using data's values)
(note: variable column was str1, now str13 to accommodate using data's values)
file data/intermediate/ffrdcrd_all.dta saved
2007
(15 vars, 126 obs)
questionnaire_no was byte now str2
inst_zip already string; no replace
column was byte now str1
status was byte now str1
(note: variable inst_city was str15, now str17 to accommodate using data's values)
(note: variable questionnaire_no was str2, now str3 to accommodate using data's
       values)
(note: variable question was str6, now str35 to accommodate using data's values)
(note: variable row was str26, now str44 to accommodate using data's values)
(note: variable column was str1, now str13 to accommodate using data's values)
file data/intermediate/ffrdcrd_all.dta saved
2008
(15 vars, 129 obs)
questionnaire_no was byte now str2
inst_zip already string; no replace
column was byte now str1
status was byte now str1
(note: variable inst_city was str15, now str17 to accommodate using data's values)
(note: variable questionnaire_no was str2, now str3 to accommodate using data's
       values)
(note: variable question was str6, now str35 to accommodate using data's values)
(note: variable row was str26, now str44 to accommodate using data's values)
(note: variable column was str1, now str13 to accommodate using data's values)
file data/intermediate/ffrdcrd_all.dta saved
2009
(15 vars, 132 obs)
questionnaire_no was byte now str2
inst_zip already string; no replace
column was byte now str1
status was byte now str1
(note: variable inst_city was str15, now str17 to accommodate using data's values)
(note: variable questionnaire_no was str2, now str3 to accommodate using data's
       values)
(note: variable question was str6, now str35 to accommodate using data's values)
(note: variable row was str26, now str44 to accommodate using data's values)
(note: variable column was str1, now str13 to accommodate using data's values)
file data/intermediate/ffrdcrd_all.dta saved
2010
(15 vars, 520 obs)
questionnaire_no already string; no replace
inst_zip already string; no replace
column already string; no replace
status was byte now str1
(note: variable inst_name_long was str63, now str65 to accommodate using data's
       values)
(note: variable inst_city was str15, now str17 to accommodate using data's values)
(note: variable question was str11, now str35 to accommodate using data's values)
(note: variable row was str26, now str44 to accommodate using data's values)
(note: variable column was str10, now str13 to accommodate using data's values)
file data/intermediate/ffrdcrd_all.dta saved
```

2011
(15 vars, 532 obs)
questionnaire_no already string; no **replace**
inst_zip already string; no **replace**
column already string; no **replace**
status already string; no **replace**
(note: variable inst_name_long was str63, now str65 to accommodate using data's
        values)
(note: variable inst_city was str15, now str17 to accommodate using data's values)
(note: variable question was str11, now str35 to accommodate using data's values)
(note: variable row was str26, now str44 to accommodate using data's values)
(note: variable column was str10, now str13 to accommodate using data's values)
file data/intermediate/ffrdcrd_all.dta saved
2012
(15 vars, 520 obs)
questionnaire_no already string; no **replace**
inst_zip already string; no **replace**
column already string; no **replace**
status already string; no **replace**
(note: variable inst_name_long was str63, now str65 to accommodate using data's
        values)
(note: variable inst_city was str15, now str17 to accommodate using data's values)
(note: variable question was str11, now str35 to accommodate using data's values)
(note: variable row was str26, now str44 to accommodate using data's values)
(note: variable column was str10, now str13 to accommodate using data's values)
file data/intermediate/ffrdcrd_all.dta saved
2013
(15 vars, 541 obs)
questionnaire_no already string; no **replace**
inst_zip already string; no **replace**
column already string; no **replace**
status already string; no **replace**
(note: variable inst_city was str15, now str17 to accommodate using data's values)
(note: variable question was str11, now str35 to accommodate using data's values)
(note: variable row was str26, now str44 to accommodate using data's values)
(note: variable column was str10, now str13 to accommodate using data's values)
file data/intermediate/ffrdcrd_all.dta saved
2014
(15 vars, 548 obs)
questionnaire_no already string; no **replace**
inst_zip already string; no **replace**
column already string; no **replace**
status already string; no **replace**
(note: variable inst_name_long was str63, now str91 to accommodate using data's
        values)
(note: variable inst_city was str15, now str17 to accommodate using data's values)
(note: variable question was str11, now str35 to accommodate using data's values)
(note: variable row was str26, now str44 to accommodate using data's values)
(note: variable column was str10, now str13 to accommodate using data's values)
file data/intermediate/ffrdcrd_all.dta saved
2015
(15 vars, 559 obs)
questionnaire_no already string; no **replace**
inst_zip already string; no **replace**
column already string; no **replace**
status already string; no **replace**
(note: variable inst_name_long was str63, now str91 to accommodate using data's
        values)
(note: variable inst_city was str15, now str17 to accommodate using data's values)
(note: variable question was str11, now str35 to accommodate using data's values)
(note: variable row was str26, now str44 to accommodate using data's values)
(note: variable column was str10, now str13 to accommodate using data's values)
file data/intermediate/ffrdcrd_all.dta saved
2016
(15 vars, 760 obs)
questionnaire_no already string; no **replace**
inst_zip already string; no **replace**
column already string; no **replace**
status already string; no **replace**
(note: variable inst_name_long was str63, now str91 to accommodate using data's
        values)
(note: variable inst_city was str15, now str17 to accommodate using data's values)

```
(note: variable question was str14, now str35 to accommodate using data's values)
(note: variable column was str10, now str13 to accommodate using data's values)
file data/intermediate/ffrdcrd_all.dta saved
2017
(15 vars, 771 obs)
questionnaire_no already string; no replace
inst_zip already string; no replace
column already string; no replace
status was byte now str1
(note: variable inst_name_long was str63, now str91 to accommodate using data's
       values)
(note: variable inst_city was str15, now str17 to accommodate using data's values)
(note: variable question was str14, now str35 to accommodate using data's values)
(note: variable column was str10, now str13 to accommodate using data's values)
file data/intermediate/ffrdcrd_all.dta saved
2018
(15 vars, 776 obs)
questionnaire_no already string; no replace
inst_zip already string; no replace
column already string; no replace
status was byte now str1
(note: variable inst_name_long was str63, now str91 to accommodate using data's
       values)
(note: variable inst_city was str15, now str17 to accommodate using data's values)
(note: variable question was str14, now str35 to accommodate using data's values)
(note: variable column was str10, now str13 to accommodate using data's values)
file data/intermediate/ffrdcrd_all.dta saved
2019
(17 vars, 928 obs)
questionnaire_no already string; no replace
inst_zip already string; no replace
column already string; no replace
status was byte now str1
(note: variable inst_name_long was str63, now str91 to accommodate using data's
       values)
(note: variable inst_city was str15, now str17 to accommodate using data's values)
(note: variable question was str22, now str35 to accommodate using data's values)
(note: variable column was str10, now str13 to accommodate using data's values)
file data/intermediate/ffrdcrd_all.dta saved

26.
27. //drop seed observation
28. drop if year == .
(1 observation deleted)

29. drop x

30. save data/intermediate/ffrdcrd_all, replace
file data/intermediate/ffrdcrd_all.dta saved

31.
32.
33. //--------------------crosswalk FFRDC data to county----------------------------
34. //import crosswalk file, keep only zips with a unique county, merge to FFRDC data by
  >  zip
35. import excel data/raw/COUNTY_ZIP_122020.xlsx, firstrow clear
(6 vars, 54,194 obs)

36. duplicates tag ZIP, gen(dup)

Duplicates in terms of ZIP
```

```
37. drop if dup > 0
   (25,876 observations deleted)

38. drop dup

39. save data/intermediate/zip_to_county_unique, replace
   file data/intermediate/zip_to_county_unique.dta saved

40.
41. use data/intermediate/ffrdcrd_all, clear

42. rename inst_zip ZIP

43. replace ZIP = substr(ZIP,1,5)
   (2,210 real changes made)

44. merge m:1 ZIP using data/intermediate/zip_to_county_unique, keepusing(COUNTY)

        Result                          # of obs.
        ─────────────────────────────────────────
        not matched                        38,226
            from master                     9,936  (_merge==1)
            from using                     28,290  (_merge==2)

        matched                            17,780  (_merge==3)
        ─────────────────────────────────────────

45. drop if _merge == 2
   (28,290 observations deleted)

46.
47. //handcode counties where there is no unique county for that zip
48. replace COUNTY = "25017" if inst_city == "Lexington"
   (1,287 real changes made)

49. replace COUNTY = "51013" if inst_city == "Arlington"
   (66 real changes made)

50. replace COUNTY = "51510" if inst_city == "Alexandria"
   (673 real changes made)

51. replace COUNTY = "51003" if inst_city == "Charlottesville"
   (556 real changes made)

52. replace COUNTY = "17043" if inst_city == "Argonne"
   (2,316 real changes made)

53. replace COUNTY = "48453" if inst_city == "Austin"
   (62 real changes made)

54. replace COUNTY = "16019" if inst_city == "Idaho Falls"
   (265 real changes made)

55. replace COUNTY = "35028" if inst_city == "Los Alamos"
   (2,511 real changes made)

56. replace COUNTY = "06037" if inst_city == "Santa Monica"
   (238 real changes made)

57. replace COUNTY = "06001" if inst_city == "Livermore"
   (1,884 real changes made)
```

```
58. drop if ZIP == "99999"
   (78 observations deleted)

59.
60. drop _merge

61. save data/intermediate/ffrdcrd_all, replace
   file data/intermediate/ffrdcrd_all.dta saved

62.
63.
64. //--------------------------summarize relevant ffrdc data----------------------
65.
66. //filter only total funding and federal funding
67. use data/intermediate/ffrdcrd_all, clear

68. tab question year
```

	1979	1980	year 1981	1982	1983	19
question > 84 | Total						
ARRA funds > 0 | 110	0	0	0	0	0	
Capital expenditure.. > 12 | 1,224	116	114	110	104	114	1
Equipment expenditu.. > 98 | 7,957	0	0	446	386	386	3
Expenditures by S&E.. > 04 | 9,639	268	516	521	437	436	5
Federal agency > 0 | 797	0	0	0	0	0	
Other agency specif.. > 0 | 144	0	0	0	0	0	
Passed through to s.. > 0 | 83	0	0	0	0	0	
Received as a subre.. > 0 | 52	0	0	0	0	0	
Source > 53 | 3,711	53	54	53	49	48	
Type of R&D > 0 | 3,921	0	0	0	0	0	
Total > 67 | 27,638	437	684	1,130	976	984	1,0

	1985	1986	year 1987	1988	1989	19
question > 90 | Total						
ARRA funds > 0 | 110	0	0	0	0	0	
Capital expenditure.. > 0 | 1,224	108	110	114	112	110	
Equipment expenditu.. > 28 | 7,957	370	364	378	348	326	3
Expenditures by S&E.. > 66 | 9,639	453	440	397	368	366	3
Federal agency > 0 | 797	0	0	0	0	0	
Other agency specif.. > 0 | 144	0	0	0	0	0	
Passed through to s.. > 0 | 83	0	0	0	0	0	
Received as a subre.. > 0 | 52	0	0	0	0	0	
Source > 51 | 3,711	45	46	49	49	51	

| | | Type of R&D | 0 | 0 | 0 | 0 | 0 | |
| > 0 | 3,921 | | | | | | | |

| | | Total | 976 | 960 | 938 | 877 | 853 | 7 |
| > 45 | 27,638 | | | | | | | |

| | | | | | year | | | |
| | question | 1991 | 1992 | 1993 | 1994 | 1995 | 19 |
> 96	Total						
ARRA funds	0	0	0	0	0	
> 0	110						
Capital expenditure..	0	0	0	0	0	
> 0	1,224						
Equipment expenditu..	352	416	446	420	464	3
> 16	7,957						
Expenditures by S&E..	397	437	460	441	485	3
> 48	9,639						
Federal agency	0	0	0	0	0	
> 0	797						
Other agency specif..	0	0	0	0	0	
> 0	144						
Passed through to s..	0	0	0	0	0	
> 0	83						
Received as a subre..	0	0	0	0	0	
> 0	52						
Source	54	54	53	53	59	
> 52	3,711						
Type of R&D	0	0	0	0	0	
> 0	3,921						

| | | Total | 803 | 907 | 959 | 914 | 1,008 | 7 |
| > 16 | 27,638 | | | | | | | |

| | | | | | year | | | |
| | question | 1997 | 1998 | 1999 | 2000 | 2001 | 20 |
> 02	Total						
ARRA funds	0	0	0	0	0	
> 0	110						
Capital expenditure..	0	0	0	0	0	
> 0	1,224						
Equipment expenditu..	337	258	276	310	632	
> 0	7,957						
Expenditures by S&E..	338	312	352	318	679	
> 0	9,639						
Federal agency	0	0	0	0	0	
> 0	797						
Other agency specif..	0	0	0	0	0	
> 0	144						
Passed through to s..	4	10	16	18	35	
> 0	83						
Received as a subre..	0	0	0	22	30	
> 0	52						
Source	51	48	53	50	112	1
> 20	3,711						
Type of R&D	0	0	0	0	0	
> 0	3,921						

| | | Total | 730 | 628 | 697 | 718 | 1,488 | 1 |
| > 20 | 27,638 | | | | | | | |

question > 08	Total	2003	2004	year 2005	2006	2007	20
ARRA funds > 0	110	0	0	0	0	0	
Capital expenditure.. > 0	1,224	0	0	0	0	0	
Equipment expenditu.. > 0	7,957	0	0	0	0	0	
Expenditures by S&E.. > 0	9,639	0	0	0	0	0	
Federal agency > 0	797	0	0	0	0	0	
Other agency specif.. > 0	144	0	0	0	0	0	
Passed through to s.. > 0	83	0	0	0	0	0	
Received as a subre.. > 0	52	0	0	0	0	0	
Source > 29	3,711	120	117	122	122	126	1
Type of R&D > 0	3,921	0	0	0	0	0	
Total > 29	27,638	120	117	122	122	126	1

question > 14	Total	2009	2010	year 2011	2012	2013	20
ARRA funds > 19	110	0	23	22	23	23	
Capital expenditure.. > 0	1,224	0	0	0	0	0	
Equipment expenditu.. > 0	7,957	0	0	0	0	0	
Expenditures by S&E.. > 0	9,639	0	0	0	0	0	
Federal agency > 0	797	0	0	0	0	0	
Other agency specif.. > 0	144	0	0	0	0	0	
Passed through to s.. > 0	83	0	0	0	0	0	
Received as a subre.. > 0	52	0	0	0	0	0	
Source > 45	3,711	132	140	141	137	143	1
Type of R&D > 84	3,921	0	357	369	360	375	3
Total > 48	27,638	132	520	532	520	541	5

	year					
question	2015	2016	2017	2018	2019	To
> tal						
ARRA funds	0	0	0	0	0	
> 110						
Capital expenditure..	0	0	0	0	0	1,
> 224						
Equipment expenditu..	0	0	0	0	0	7,
> 957						
Expenditures by S&E..	0	0	0	0	0	9,
> 639						
Federal agency	0	191	198	200	208	
> 797						
Other agency specif..	0	0	0	0	144	
> 144						
Passed through to s..	0	0	0	0	0	
> 83						
Received as a subre..	0	0	0	0	0	
> 52						
Source	148	155	156	159	159	3,
> 711						
Type of R&D	411	414	417	417	417	3,
> 921						
Total	559	760	771	776	928	27,
> 638						

```
69. keep if question == "Source"
   (23,927 observations deleted)

70. tab row year
```

	year					
row	1979	1980	1981	1982	1983	19
> 84 | Total						
All other sources	8	7	7	6	6	
> 6 | 471						
Business	0	0	0	0	0	
> 0 | 196						
Federal government	18	18	18	18	18	
> 17 | 1,137						
Industry	3	3	3	2	1	
> 4 | 182						
Institution funds, ..	2	2	2	2	3	
> 5 | 142						
Nonprofit organizat..	0	0	0	0	0	
> 0 | 121						
State and local gov..	4	6	5	3	2	
> 4 | 325						
Total	18	18	18	18	18	
> 17 | 1,137						
Total	53	54	53	49	48	
> 53 | 3,711						

row	1985	1986	year 1987	1988	1989	19
> 90 | Total						
All other sources	6	7	7	7	7	
> 7 | 471						
Business	0	0	0	0	0	
> 0 | 196						
Federal government	17	17	18	18	18	
> 18 | 1,137						
Industry	1	1	1	1	2	
> 2 | 182						
Institution funds, ..	2	2	2	2	3	
> 3 | 142						
Nonprofit organizat..	0	0	0	0	0	
> 0 | 121						
State and local gov..	2	2	3	3	3	
> 3 | 325						
Total	17	17	18	18	18	
> 18 | 1,137						
Total	45	46	49	49	51	
> 51 | 3,711						

row	1991	1992	year 1993	1994	1995	19
> 96 | Total						
All other sources	7	7	8	9	9	
> 8 | 471						
Business	0	0	0	0	0	
> 0 | 196						
Federal government	19	19	19	18	18	
> 18 | 1,137						
Industry	2	2	1	2	5	
> 2 | 182						
Institution funds, ..	4	4	3	2	4	
> 2 | 142						
Nonprofit organizat..	0	0	0	0	0	
> 0 | 121						
State and local gov..	3	3	3	4	5	
> 4 | 325						
Total	19	19	19	18	18	
> 18 | 1,137						
Total	54	54	53	53	59	
> 52 | 3,711						

row	1997	1998	year 1999	2000	2001	20
> 02 | Total						
All other sources	7	7	9	8	11	
> 11 | 471						
Business	0	0	0	0	0	
> 0 | 196						
Federal government	18	17	17	16	36	
> 36 | 1,137						
Industry	2	2	3	3	10	
> 13 | 182						
Institution funds, ..	2	2	3	3	10	
> 11 | 142						
Nonprofit organizat..	0	0	0	0	0	
> 0 | 121						
State and local gov..	4	3	4	4	9	

> 13 |	325					
	Total |	18	17	17	16	36
> 36 |	1,137					
	Total |	51	48	53	50	112	1
> 20 |	3,711					

		year				
row |	2003	2004	2005	2006	2007	20
> 08 | Total						
All other sources |	10	10	13	13	12
> 12 | 471						
Business |	0	0	0	0	0
> 0 | 196						
Federal government |	36	36	36	37	38
> 38 | 1,137						
Industry |	14	15	15	15	17
> 18 | 182						
Institution funds, .. |	11	7	10	8	9
> 8 | 142						
Nonprofit organizat.. |	0	0	0	0	0
> 0 | 121						
State and local gov.. |	13	13	12	12	12
> 15 | 325						
Total |	36	36	36	37	38
> 38 | 1,137						
Total |	120	117	122	122	126	1
> 29 | 3,711						

		year				
row |	2009	2010	2011	2012	2013	20
> 14 | Total						
All other sources |	14	21	19	18	20
> 20 | 471						
Business |	0	16	17	17	18
> 19 | 196						
Federal government |	39	40	41	40	41
> 41 | 1,137						
Industry |	17	0	0	0	0
> 0 | 182						
Institution funds, .. |	9	0	0	0	0
> 0 | 142						
Nonprofit organizat.. |	0	10	9	9	10
> 10 | 121						
State and local gov.. |	14	13	14	13	13
> 14 | 325						
Total |	39	40	41	40	41
> 41 | 1,137						
Total |	132	140	141	137	143	1
> 45 | 3,711						

row	year 2015	2016	2017	2018	2019	To
> tal						
All other sources	19	22	22	22	22	
> 471						
Business	20	22	21	23	23	
> 196						
Federal government	42	42	42	42	42	1,
> 137						
Industry	0	0	0	0	0	
> 182						
Institution funds, ..	0	0	0	0	0	
> 142						
Nonprofit organizat..	12	14	15	16	16	
> 121						
State and local gov..	13	13	14	14	14	
> 325						
Total	42	42	42	42	42	1,
> 137						
Total	148	155	156	159	159	3,
> 711						

71. keep if row == "Federal government" | row == "Total"
   (1,437 observations deleted)

72. replace row = "Federal" if row == "Federal government"
   (1,137 real changes made)

73. drop questionnaire_no status question

74. reshape wide data, i(year ffrdctype inst_name_long COUNTY) j(row) string
   (note: j = Federal Total)

Data	long	->	wide
Number of obs.	2274	->	1137
Number of variables	18	->	18
j variable (2 values)	row	->	(dropped)
xij variables:			
	data	->	dataFederal dataTotal

75.
76. rename dataFederal federal_funding

77. rename dataTotal total_funding

78.
79. //calculate total funding by county by year and number of ffrdcs by county by year
80. gen ffrdc_count = 1

81. collapse (sum) total_funding federal_funding ffrdc_count, by(COUNTY year)

82.
83. save data/intermediate/ffrdcrd_county_summary, replace
   file data/intermediate/ffrdcrd_county_summary.dta saved

```
84.
85. //-------------read in and standardize QECW all industry data---------
86. //seed the append loop
87. clear

88. set obs 1
   number of observations (_N) was 0, now 1

89. gen x=.
   (1 missing value generated)

90. save data/intermediate/qcew_allcounties_allind, replace
   file data/intermediate/qcew_allcounties_allind.dta saved

91.
92. //read in and append QCEW data
93. forvalues yr = 1975(1)2019 {
   2.       display `yr'
   3.          if `yr' <= 2015{
   4.                  import delimited "data/raw/QCEW/`yr'.annual 10 Total, all industr
 > ies.csv", clear
   5.          }
   6.          else {
   7.                  import delimited "data/raw/QCEW/`yr'.annual 10 10 Total, all indu
 > stries.csv", clear
   8.          }
   9.
94.         //keep only totals (not by ownership)
95.         rename area_fips COUNTY
   10.
96.         drop oty* //overtime stats, not relevant and not available
   11.        drop lq* //location quotients: only relevant for per-industry stats
   12.
97.            tostring(disclosure_code), replace
   13.
98.            append using data/intermediate/qcew_allcounties_allind
   14.        save data/intermediate/qcew_allcounties_allind, replace
   15. }
   1975
   (43 vars, 13,469 obs)
   disclosure_code already string; no replace
   file data/intermediate/qcew_allcounties_allind.dta saved
   1976
   (43 vars, 13,989 obs)
   disclosure_code already string; no replace
   file data/intermediate/qcew_allcounties_allind.dta saved
   1977
   (43 vars, 13,870 obs)
   disclosure_code already string; no replace
   file data/intermediate/qcew_allcounties_allind.dta saved
   1978
   (43 vars, 16,835 obs)
   disclosure_code already string; no replace
   file data/intermediate/qcew_allcounties_allind.dta saved
   1979
   (43 vars, 17,145 obs)
   disclosure_code already string; no replace
   file data/intermediate/qcew_allcounties_allind.dta saved
   1980
   (43 vars, 17,136 obs)
   disclosure_code already string; no replace
   file data/intermediate/qcew_allcounties_allind.dta saved
   1981
   (43 vars, 17,188 obs)
   disclosure_code already string; no replace
   file data/intermediate/qcew_allcounties_allind.dta saved
   1982
   (43 vars, 17,199 obs)
   disclosure_code already string; no replace
   file data/intermediate/qcew_allcounties_allind.dta saved
   1983
   (43 vars, 17,196 obs)
```

```
disclosure_code already string; no replace
file data/intermediate/qcew_allcounties_allind.dta saved
1984
(43 vars, 17,228 obs)
disclosure_code already string; no replace
file data/intermediate/qcew_allcounties_allind.dta saved
1985
(43 vars, 17,222 obs)
disclosure_code already string; no replace
file data/intermediate/qcew_allcounties_allind.dta saved
1986
(43 vars, 17,294 obs)
disclosure_code already string; no replace
file data/intermediate/qcew_allcounties_allind.dta saved
1987
(43 vars, 17,301 obs)
disclosure_code already string; no replace
file data/intermediate/qcew_allcounties_allind.dta saved
1988
(43 vars, 17,329 obs)
disclosure_code already string; no replace
file data/intermediate/qcew_allcounties_allind.dta saved
1989
(43 vars, 17,366 obs)
disclosure_code already string; no replace
file data/intermediate/qcew_allcounties_allind.dta saved
1990
(43 vars, 17,188 obs)
disclosure_code was byte now str1
(note: variable taxable_annual_wages was byte, now double to accommodate using
        data's values)
(note: variable annual_contributions was byte, now double to accommodate using
        data's values)
file data/intermediate/qcew_allcounties_allind.dta saved
1991
(43 vars, 17,225 obs)
disclosure_code was byte now str1
(note: variable taxable_annual_wages was byte, now double to accommodate using
        data's values)
(note: variable annual_contributions was byte, now double to accommodate using
        data's values)
file data/intermediate/qcew_allcounties_allind.dta saved
1992
(43 vars, 17,236 obs)
disclosure_code was byte now str1
(note: variable taxable_annual_wages was byte, now double to accommodate using
        data's values)
(note: variable annual_contributions was byte, now double to accommodate using
        data's values)
file data/intermediate/qcew_allcounties_allind.dta saved
1993
(43 vars, 17,243 obs)
disclosure_code was byte now str1
(note: variable taxable_annual_wages was byte, now double to accommodate using
        data's values)
(note: variable annual_contributions was byte, now double to accommodate using
        data's values)
file data/intermediate/qcew_allcounties_allind.dta saved
1994
(43 vars, 17,257 obs)
disclosure_code was byte now str1
(note: variable taxable_annual_wages was byte, now double to accommodate using
        data's values)
(note: variable annual_contributions was byte, now double to accommodate using
        data's values)
file data/intermediate/qcew_allcounties_allind.dta saved
1995
(43 vars, 17,260 obs)
disclosure_code was byte now str1
(note: variable taxable_annual_wages was byte, now double to accommodate using
        data's values)
(note: variable annual_contributions was byte, now double to accommodate using
```

```
        data's values)
file data/intermediate/qcew_allcounties_allind.dta saved
1996
(43 vars, 17,260 obs)
disclosure_code was byte now str1
(note: variable taxable_annual_wages was byte, now double to accommodate using
        data's values)
(note: variable annual_contributions was byte, now double to accommodate using
        data's values)
file data/intermediate/qcew_allcounties_allind.dta saved
1997
(43 vars, 17,263 obs)
disclosure_code was byte now str1
(note: variable taxable_annual_wages was byte, now double to accommodate using
        data's values)
(note: variable annual_contributions was byte, now double to accommodate using
        data's values)
file data/intermediate/qcew_allcounties_allind.dta saved
1998
(43 vars, 17,268 obs)
disclosure_code was byte now str1
(note: variable taxable_annual_wages was byte, now double to accommodate using
        data's values)
(note: variable annual_contributions was byte, now double to accommodate using
        data's values)
file data/intermediate/qcew_allcounties_allind.dta saved
1999
(43 vars, 17,275 obs)
disclosure_code was byte now str1
(note: variable taxable_annual_wages was byte, now double to accommodate using
        data's values)
(note: variable annual_contributions was byte, now double to accommodate using
        data's values)
file data/intermediate/qcew_allcounties_allind.dta saved
2000
(43 vars, 17,277 obs)
disclosure_code was byte now str1
(note: variable taxable_annual_wages was byte, now double to accommodate using
        data's values)
(note: variable annual_contributions was byte, now double to accommodate using
        data's values)
file data/intermediate/qcew_allcounties_allind.dta saved
2001
(43 vars, 19,086 obs)
disclosure_code already string; no replace
file data/intermediate/qcew_allcounties_allind.dta saved
2002
(43 vars, 19,076 obs)
disclosure_code already string; no replace
file data/intermediate/qcew_allcounties_allind.dta saved
2003
(43 vars, 19,074 obs)
disclosure_code already string; no replace
file data/intermediate/qcew_allcounties_allind.dta saved
2004
(43 vars, 19,086 obs)
disclosure_code already string; no replace
file data/intermediate/qcew_allcounties_allind.dta saved
2005
(43 vars, 19,123 obs)
disclosure_code already string; no replace
file data/intermediate/qcew_allcounties_allind.dta saved
2006
(43 vars, 19,122 obs)
disclosure_code already string; no replace
file data/intermediate/qcew_allcounties_allind.dta saved
2007
(43 vars, 19,142 obs)
disclosure_code already string; no replace
file data/intermediate/qcew_allcounties_allind.dta saved
2008
(43 vars, 19,152 obs)
```

```
     disclosure_code already string; no replace
     file data/intermediate/qcew_allcounties_allind.dta saved
     2009
     (43 vars, 19,143 obs)
     disclosure_code already string; no replace
     file data/intermediate/qcew_allcounties_allind.dta saved
     2010
     (43 vars, 19,144 obs)
     disclosure_code already string; no replace
     file data/intermediate/qcew_allcounties_allind.dta saved
     2011
     (43 vars, 19,144 obs)
     disclosure_code already string; no replace
     file data/intermediate/qcew_allcounties_allind.dta saved
     2012
     (43 vars, 19,143 obs)
     disclosure_code already string; no replace
     file data/intermediate/qcew_allcounties_allind.dta saved
     2013
     (43 vars, 19,245 obs)
     disclosure_code already string; no replace
     file data/intermediate/qcew_allcounties_allind.dta saved
     2014
     (43 vars, 19,244 obs)
     disclosure_code already string; no replace
     file data/intermediate/qcew_allcounties_allind.dta saved
     2015
     (43 vars, 19,257 obs)
     disclosure_code already string; no replace
     file data/intermediate/qcew_allcounties_allind.dta saved
     2016
     (43 vars, 19,238 obs)
     disclosure_code already string; no replace
     file data/intermediate/qcew_allcounties_allind.dta saved
     2017
     (43 vars, 19,241 obs)
     disclosure_code already string; no replace
     file data/intermediate/qcew_allcounties_allind.dta saved
     2018
     (43 vars, 19,238 obs)
     disclosure_code already string; no replace
     file data/intermediate/qcew_allcounties_allind.dta saved
     2019
     (43 vars, 19,238 obs)
     disclosure_code already string; no replace
     file data/intermediate/qcew_allcounties_allind.dta saved

 99.
100 //NOTE: disclosure_code = N means missing data
101 recode annual* avg_annual_pay total_annual_wages taxable (0 = .) if disclosure_code
  > == "N"
    (annual_avg_estabs_count: 16481 changes made)
    (annual_avg_emplvl: 31333 changes made)
    (annual_contributions: 31333 changes made)
    (annual_avg_wkly_wage: 31333 changes made)
    (avg_annual_pay: 31333 changes made)
    (total_annual_wages: 31333 changes made)
    (taxable_annual_wages: 31333 changes made)

102 tab agglvl_title
```

agglvl_title	Freq.	Percent	Cum.
CMSA or CSA, Total Covered	4,012	0.50	0.50
County, Total -- by ownership sector	548,566	68.43	68.93
County, Total Covered	145,669	18.17	87.10
MSA, Total -- by ownership sector	61,403	7.66	94.76
MSA, Total Covered	11,203	1.40	96.16
MicroSA, Total Covered	17,081	2.13	98.29
National, Total -- by ownership sector	193	0.02	98.31
National, Total Covered	45	0.01	98.32
State, Total -- by ownership sector	9,384	1.17	99.49
State, Total Covered	2,359	0.29	99.78
Total Government (U.S.)	30	0.00	99.79
Total Government, by State	1,590	0.20	99.99
Total U.I. Covered (U.S.)	30	0.00	99.99
Total, all U.S. CMSAs or all U.S. CSAs	30	0.00	99.99
Total, all U.S. MSAs	30	0.00	100.00
Total, all U.S. non-MSA counties	30	0.00	100.00
Total	801,655	100.00	

```
103 keep if agglvl_title == "County, Total Covered" //not using MSA data, using county d
  > ata and crosswalking for consistent MSA definition since redraw post census
  (655,987 observations deleted)

104
105 //drop seed observation
106 drop if year == .
  (0 observations deleted)

107 drop x

108 save data/intermediate/qcew_allcounties_allind, replace
  file data/intermediate/qcew_allcounties_allind.dta saved

109
110
111 // -------------- merge qcew with ffrdc data, adjust for inflation-----------------
  > --------
112 use data/intermediate/qcew_allcounties_allind, clear

113 merge 1:1 year COUNTY using data/intermediate/ffrdcrd_county_summary
```

Result	# of obs.	
not matched	144,758	
from master	144,758	(_merge==1)
from using	0	(_merge==2)
matched	911	(_merge==3)

```
114 drop _merge

115
116 merge m:1 year using data/intermediate/inflation_adjustment
```

Result	# of obs.	
not matched	0	
matched	145,669	(_merge==3)

```
117 drop _merge

118 foreach dollar_var of varlist total_annual_wages-federal_funding {
  2.      replace `dollar_var' = `dollar_var'/dollarvalue
  3. }
(139,855 real changes made)
(78,044 real changes made)
(78,044 real changes made)
variable annual_avg_wkly_wage was int now float
(139,855 real changes made)
variable avg_annual_pay was long now double
(139,855 real changes made)
(881 real changes made)
(881 real changes made)

119
120 save data/intermediate/merged_allcounties_allind, replace
file data/intermediate/merged_allcounties_allind.dta saved

121
122 //--------------crosswalk to and summarize by MSA----------------------
123 import delimited data/raw/qcew-county-msa-csa-crosswalk-csv.csv, clear
(7 vars, 3,251 obs)

124 gen COUNTY = string(countycode, "%05.0f")

125 save data/intermediate/county-to-msa, replace
file data/intermediate/county-to-msa.dta saved

126
127 use data/intermediate/merged_allcounties_allind, clear

128 merge m:1 COUNTY using data/intermediate/county-to-msa
```

Result	# of obs.	
not matched	1,949	
from master	1,947	(_merge==1)
from using	2	(_merge==2)
matched	143,722	(_merge==3)

```
129 drop if _merge == 2
(2 observations deleted)

130
131 //investigate if all FFRDCs are in MSAs
132 list if ffrdc_count != . & msacode == "" //there is one FFRDC in Barnwell County, SC
  >  that is not in a MSA. TO DO:
```

105844.	COUNTY	own_code	indus~de	agglv~de	size_c~e	year
qtr	disclo~e		0	10	70	0	2015
A						

		area_title	own_title		industry_title
>	agglvl_title				
	Barnwell County, South Carolina	Total Covered		Total, all industries
>	County, Total Covered				

		size_title	annual~t	annual~l	total_a~s	taxabl~s
> annual_~s	annual~e					
	All establishment sizes	404	5263	1.792e+08	59936760
> 1624103.1	654.738					

	avg_annua~y	total_fun~g	federal_f~g	ffrdc_~t	dolla

```
> r~e      |   count~de   |
          | 34053.92918 |  131244.2378  |  131244.2378  |          1  |   .9270
> 883      |    45011    |
          +-------------+
```

```
          |              countytitle | msacode | msatitle | msatype | csacode | c
> satitle |    _merge   |
          | Barnwell County, South Carolina |         |          |         |         |
>         | matched (3) |
          +-------------+
```

```
105846. |  COUNTY  | own_code  |  indus~de  |  agglv~de  |  size_c~e  |  year
   qtr  | disclo~e |
        |   45011  |     0     |     10     |     70     |     0      |  2004
   |  A |          |
          +----------+
```

```
>         |              area_title  |  own_title  |       industry_title  |
          | agglvl_title |
          | Barnwell County, South Carolina | Total Covered | Total, all industries |
> County, Total Covered |
          +--------------+
```

```
>         |         size_title | annual~t | annual~l | total_a~s | taxabl~s |
> annual_~s | annual~e |
          | All establishment sizes |   439   |   7417   | 2.701e+08 | 63990447 |
> 1712615.8 |  699.77  |
          +----------+
```

```
>         | avg_annua~y |  total_fun~g  |  federal_f~g  |  ffrdc_~t  |  dolla
> r~e      |  count~de   |
          | 36417.8119  |  127672.1373  |  127672.1373  |          1 |   .7388
> 143      |    45011    |
          +-------------+
```

```
          |              countytitle | msacode | msatitle | msatype | csacode | c
> satitle |    _merge   |
          | Barnwell County, South Carolina |         |          |         |         |
>         | matched (3) |
          +-------------+
```

```
105849. |  COUNTY  | own_code  |  indus~de  |  agglv~de  |  size_c~e  |  year
   qtr  | disclo~e |
        |   45011  |     0     |     10     |     70     |     0      |  2016
   |  A |          |
          +----------+
```

```
>         |              area_title  |  own_title  |       industry_title  |
          | agglvl_title |
          | Barnwell County, South Carolina | Total Covered | 10 Total, all industries |
> County, Total Covered |
          +--------------+
```

```
>         |         size_title | annual~t | annual~l | total_a~s | taxabl~s |
> annual_~s | annual~e |
          | All establishment sizes |   385   |   5085   | 1.783e+08 | 60405991 |
> 1313564.8 | 674.276  |
          +----------+
```

```
>         | avg_annua~y |  total_fun~g  |  federal_f~g  |  ffrdc_~t  |  dolla
> r~e      |  count~de   |
          | 35060.2369  |  134089.3748  |  134089.3748  |          1 |   .9387
> 843      |    45011    |
          +-------------+
```

```
          |              countytitle | msacode | msatitle | msatype | csacode | c
```

```
> satitle |        _merge |
        | Barnwell County, South Carolina |         |         |         |         |
>       |       matched (3) |
        |_____|
```

```
105851. | COUNTY  |  own_code  |  indus~de  |  agglv~de  |  size_c~e  |  year
     | qtr     | disclo~e  |
        |     45011 |        0 |        10 |        70 |         0 |     2013
     |   A     |         |         |
```

```
>       |   agglvl_title |        area_title |    own_title |        industry_title |
        | Barnwell County, South Carolina | Total Covered |    Total, all industries |
>  County, Total Covered |
```

```
>       |        size_title | annual~t | annual~l | total_a~s | taxabl~s |
> annual_~s | annual~e |
        | All establishment sizes |      411 |     5385 | 1.770e+08 | 55340382 |
> 1948608.8 |  632.128 |
```

```
>       |   avg_annua~y |    total_fun~g |    federal_f~g |    ffrdc_~t |    dolla
> r~e   |   count~de |
        |   32871.74706 |    127146.5963 |    127146.5963 |         1 |     .911
> 208   |       45011 |
```

```
>       |        countytitle | msacode | msatitle | msatype | csacode | c
> satitle |        _merge |
        | Barnwell County, South Carolina |         |         |         |         |
>       |       matched (3) |
```

```
105854. | COUNTY  |  own_code  |  indus~de  |  agglv~de  |  size_c~e  |  year
     | qtr     | disclo~e  |
        |     45011 |        0 |        10 |        70 |         0 |     2008
     |   A     |         |
```

```
>       |   agglvl_title |        area_title |    own_title |        industry_title |
        | Barnwell County, South Carolina | Total Covered |    Total, all industries |
>  County, Total Covered |
```

```
>       |        size_title | annual~t | annual~l | total_a~s | taxabl~s |
> annual_~s | annual~e |
        | All establishment sizes |      456 |     6620 | 2.315e+08 | 48361600 |
> 1318356.3 |  672.087 |
```

```
>       |   avg_annua~y |    total_fun~g |    federal_f~g |    ffrdc_~t |    dolla
> r~e   |   count~de |
        |   34965.16466 |    140592.1176 |    140592.1176 |         1 |    .8421
> 525   |       45011 |
```

```
>       |        countytitle | msacode | msatitle | msatype | csacode | c
> satitle |        _merge |
        | Barnwell County, South Carolina |         |         |         |         |
>       |       matched (3) |
```

105856.	COUNTY	own_code	indus~de	agglv~de	size_c~e	year
qtr	disclo~e					
	45011	0	10	70	0	2010
A						

>	agglvl_title	area_title	own_title	industry_title
	Barnwell County, South Carolina	Total Covered	Total, all industries
> County, Total Covered				

> annual_~s	annual~e	size_title	annual~t	annual~l	total_a~s	taxabl~s
	All establishment sizes	432	5677	1.943e+08	40071289
> 1147282.6	657.74					

> r~e	avg_annua~y	total_fun~g	federal_f~g	ffrdc_~t	dolla
	count~de				
	34225.92706	149087.7256	149087.7256	1	.8529
> 207	45011				

> satitle	_merge	countytitle	msacode	msatitle	msatype	csacode	c
		Barnwell County, South Carolina					
>	matched (3)						

105857.	COUNTY	own_code	indus~de	agglv~de	size_c~e	year
qtr	disclo~e					
	45011	0	10	70	0	2002
A						

>	agglvl_title	area_title	own_title	industry_title
	Barnwell County, South Carolina	Total Covered	Total, all industries
> County, Total Covered				

> annual_~s	annual~e	size_title	annual~t	annual~l	total_a~s	taxabl~s
	All establishment sizes	474	7977	3.935e+08	73237529
> 1340480.5	948.011					

> r~e	avg_annua~y	total_fun~g	federal_f~g	ffrdc_~t	dolla
	count~de				
	49327.84358	133037.0776	133037.0776	1	.7035
> 783	45011				

> satitle	_merge	countytitle	msacode	msatitle	msatype	csacode	c
		Barnwell County, South Carolina					
>	matched (3)						

```
105860. | COUNTY   | own_code  | indus~de  | agglv~de  | size_c~e  | year
        |    disclo~e        |           |           |           |
   qtr  |  45011  |           |    0      |    10     |    70     |     0     |  2011
        |    A    |           |           |           |           |
```

```
                         |           area_title |    own_title |        industry_title |
 >        agglvl_title |
        | Barnwell County, South Carolina | Total Covered |   Total, all industries |
 > County, Total Covered |
```

```
                         size_title | annual~t | annual~l | total_a~s | taxabl~s |
 > annual~s | annual~e |
        | All establishment sizes |   412    |   5520   | 1.884e+08 | 49035883 |
 > 1843026.6 |  656.933 |
```

```
                         avg_annua~y |  total_fun~g  | federal_f~g  |  ffrdc_~t  |  dolla
 > r~e    |  count~de  |
        |  34133.23769 |  152901.7204  | 152901.7204  |     1      |  .8798
 > 462   |    45011   |
```

```
                         countytitle | msacode | msatitle | msatype | csacode | c
 > satitle |   _merge  |
        | Barnwell County, South Carolina |        |          |         |        |
 >        | matched (3) |
```

```
105861. | COUNTY   | own_code  | indus~de  | agglv~de  | size_c~e  | year
        |    disclo~e        |           |           |           |
   qtr  |  45011  |           |    0      |    10     |    70     |     0     |  2017
        |    A    |           |           |           |           |
```

```
                         |           area_title |    own_title |        industry_title |
 >        agglvl_title |
        | Barnwell County, South Carolina | Total Covered | 10 Total, all industries |
 > County, Total Covered |
```

```
                         size_title | annual~t | annual~l | total_a~s | taxabl~s |
 > annual~s | annual~e |
        | All establishment sizes |   384    |   5142   | 1.870e+08 | 62603751 |
 > 1193390.8 |  699.847 |
```

```
                         avg_annua~y |  total_fun~g  | federal_f~g  |  ffrdc_~t  |  dolla
 > r~e    |  count~de  |
        |   36370.1226 |  147559.1705  | 147559.1705  |     1      |  .9587
 > 815   |    45011   |
```

```
                         countytitle | msacode | msatitle | msatype | csacode | c
 > satitle |   _merge  |
        | Barnwell County, South Carolina |        |          |         |        |
 >        | matched (3) |
```

105864.	COUNTY	own_code	indus~de	agglv~de	size_c~e	year
qtr	disclo~e					
	45011	0	10	70	0	2014
	A					

	agglvl_title	area_title	own_title	industry_title
>		Barnwell County, South Carolina	Total Covered	Total, all industries
> County, Total Covered				

	size_title	annual~t	annual~l	total_a~s	taxabl~s
> annual~s	annual~e				
	All establishment sizes	402	5474	1.798e+08	57866247
> 1988103.8	631.756				

	avg_annua~y	total_fun~g	federal_f~g	ffrdc_~t	dolla
> r~e	count~de				
	32847.01173	130685.0155	130685.0155	1	.9259
> 899	45011				

		countytitle	msacode	msatitle	msatype	csacode	c
> satitle	_merge					
	Barnwell County, South Carolina				
>	matched (3)					

105869.	COUNTY	own_code	indus~de	agglv~de	size_c~e	year
qtr	disclo~e					
	45011	0	10	70	0	2018
	A					

	agglvl_title	area_title	own_title	industry_title
>		Barnwell County, South Carolina	Total Covered	10 Total, all industries
> County, Total Covered				

	size_title	annual~t	annual~l	total_a~s	taxabl~s
> annual~s	annual~e				
	All establishment sizes	391	5521	2.082e+08	71404740
> 1508408.9	724.903				

	avg_annua~y	total_fun~g	federal_f~g	ffrdc_~t	dolla
> r~e	count~de				
	37713.27735	157076.8896	155768.6027	1	.9822
> 005	45011				

		countytitle	msacode	msatitle	msatype	csacode	c
> satitle	_merge					
	Barnwell County, South Carolina				
>	matched (3)					

105870.	COUNTY	own_code	indus~de	agglv~de	size_c~e	year
qtr	disclo~e					
	45011	0	10	70	0	2012
A						

	agglvl_title	area_title	own_title	industry_title
>		Barnwell County, South Carolina	Total Covered	Total, all industries
> County, Total Covered				

	size_title	annual~t	annual~l	total_a~s	taxabl~s
> annual~s	annual~e				
	All establishment sizes	407	5440	1.841e+08	57436412
> 1843715	651.409				

	avg_annua~y	total_fun~g	federal_f~g	ffrdc_~t	dolla
> r~e	count~de				
	33846.55058	147382.1521	147382.1521	1	.8980
> 531	45011				

	countytitle	msacode	msatitle	msatype	csacode	c
> satitle	_merge					
	Barnwell County, South Carolina					
>	matched (3)					

105871.	COUNTY	own_code	indus~de	agglv~de	size_c~e	year
qtr	disclo~e					
	45011	0	10	70	0	2009
A						

	agglvl_title	area_title	own_title	industry_title
>		Barnwell County, South Carolina	Total Covered	Total, all industries
> County, Total Covered				

	size_title	annual~t	annual~l	total_a~s	taxabl~s
> annual~s	annual~e				
	All establishment sizes	434	6091	2.135e+08	45120018
> 1244637.9	674.486				

	avg_annua~y	total_fun~g	federal_f~g	ffrdc_~t	dolla
> r~e	count~de				
	35061.33037	155265.1369	155265.1369	1	.8391
> 581	45011				

	countytitle	msacode	msatitle	msatype	csacode	c
> satitle	_merge					
	Barnwell County, South Carolina					
>	matched (3)					

105875.	COUNTY	own_code	indus~de	agglv~de	size_c~e	year
qtr	disclo~e					
	45011	**0**	**10**	**70**	**0**	**2019**
A						

>	agglvl_title	area_title	own_title	industry_title
	Barnwell County, South Carolina	**Total Covered**	**10 Total, all industries**
> **County, Total Covered**				

	size_title	annual~t	annual~l	total_a~s	taxabl~s
> annual~s	annual~e				
	All establishment sizes	**403**	**5362**	**1.965e+08**	**64897777**
> **1238577**	**705**				

	avg_annua~y	total_fun~g	federal_f~g	ffrdc_~t	dolla
> r~e	count~de				
	36651	**176379**	**173239**	**1**	
> **1**	**45011**				

	countytitle	msacode	msatitle	msatype	csacode	c
> satitle	_merge					
	Barnwell County, South Carolina					
>	**matched (3)**					

105877.	COUNTY	own_code	indus~de	agglv~de	size_c~e	year
qtr	disclo~e					
	45011	**0**	**10**	**70**	**0**	**2006**
A						

>	agglvl_title	area_title	own_title	industry_title
	Barnwell County, South Carolina	**Total Covered**	**Total, all industries**
> **County, Total Covered**				

	size_title	annual~t	annual~l	total_a~s	taxabl~s
> annual~s	annual~e				
	All establishment sizes	**509**	**6984**	**2.528e+08**	**57659770**
> **1456886.4**	**696.239**				

	avg_annua~y	total_fun~g	federal_f~g	ffrdc_~t	dolla
> r~e	count~de				
	36195.53282	**130049.5184**	**130049.5184**	**1**	**.7885**
> **227**	**45011**				

	countytitle	msacode	msatitle	msatype	csacode	c
> satitle	_merge					
	Barnwell County, South Carolina					
>	**matched (3)**					

105878.	COUNTY	own_code	indus~de	agglv~de	size_c~e	year
qtr	disclo~e					
	45011	0	10	70	0	2001
A						

>	agglvl_title	area_title	own_title	industry_title
	Barnwell County, South Carolina	Total Covered	Total, all industries
> County, Total Covered			

> annual_~s	size_title	annual~t	annual~l	total_a~s	taxabl~s
annual~e	All establishment sizes	461	8403	4.593e+08	76104990
> 1335634.7	1051.12				

> r~e	avg_annua~y	total_fun~g	federal_f~g	ffrdc_~t	dolla
count~de	54665.53747	125851.5863	125851.5863	1	.6925
> 936	45011				

> satitle	countytitle	msacode	msatitle	msatype	csacode	c
_merge	Barnwell County, South Carolina					
>	matched (3)					

105880.	COUNTY	own_code	indus~de	agglv~de	size_c~e	year
qtr	disclo~e					
	45011	0	10	70	0	2005
A						

>	agglvl_title	area_title	own_title	industry_title
	Barnwell County, South Carolina	Total Covered	Total, all industries
> County, Total Covered			

> annual_~s	size_title	annual~t	annual~l	total_a~s	taxabl~s
annual~e	All establishment sizes	465	7322	2.653e+08	61488665
> 1665195.2	696.444				

> r~e	avg_annua~y	total_fun~g	federal_f~g	ffrdc_~t	dolla
count~de	36237.34665	129143.248	129143.248	1	.7638
> 804	45011				

> satitle	countytitle	msacode	msatitle	msatype	csacode	c
_merge	Barnwell County, South Carolina					
>	matched (3)					

105881.	COUNTY	own_code	indus~de	agglv~de	size_c~e	year
qtr	disclo~e	0	10	70	0	2007
	45011					
A						

>	agglvl_title	area_title	own_title	industry_title
> County, Total Covered	Barnwell County, South Carolina	Total Covered	Total, all industries	

> annual_~s	size_title	annual~t	annual~l	total_a~s	taxabl~s
> 1388890.2	annual~e	All establishment sizes	441	6654	2.410e+08	53029608
	696.656					

> r~e	avg_annua~y	total_fun~g	federal_f~g	ffrdc_~t	dolla
> 166	count~de	141667.8737	141667.8737	1	.8110
	36221.20596				
	45011				

> satitle	_merge	countytitle	msacode	msatitle	msatype	csacode	c
>	matched (3)	Barnwell County, South Carolina					

105883.	COUNTY	own_code	indus~de	agglv~de	size_c~e	year
qtr	disclo~e	0	10	70	0	2003
	45011					
A						

>	agglvl_title	area_title	own_title	industry_title
> County, Total Covered	Barnwell County, South Carolina	Total Covered	Total, all industries	

> annual_~s	size_title	annual~t	annual~l	total_a~s	taxabl~s
> 1496315.4	annual~e	All establishment sizes	448	7519	2.757e+08	64765567
	704.607					

> r~e	avg_annua~y	total_fun~g	federal_f~g	ffrdc_~t	dolla
> 502	count~de	131225.0361	131225.0361	1	.7195
	36675.69029				
	45011				

> satitle	_merge	countytitle	msacode	msatitle	msatype	csacode	c
>	matched (3)	Barnwell County, South Carolina					

```
133 drop if msacode == "" //omit that FFRDC
   (62,214 observations deleted)

134
135 //summarize by MSA
136 collapse (sum) total_funding federal_funding ffrdc_count annual_avg_estabs_count ann
   > ual_avg_emplvl total_annual_wages, by(msacode msatitle msatype year)

137 gen avg_annual_pay = total_annual_wages/annual_avg_emplvl
   (400 missing values generated)

138 save data/intermediate/merged_allMSAs_allind, replace
   file data/intermediate/merged_allMSAs_allind.dta saved

139
140 drop if year < 2001 //this has to be done because missing non-academic ffrdcs are no
   > w counted as 0 ffrdcs that year
   (23,960 observations deleted)

141
142 save data/intermediate/merged_allMSAs_allind_post01, replace
   file data/intermediate/merged_allMSAs_allind_post01.dta saved

143
144
145
146 //look into only Metro, not Micro
147 tab ffrdc msatype
```

(sum) ffrdc_coun t	MSA Type Metro	Micro	Total
0	6,993	10,250	17,243
1	303	29	332
2	19	0	19
3	19	0	19
5	19	0	19
8	5	0	5
9	1	0	1
10	2	0	2
11	2	0	2
12	4	0	4
13	5	0	5
Total	7,372	10,279	17,651

```
148 list msatitle year if msatype == "Micro" & ffrdc_count > 0 //Alamogordo, NM 2010+, L
   > os Alamos, NM throughout 2001-2019 each with one ffrdc_count
```

	msatitle	year
162.	Alamogordo, NM	2010
163.	Alamogordo, NM	2011
164.	Alamogordo, NM	2012
165.	Alamogordo, NM	2013
166.	Alamogordo, NM	2014
167.	Alamogordo, NM	2015
168.	Alamogordo, NM	2016
169.	Alamogordo, NM	2017
170.	Alamogordo, NM	2018
171.	Alamogordo, NM	2019
9368.	Los Alamos, NM	2001
9369.	Los Alamos, NM	2002
9370.	Los Alamos, NM	2003
9371.	Los Alamos, NM	2004
9372.	Los Alamos, NM	2005
9373.	Los Alamos, NM	2006

```
9374.  │ Los Alamos, NM    2007
9375.  │ Los Alamos, NM    2008
9376.  │ Los Alamos, NM    2009
9377.  │ Los Alamos, NM    2010

9378.  │ Los Alamos, NM    2011
9379.  │ Los Alamos, NM    2012
9380.  │ Los Alamos, NM    2013
9381.  │ Los Alamos, NM    2014
9382.  │ Los Alamos, NM    2015

9383.  │ Los Alamos, NM    2016
9384.  │ Los Alamos, NM    2017
9385.  │ Los Alamos, NM    2018
9386.  │ Los Alamos, NM    2019
```

```
149
150 keep if msatype == "Metro"
  (10,279 observations deleted)

151 save data/intermediate/merged_MetroMSAs_allind_post01, replace
  file data/intermediate/merged_MetroMSAs_allind_post01.dta saved

152
153
154
  end of do-file

155 do code/2-summary-stats-and-ols.do

156 cd C:\Users\ecsxn\Documents\repo\rd_spillovers_1433
  C:\Users\ecsxn\Documents\repo\rd_spillovers_1433

157
158
159 //--------------------------summary stats--------------------------------
160
161 use data/intermediate/merged_allMSAs_allind, clear

162 keep if msatype == "Metro"
  (24,256 observations deleted)

163
164 //summarize FFRDC count per MSA per year
165 tab ffrdc year
```

(sum) ffrdc_coun t > 81	Total	1975	1976	1977	year 1978	1979	1980	19
0 > 68	16,677	381	381	381	381	368	368	3
1 > 11	558	0	0	0	0	11	11	
2 > 1	41	0	0	0	0	1	1	
3 > 1	41	0	0	0	0	1	1	
5 > 0	19	0	0	0	0	0	0	
8 > 0	5	0	0	0	0	0	0	
9 > 0	1	0	0	0	0	0	0	
10 > 0	2	0	0	0	0	0	0	
11 > 0	2	0	0	0	0	0	0	
12		0	0	0	0	0	0	

```
>  0 |
      13 |        4
>  0 |                 0         0         0         0         0         0
        |        5
         ---
         +
      Total |      381       381       381       381       381       381       3
> 81 |  17,355


         (sum) |
 ffrdc_coun    |                              year
        t |              1982      1983      1984      1985      1986      1987      19
> 88 |  Total
         ---
         +
        0 |                368       368       368       368       368       367       3
> 67 |  16,677
        1 |                 11        11        11        11        11        12
> 12 |     558
        2 |                  1         1         1         1         1         1
>  1 |      41
        3 |                  1         1         1         1         1         1
>  1 |      41
        5 |                  0         0         0         0         0         0
>  0 |      19
        8 |                  0         0         0         0         0         0
>  0 |       5
        9 |                  0         0         0         0         0         0
>  0 |       1
       10 |                  0         0         0         0         0         0
>  0 |       2
       11 |                  0         0         0         0         0         0
>  0 |       2
       12 |                  0         0         0         0         0         0
>  0 |       4
       13 |                  0         0         0         0         0         0
>  0 |       5
         ---
         +
      Total |      381       381       381       381       381       381       3
> 81 |  17,355


         (sum) |
 ffrdc_coun    |                              year
        t |              1989      1990      1991      1992      1993      1994      19
> 95 |  Total
         ---
         +
        0 |                367       374       373       373       373       374       3
> 74 |  16,677
        1 |                 12        12        13        13        13        12
> 12 |     558
        2 |                  1         1         1         1         1         1
>  1 |      41
        3 |                  1         1         1         1         1         1
>  1 |      41
        5 |                  0         0         0         0         0         0
>  0 |      19
        8 |                  0         0         0         0         0         0
>  0 |       5
        9 |                  0         0         0         0         0         0
>  0 |       1
       10 |                  0         0         0         0         0         0
>  0 |       2
       11 |                  0         0         0         0         0         0
>  0 |       2
       12 |                  0         0         0         0         0         0
>  0 |       4
       13 |                  0         0         0         0         0         0
>  0 |       5
         ---
         +
```

		381	388	388	388	388	388	3
Total | > 88 |	17,355							

(sum) ffrdc_coun t > 02 |	Total	1996	1997	1998	year 1999	2000	2001	20
0 | > 68 |	16,677	374	374	375	375	376	368	3
1 | > 16 |	558	12	12	11	11	10	16	
2 | > 1 |	41	1	1	1	1	1	1	
3 | > 1 |	41	1	1	1	1	1	1	
5 | > 1 |	19	0	0	0	0	0	1	
8 | > 1 |	5	0	0	0	0	0	1	
9 | > 0 |	1	0	0	0	0	0	0	
10 | > 0 |	2	0	0	0	0	0	0	
11 | > 0 |	2	0	0	0	0	0	0	
12 | > 0 |	4	0	0	0	0	0	0	
13 | > 0 |	5	0	0	0	0	0	0	
Total | > 88 |	17,355	388	388	388	388	388	388	3

(sum) ffrdc_coun t > 09 |	Total	2003	2004	2005	year 2006	2007	2008	20
0 | > 68 |	16,677	368	368	368	368	368	368	3
1 | > 16 |	558	16	16	16	16	16	16	
2 | > 1 |	41	1	1	1	1	1	1	
3 | > 1 |	41	1	1	1	1	1	1	
5 | > 1 |	19	1	1	1	1	1	1	
8 | > 0 |	5	1	1	1	0	0	0	
9 | > 0 |	1	0	0	0	1	0	0	
10 | > 0 |	2	0	0	0	0	1	1	
11 | > 1 |	2	0	0	0	0	0	0	
12 | > 0 |	4	0	0	0	0	0	0	
13 | > 0 |	5	0	0	0	0	0	0	
Total | > 88 |	17,355	388	388	388	388	388	388	3

(sum) ffrdc_coun t	Total	2010	2011	2012	year 2013	2014	2015	20
0	16,677	368	368	369	368	368	368	3
1	558	16	16	15	16	16	16	
2	41	1	1	1	1	1	1	
3	41	1	1	1	1	1	1	
5	19	1	1	1	1	1	1	
8	5	0	0	0	0	0	0	
9	1	0	0	0	0	0	0	
10	2	0	0	0	0	0	0	
11	2	1	0	0	0	0	0	
12	4	0	1	1	1	1	0	
13	5	0	0	0	0	0	1	
Total	17,355	388	388	388	388	388	388	3

(wrapped continuation markers: `> 16`, `> 68`, `> 16`, `> 1`, `> 1`, `> 1`, `> 0`, `> 0`, `> 0`, `> 0`, `> 0`, `> 1`, `> 88`)

(sum) ffrdc_coun t	2017	year 2018	2019	Total
0	368	368	368	16,677
1	16	16	16	558
2	1	1	1	41
3	1	1	1	41
5	1	1	1	19
8	0	0	0	5
9	0	0	0	1
10	0	0	0	2
11	0	0	0	2
12	0	0	0	4
13	1	1	1	5
Total	388	388	388	17,355

```
166 tab2xl ffrdc year if year >= 1979 & year < 1990 using output/msa_ffrdc_counts_1.xlsx
  > , replace col(1) row(1)
  file output/msa_ffrdc_counts_1.xlsx saved

167 tab2xl ffrdc year if year >= 1990 & year < 2000  using output/msa_ffrdc_counts_2.xls
  > x, replace col(1) row(1)
  file output/msa_ffrdc_counts_2.xlsx saved
```

```
168 tab2xl ffrdc year if year >= 2000 & year < 2010 using output/msa_ffrdc_counts_3.xlsx
  > , replace col(1) row(1)
  file output/msa_ffrdc_counts_3.xlsx saved

169 tab2xl ffrdc year if year >= 2010 using output/msa_ffrdc_counts_4.xlsx, replace col(
  > 1) row(1)
  file output/msa_ffrdc_counts_4.xlsx saved

170
171
172 //summarize causal and outcome variables
173 gen has_ffrdc = ffrdc > 0

174 label define has_ffrdc_values 0 "no FFRDC" 1 "with FFRDC"

175 label values has_ffrdc has_ffrdc_values

176
177 sort year has_ffrdc

178 replace avg_annual_pay = avg_annual_pay/1000
  (17,277 real changes made)

179 label variable avg_annual_pay "Average annual pay of employed workers (thousands 201
  > 9$)"

180 replace annual_avg_emplvl = annual_avg_emplvl / 1000
  (17,277 real changes made)

181 label variable annual_avg_emplvl "Annual average of total employment (thousands)"

182 replace federal_funding = federal_funding / 1000
  (678 real changes made)

183 label variable federal_funding "Total federal FFRDC funding received (millions 2019$
  > )"

184
185 estimates clear

186 eststo: estpost summarize avg_annual_pay annual_avg_emplvl federal_funding if year >
  > = 2001
```

	e(count)	e(sum_w)	e(mean)	e(Var)	e(sd)	e(min)	e(
> max)	e(sum)						
avg_annual~y	7372	7372	46.01671	76.34608	8.737624	19.45275	136.
> 9359 339235.2							
annual_avg~l	7372	7372	301.0302	492293.6	701.6364	8.577	954
> 2.66 2219195							
federal_fu~g	7372	7372	41.39821	77271.13	277.9769	0	3969
> .324 305187.6							

```
  (est1 stored)

187 esttab using output/summarystats.csv, cells("mean(fmt(2)) sd(fmt(2)) min(fmt(2)) max
  > (fmt(2))") label nodepvar replace
  (output written to output/summarystats.csv)

188
```

```
189 //histograms
190 drop if year < 2001
   (9,983 observations deleted)

191 encode msacode, gen(msa_factor)

192
193 reg avg_annual_pay i.msa_factor i.year, robust
```

Linear regression

Number of obs	= 7,372
F(405, 6966)	= 1215.90
Prob > F	= 0.0000
R-squared	= 0.9646
Root MSE	= 1.6917

avg_annual~y	Coef.	Robust Std. Err.	t	P>|t|	[95% Conf. Interval]	
msa_factor						
C1038	-14.31439	.418447	-34.21	0.000	-15.13467	-13.49411
C1042	9.435658	.3644079	25.89	0.000	8.721307	10.15001
C1050	1.918012	.4203007	4.56	0.000	1.094094	2.741929
C1054	3.063446	.3794383	8.07	0.000	2.319631	3.807261
C1058	14.33511	.3403431	42.12	0.000	13.66793	15.00228
C1074	7.523087	.3683613	20.42	0.000	6.800986	8.245187
C1078	1.265649	.3555487	3.56	0.000	.568665	1.962632
C1090	11.5436	.3160477	36.52	0.000	10.92405	12.16315
C1102	.8377593	.2972114	2.82	0.005	.2551344	1.420384
C1110	5.161588	.3836289	13.45	0.000	4.409558	5.913617
C1118	7.466436	.4413599	16.92	0.000	6.601236	8.331636
C1126	17.05607	.3687642	46.25	0.000	16.33318	17.77896
C1146	19.82154	.4944715	40.09	0.000	18.85223	20.79085
C1150	1.685616	.5145503	3.28	0.001	.6769403	2.694291
C1154	6.198388	.3279255	18.90	0.000	5.555554	6.841222
C1164	-14.12712	.5372256	-26.30	0.000	-15.18025	-13.074
C1170	1.616884	.3341148	4.84	0.000	.9619172	2.271851
C1202	3.779103	.3253683	11.61	0.000	3.141282	4.416924
C1206	19.44891	.3419296	56.88	0.000	18.77863	20.1192
C1210	7.94364	.4780797	16.62	0.000	7.006458	8.880822
C1222	-.5626745	.3337501	-1.69	0.092	-1.216926	.0915774
C1226	6.687573	.3022468	22.13	0.000	6.095078	7.280069
C1242	19.35954	.4917009	39.37	0.000	18.39565	20.32342
C1254	7.268423	.3580517	20.30	0.000	6.566533	7.970314
C1258	19.05361	.3547258	53.71	0.000	18.35824	19.74898
C1262	1.635593	.3168213	5.16	0.000	1.014527	2.25666
C1270	7.30154	.3153688	23.15	0.000	6.683321	7.919759
C1294	10.07243	.5698655	17.68	0.000	8.955323	11.18954
C1298	11.53756	.3199381	36.06	0.000	10.91038	12.16474
C1302	4.479609	.4701132	9.53	0.000	3.558044	5.401174
C1314	12.34371	.6811888	18.12	0.000	11.00837	13.67904
C1322	1.156446	.4739157	2.44	0.015	.2274273	2.085465
C1338	4.5083	.4883861	9.23	0.000	3.550914	5.465686
C1346	3.087731	.3767985	8.19	0.000	2.349091	3.82637
C1374	4.901555	.4913779	9.98	0.000	3.938305	5.864805
C1378	5.443066	.3694114	14.73	0.000	4.718907	6.167225
C1382	12.81149	.295237	43.39	0.000	12.23274	13.39025
C1390	6.391189	.8725029	7.33	0.000	4.680818	8.101561
C1398	2.775237	.3197866	8.68	0.000	2.148358	3.402116
C1401	13.50206	.3781416	35.71	0.000	12.76079	14.24333
C1402	2.137125	.3933506	5.43	0.000	1.366038	2.908211
C1410	8.438332	.6141382	13.74	0.000	7.234434	9.64223
C1426	6.216221	.3704843	16.78	0.000	5.489959	6.942483
C1446	34.72208	.6366459	54.54	0.000	33.47406	35.9701
C1450	25.67711	.5094777	50.40	0.000	24.67838	26.67584
C1454	1.415942	.3071239	4.61	0.000	.8138851	2.017998
C1474	10.28998	.3570976	28.82	0.000	9.589958	10.99
C1486	52.24754	.8539763	61.18	0.000	50.57349	53.9216
C1518	-5.826742	.3393712	-17.17	0.000	-6.492013	-5.161471
C1526	1.681595	.3249176	5.18	0.000	1.044657	2.318532
C1538	8.224147	.3127511	26.30	0.000	7.611059	8.837234
C1550	1.210693	.4178501	2.90	0.004	.391579	2.029806

C1554	12.69583	.2937061	43.23	0.000	12.12008	13.27159
C1568	25.66967	.92193	27.84	0.000	23.86241	27.47694
C1594	2.677074	.3890985	6.88	0.000	1.914322	3.439826
C1598	5.25115	.4710349	11.15	0.000	4.327778	6.174522
C1602	.0711503	.3255432	0.22	0.827	-.5670135	.7093141
C1606	.7832935	.3607964	2.17	0.030	.0760226	1.490564
C1618	11.02264	.4139471	26.63	0.000	10.21117	11.8341
C1622	9.940256	.9226747	10.77	0.000	8.131533	11.74898
C1630	11.58172	.3439107	33.68	0.000	10.90755	12.25589
C1654	3.028598	.2882864	10.51	0.000	2.463469	3.593728
C1658	6.360099	.3336607	19.06	0.000	5.706022	7.014175
C1662	8.309893	.3587205	23.17	0.000	7.606692	9.013095
C1670	6.799671	.3987688	17.05	0.000	6.017963	7.581379
C1674	16.11353	.3428884	46.99	0.000	15.44137	16.7857
C1682	10.78185	.3840506	28.07	0.000	10.02899	11.53471
C1686	6.515723	.321386	20.27	0.000	5.885708	7.145737
C1694	5.660238	.4436406	12.76	0.000	4.790567	6.529909
C1698	22.49277	.3104558	72.45	0.000	21.88418	23.10136
C1702	1.532054	.3205388	4.78	0.000	.9037003	2.160408
C1714	14.09921	.3000881	46.98	0.000	13.51095	14.68748
C1730	-.0872919	.3159193	-0.28	0.782	-.7065899	.5320061
C1742	2.269303	.4509216	5.03	0.000	1.38536	3.153247
C1746	13.49697	.3173774	42.53	0.000	12.87482	14.11913
C1766	-1.587088	.3046234	-5.21	0.000	-2.184242	-.9899331
C1778	.9310357	.3735975	2.49	0.013	.1986708	1.663401
C1782	10.20559	.3314805	30.79	0.000	9.555791	10.8554
C1786	3.341587	.3152919	10.60	0.000	2.723519	3.959656
C1790	5.595211	.302257	18.51	0.000	5.002695	6.187727
C1798	2.987929	.3017734	9.90	0.000	2.396361	3.579497
C1802	12.79054	.4036009	31.69	0.000	11.99935	13.58172
C1814	13.43252	.2954486	45.46	0.000	12.85335	14.01169
C1858	6.621647	.4181763	15.83	0.000	5.801894	7.4414
C1870	11.88199	.4175568	28.46	0.000	11.06345	12.70053
C1888	3.029422	.3820942	7.93	0.000	2.280401	3.778443
C1906	-.2815775	.3061027	-0.92	0.358	-.881632	.3184771
C1910	21.24204	.3140683	67.64	0.000	20.62637	21.85771
C1914	3.239488	.3887025	8.33	0.000	2.477513	4.001463
C1918	3.012259	.3120551	9.65	0.000	2.400536	3.623982
C1930	-3.149031	.3426135	-9.19	0.000	-3.820658	-2.477404
C1934	9.087404	.3462386	26.25	0.000	8.408671	9.766137
C1938	9.957992	.4598268	21.66	0.000	9.056592	10.85939
C1946	5.157963	.3502987	14.72	0.000	4.471271	5.844655
C1950	11.02794	.3638156	30.31	0.000	10.31475	11.74113
C1966	-.2316818	.3575676	-0.65	0.517	-.9326232	.4692596
C1974	23.10589	.3889118	59.41	0.000	22.3435	23.86827
C1978	14.16461	.3751918	37.75	0.000	13.42912	14.9001
C1982	20.76722	.5506796	37.71	0.000	19.68773	21.84672
C2002	.9941069	.2922289	3.40	0.001	.4212492	1.566965
C2010	4.095217	.3426379	11.95	0.000	3.423542	4.766891
C2022	4.310917	.3290737	13.10	0.000	3.665832	4.956002
C2026	4.733437	.3192774	14.83	0.000	4.107556	5.359318
C2050	24.55074	.4124914	59.52	0.000	23.74214	25.35935
C2070	4.044563	.39163	10.33	0.000	3.276849	4.812278
C2074	2.278433	.3522298	6.47	0.000	1.587956	2.968911
C2094	.1661182	.3740802	0.44	0.657	-.5671928	.8994293
C2106	2.006028	.3225437	6.22	0.000	1.373744	2.638312
C2114	6.437449	.5453192	11.80	0.000	5.368457	7.506441
C2130	5.597214	.4248375	13.17	0.000	4.764404	6.430025
C2134	-.7393453	.3150866	-2.35	0.019	-1.357011	-.1216796
C2150	3.453774	.3626489	9.52	0.000	2.742872	4.164676
C2166	3.416086	.3128955	10.92	0.000	2.802716	4.029457
C2178	6.07877	.3706431	16.40	0.000	5.352196	6.805343
C2182	13.70781	.3832014	35.77	0.000	12.95662	14.459
C2202	6.216104	.588334	10.57	0.000	5.06279	7.369417
C2214	7.077074	.5714426	12.38	0.000	5.956873	8.197276
C2218	2.286947	.3497103	6.54	0.000	1.601408	2.972486
C2222	9.132206	.6296714	14.50	0.000	7.897858	10.36655
C2238	2.556832	.3525708	7.25	0.000	1.865686	3.247978
C2242	8.467297	.8694672	9.74	0.000	6.762877	10.17172
C2250	2.82688	.4383387	6.45	0.000	1.967602	3.686157
C2252	-.5911042	.318893	-1.85	0.064	-1.216232	.0340231
C2254	4.254001	.3250013	13.09	0.000	3.616899	4.891102

C2266	9.867523	.3734713	26.42	0.000	9.135406	10.59964
C2290	-.1829597	.3159899	-0.58	0.563	-.8023962	.4364768
C2306	5.876309	.4742233	12.39	0.000	4.946687	6.805931
C2342	3.637382	.2992875	12.15	0.000	3.050687	4.224076
C2346	-1.66046	.4220198	-3.93	0.000	-2.487747	-.8331725
C2354	5.285386	.4977518	10.62	0.000	4.309641	6.261131
C2358	6.167755	.311763	19.78	0.000	5.556605	6.778905
C2390	1.182853	.2873954	4.12	0.000	.6194702	1.746235
C2402	3.024838	.2969757	10.19	0.000	2.442675	3.607001
C2414	-2.046031	.3441059	-5.95	0.000	-2.720583	-1.371479
C2422	1.27712	.6186081	2.06	0.039	.0644595	2.48978
C2426	-1.229901	.3119889	-3.94	0.000	-1.841494	-.6183074
C2430	4.159394	.4480092	9.28	0.000	3.281159	5.037628
C2434	8.787703	.4218087	20.83	0.000	7.960829	9.614576
C2442	-3.035598	.3428535	-8.85	0.000	-3.707696	-2.363501
C2450	-.4779561	.3735585	-1.28	0.201	-1.210245	.2543324
C2454	7.720426	.5428444	14.22	0.000	6.656286	8.784566
C2458	8.076196	.3040431	26.56	0.000	7.480179	8.672213
C2466	6.593309	.3642675	18.10	0.000	5.879234	7.307384
C2478	3.94371	.3196159	12.34	0.000	3.317165	4.570255
C2486	5.534566	.3211378	17.23	0.000	4.905038	6.164094
C2502	-9.455676	.7489471	-12.63	0.000	-10.92384	-7.987512
C2506	4.710814	.4795585	9.82	0.000	3.770733	5.650895
C2518	3.934216	.4097893	9.60	0.000	3.130904	4.737527
C2522	-3.018007	.5208818	-5.79	0.000	-4.039094	-1.99692
C2526	2.260986	.3359223	6.73	0.000	1.602476	2.919496
C2542	12.41386	.3037611	40.87	0.000	11.8184	13.00932
C2550	1.290885	.3205925	4.03	0.000	.6624257	1.919344
C2554	26.15924	.3245858	80.59	0.000	25.52295	26.79553
C2562	-1.363931	.3436919	-3.97	0.000	-2.037672	-.6901903
C2586	.3813593	.3664016	1.04	0.298	-.3368994	1.099618
C2594	-.3856022	.4047708	-0.95	0.341	-1.179076	.4078718
C2598	.6852068	.4121327	1.66	0.096	-.1226989	1.493112
C2614	-.6498401	.4829898	-1.35	0.179	-1.596647	.2969671
C2630	-3.601284	.3366213	-10.70	0.000	-4.261164	-2.941404
C2638	11.22198	1.024129	10.96	0.000	9.214372	13.22958
C2642	26.15939	.6619468	39.52	0.000	24.86178	27.45701
C2658	4.270862	.3438076	12.42	0.000	3.596894	4.944829
C2662	18.16439	.3713822	48.91	0.000	17.43636	18.89241
C2682	4.341891	.3715809	11.68	0.000	3.613479	5.070302
C2690	12.35022	.3736529	33.05	0.000	11.61775	13.0827
C2698	8.142307	.353568	23.03	0.000	7.449206	8.835408
C2706	11.39072	.4245758	26.83	0.000	10.55843	12.22302
C2710	7.953773	.3594986	22.12	0.000	7.249046	8.6585
C2714	4.413286	.3411204	12.94	0.000	3.744586	5.081986
C2718	3.388866	.418991	8.09	0.000	2.567516	4.210216
C2726	10.65096	.3315796	32.12	0.000	10.00097	11.30096
C2734	-5.379169	.3264304	-16.48	0.000	-6.019072	-4.739266
C2750	6.081161	.5020833	12.11	0.000	5.096925	7.065397
C2762	1.712717	.3269827	5.24	0.000	1.071732	2.353703
C2774	.6214545	.2930211	2.12	0.034	.047044	1.195865
C2778	-.3265624	.3289729	-0.99	0.321	-.9714494	.3183246
C2786	-1.252287	.291285	-4.30	0.000	-1.823295	-.6812798
C2790	-.3548327	.3015282	-1.18	0.239	-.9459199	.2362545
C2798	5.020955	.3441884	14.59	0.000	4.34624	5.695669
C2802	9.666923	.3727409	25.93	0.000	8.936237	10.39761
C2810	2.610627	.39245	6.65	0.000	1.841305	3.379948
C2814	13.7615	.2955709	46.56	0.000	13.18209	14.34091
C2842	11.48669	.3680115	31.21	0.000	10.76528	12.20811
C2866	3.085051	.5224611	5.90	0.000	2.060868	4.109234
C2870	5.069163	.3838162	13.21	0.000	4.316766	5.82156
C2874	3.147652	.3499381	8.99	0.000	2.461666	3.833637
C2894	8.541427	.3067528	27.84	0.000	7.940098	9.142756
C2902	14.38093	1.45878	9.86	0.000	11.52128	17.24058
C2910	2.580973	.3144107	8.21	0.000	1.964632	3.197314
C2918	8.131383	.7002496	11.61	0.000	6.75868	9.504085
C2920	6.674268	.3420687	19.51	0.000	6.003709	7.344826
C2934	8.544319	.7390049	11.56	0.000	7.095644	9.992994
C2942	-1.486881	.3187724	-4.66	0.000	-2.111772	-.86199
C2946	2.851448	.3623133	7.87	0.000	2.141203	3.561692
C2954	6.65312	.3659186	18.18	0.000	5.935808	7.370432
C2962	11.37513	.3458647	32.89	0.000	10.69713	12.05313

C2970	-3.085496	.3386887	-9.11	0.000	-3.749429	-2.421563
C2974	-.9548874	.3887479	-2.46	0.014	-1.716952	-.1928232
C2982	10.10105	.488244	20.69	0.000	9.143948	11.05816
C2994	-.7689797	.3067696	-2.51	0.012	-1.370342	-.1676179
C3002	-.8396237	.3359142	-2.50	0.012	-1.498118	-.1811295
C3014	2.035583	.3055287	6.66	0.000	1.436654	2.634513
C3030	.567591	.3219536	1.76	0.078	-.0635361	1.198718
C3034	2.115684	.2995781	7.06	0.000	1.528419	2.702948
C3046	8.84962	.3452852	25.63	0.000	8.172756	9.526484
C3062	4.326948	.3064747	14.12	0.000	3.726165	4.927732
C3070	4.445322	.3059923	14.53	0.000	3.845484	5.04516
C3078	7.290588	.3371085	21.63	0.000	6.629752	7.951423
C3086	-4.037007	.2984173	-13.53	0.000	-4.621996	-3.452018
C3098	5.887353	.6588833	8.94	0.000	4.595741	7.178965
C3102	7.394507	.4098492	18.04	0.000	6.591078	8.197936
C3108	22.65357	.3476635	65.16	0.000	21.97205	23.3351
C3114	10.29575	.3016292	34.13	0.000	9.704461	10.88703
C3118	2.046704	.3422053	5.98	0.000	1.375877	2.71753
C3134	2.965926	.3318145	8.94	0.000	2.315468	3.616383
C3142	3.401237	.4752917	7.16	0.000	2.46952	4.332953
C3146	1.531411	.363654	4.21	0.000	.8185384	2.244284
C3154	12.07999	.4082622	29.59	0.000	11.27967	12.88031
C3170	20.70814	.3236356	63.99	0.000	20.07372	21.34257
C3174	-.6088102	.3242052	-1.88	0.060	-1.244351	.0267308
C3186	1.926252	.344627	5.59	0.000	1.250678	2.601826
C3190	1.062173	.7479914	1.42	0.156	-.4041175	2.528464
C3242	-13.76084	.5188799	-26.52	0.000	-14.778	-12.74367
C3258	-5.194479	.3188963	-16.29	0.000	-5.819613	-4.569345
C3278	1.623233	.3061027	5.30	0.000	1.023178	2.223287
C3282	12.58445	.3097302	40.63	0.000	11.97728	13.19161
C3290	1.1565	.3315887	3.49	0.000	.506485	1.806515
C3310	13.50469	.3158133	42.76	0.000	12.8856	14.12378
C3314	.9785821	.3739728	2.62	0.009	.2454815	1.711683
C3322	22.19668	.7250152	30.62	0.000	20.77543	23.61793
C3326	21.67534	2.209435	9.81	0.000	17.34418	26.00651
C3334	13.84094	.3085862	44.85	0.000	13.23602	14.44586
C3346	21.50196	.3254903	66.06	0.000	20.8639	22.14002
C3354	.7857618	.3056463	2.57	0.010	.1866019	1.384922
C3366	6.795862	.3858236	17.61	0.000	6.03953	7.552194
C3370	6.387213	.3090514	20.67	0.000	5.781378	6.993048
C3374	.1694884	.3268536	0.52	0.604	-.4712443	.8102211
C3378	11.01616	.5976738	18.43	0.000	9.844536	12.18778
C3386	5.410358	.3486796	15.52	0.000	4.72684	6.093877
C3406	6.660808	.7108549	9.37	0.000	5.267316	8.0543
C3410	1.572399	.4493211	3.50	0.000	.6915925	2.453205
C3458	4.824721	.5871838	8.22	0.000	3.673662	5.97578
C3462	.5608197	.5255869	1.07	0.286	-.4694907	1.59113
C3474	4.139599	.5077349	8.15	0.000	3.144284	5.134915
C3482	-4.339104	.4684213	-9.26	0.000	-5.257353	-3.420856
C3490	14.01182	.3644462	38.45	0.000	13.29739	14.72624
C3494	8.530023	.4359107	19.57	0.000	7.675506	9.384541
C3498	13.63094	.3976877	34.28	0.000	12.85135	14.41053
C3510	2.954085	.351121	8.41	0.000	2.265781	3.642389
C3530	18.42394	.3653926	50.42	0.000	17.70766	19.14022
C3538	12.08153	.6325069	19.10	0.000	10.84162	13.32143
C3562	37.23901	.4519122	82.40	0.000	36.35313	38.1249
C3566	7.905252	.3267212	24.20	0.000	7.264779	8.545725
C3584	4.579014	.3462704	13.22	0.000	3.900218	5.257809
C3598	16.32582	.3615265	45.16	0.000	15.61712	17.03452
C3610	-.6892108	.4006046	-1.72	0.085	-1.474518	.0960963
C3614	.0456722	.5049017	0.09	0.928	-.9440889	1.035433
C3622	13.50876	1.531675	8.82	0.000	10.50621	16.5113
C3626	3.132079	.3134096	9.99	0.000	2.5177	3.746457
C3642	7.84358	.5342508	14.68	0.000	6.796286	8.890874
C3650	9.972703	.3474012	28.71	0.000	9.291691	10.65371
C3654	9.162244	.3043121	30.11	0.000	8.5657	9.758789
C3674	7.627723	.3662483	20.83	0.000	6.909765	8.345681
C3678	11.68214	.3416938	34.19	0.000	11.01232	12.35196
C3698	3.107822	.3199511	9.71	0.000	2.48062	3.735024
C3710	17.22973	.4349615	39.61	0.000	16.37707	18.08239
C3734	10.5736	.40246	26.27	0.000	9.784652	11.36254
C3746	1.358754	.3951	3.44	0.001	.5842381	2.133271

C3762	1.581939	.3571902	4.43	0.000	.881738	2.282141
C3786	2.620221	.3135371	8.36	0.000	2.005593	3.234849
C3790	13.9081	.540401	25.74	0.000	12.84875	14.96745
C3798	22.52488	.3117386	72.26	0.000	21.91378	23.13598
C3806	13.89381	.3017476	46.04	0.000	13.30229	14.48533
C3822	1.299265	.3649791	3.56	0.000	.583795	2.014735
C3830	14.30985	.4182188	34.22	0.000	13.49002	15.12969
C3834	7.056306	.3794807	18.59	0.000	6.312408	7.800204
C3854	-2.973999	.3460051	-8.60	0.000	-3.652275	-2.295724
C3866	-13.98964	.5152933	-27.15	0.000	-14.99977	-12.97951
C3886	8.636904	.3087211	27.98	0.000	8.031716	9.242091
C3890	16.69246	.4618161	36.15	0.000	15.78716	17.59776
C3894	2.938093	.4545267	6.46	0.000	2.047083	3.829104
C3914	-.6164533	.3166789	-1.95	0.052	-1.23724	.0043339
C3930	11.58947	.3108989	37.28	0.000	10.98002	12.19893
C3934	3.576062	.4392027	8.14	0.000	2.715091	4.437034
C3938	2.027733	.3163748	6.41	0.000	1.407542	2.647924
C3946	-.6657629	.5006809	-1.33	0.184	-1.64725	.3157242
C3954	9.690395	.4379418	22.13	0.000	8.831896	10.54889
C3958	14.31063	.4191025	34.15	0.000	13.48906	15.1322
C3966	.0411457	.3464514	0.12	0.905	-.6380045	.7202959
C3974	9.7251	.2998128	32.44	0.000	9.137376	10.31282
C3982	3.215136	.3087293	10.41	0.000	2.609932	3.820339
C3990	10.69547	.3937605	27.16	0.000	9.923579	11.46736
C4006	14.15097	.3599369	39.32	0.000	13.44538	14.85655
C4014	6.558965	.3597897	18.23	0.000	5.853668	7.264262
C4022	4.699662	.3422355	13.73	0.000	4.028776	5.370548
C4034	15.91014	.4834662	32.91	0.000	14.9624	16.85788
C4038	10.63707	.3695494	28.78	0.000	9.912639	11.3615
C4042	7.696102	.352338	21.84	0.000	7.005412	8.386791
C4058	.7595821	.5099395	1.49	0.136	-.2400546	1.759219
C4066	3.712135	.474223	7.83	0.000	2.782513	4.641756
C4090	18.29538	.3111664	58.80	0.000	17.6854	18.90536
C4098	7.055087	.7624982	9.25	0.000	5.560359	8.549816
C4106	4.116644	.3675813	11.20	0.000	3.396073	4.837216
C4110	-4.540441	.3247992	-13.98	0.000	-5.177147	-3.903736
C4114	1.69171	.3478816	4.86	0.000	1.009756	2.373664
C4118	13.64978	.3189015	42.80	0.000	13.02464	14.27493
C4142	3.349393	.3405599	9.83	0.000	2.681792	4.016994
C4150	8.05858	.3548738	22.71	0.000	7.362919	8.754241
C4154	.3730266	.3009245	1.24	0.215	-.2168771	.9629303
C4162	11.95381	.4391997	27.22	0.000	11.09285	12.81478
C4166	1.139945	.4068637	2.80	0.005	.3423686	1.937522
C4170	8.23648	.3518119	23.41	0.000	7.546822	8.926139
C4174	20.19139	.411512	49.07	0.000	19.3847	20.99808
C4186	43.37817	1.671769	25.95	0.000	40.10099	46.65535
C4190	-16.48238	.7341224	-22.45	0.000	-17.92149	-15.04328
C4194	67.82051	3.293469	20.59	0.000	61.36431	74.27671
C4198	-7.902355	.4734045	-16.69	0.000	-8.830373	-6.974338
C4202	6.140044	.3629523	16.92	0.000	5.428547	6.851541
C4210	10.99869	.4547981	24.18	0.000	10.10714	11.89023
C4214	5.998222	.3980568	15.07	0.000	5.21791	6.778535
C4220	12.54649	.3323761	37.75	0.000	11.89493	13.19805
C4222	13.15078	.4220649	31.16	0.000	12.32341	13.97816
C4234	6.087038	.2919622	20.85	0.000	5.514703	6.659373
C4254	3.176381	.3153211	10.07	0.000	2.558256	3.794507
C4266	28.38108	1.233359	23.01	0.000	25.96332	30.79884
C4268	2.976768	.3909423	7.61	0.000	2.210402	3.743134
C4270	-5.280053	.334653	-15.78	0.000	-5.936075	-4.624031
C4310	7.343345	.3471315	21.15	0.000	6.662862	8.023829
C4330	4.141923	.3651198	11.34	0.000	3.426177	4.857669
C4334	3.609799	.3370862	10.71	0.000	2.949007	4.270591
C4342	5.790216	.5166351	11.21	0.000	4.777454	6.802978
C4358	3.008816	.407547	7.38	0.000	2.209899	3.807732
C4362	6.190104	.426861	14.50	0.000	5.353327	7.026882
C4378	5.291574	.4093161	12.93	0.000	4.489189	6.093958
C4390	6.90644	.3539895	19.51	0.000	6.212513	7.600368
C4406	5.59826	.3919033	14.28	0.000	4.83001	6.36651
C4410	14.58122	.3651242	39.93	0.000	13.86546	15.29697
C4414	9.933148	.3261203	30.46	0.000	9.293853	10.57244
C4418	.7315357	.3035326	2.41	0.016	.1365194	1.326552
C4422	1.081595	.4893189	2.21	0.027	.122381	2.040809

C4430	7.819201	.476509	16.41	0.000	6.885098	8.753304
C4442	1.365507	.367022	3.72	0.000	.6460326	2.084982
C4470	7.008146	.3313887	21.15	0.000	6.358523	7.657769
C4494	-1.962163	.3001284	-6.54	0.000	-2.550506	-1.37382
C4506	9.826725	.3022749	32.51	0.000	9.234174	10.41928
C4522	4.852075	.3682776	13.18	0.000	4.130138	5.574011
C4530	9.663873	.3092046	31.25	0.000	9.057738	10.27001
C4546	.9507492	.3461581	2.75	0.006	.2721739	1.629325
C4550	2.256657	.4179058	5.40	0.000	1.437435	3.07588
C4554	.8860289	.4104117	2.16	0.031	.0814969	1.690561
C4578	7.997138	.3866982	20.68	0.000	7.239092	8.755184
C4582	4.742946	.3361381	14.11	0.000	4.084013	5.40188
C4594	31.94002	.4616307	69.19	0.000	31.03509	32.84496
C4606	7.505348	.3367197	22.29	0.000	6.845275	8.165421
C4614	8.983462	.3783765	23.74	0.000	8.241728	9.725195
C4622	5.662011	.3437422	16.47	0.000	4.988172	6.33585
C4634	6.411239	.342773	18.70	0.000	5.7393	7.083179
C4652	11.47602	.3468843	33.08	0.000	10.79602	12.15602
C4654	2.675621	.2936063	9.11	0.000	2.100063	3.251179
C4666	-4.172828	.3076126	-13.57	0.000	-4.775843	-3.569814
C4670	14.93825	.6948347	21.50	0.000	13.57616	16.30034
C4702	5.310183	.499095	10.64	0.000	4.331805	6.288561
C4722	8.446136	.4767655	17.72	0.000	7.51153	9.380742
C4726	7.165879	.3068404	23.35	0.000	6.564379	7.76738
C4730	-1.003346	.3011132	-3.33	0.001	-1.59362	-.4130725
C4738	4.166711	.3386573	12.30	0.000	3.502839	4.830582
C4746	2.322452	.3673581	6.32	0.000	1.602318	3.042585
C4758	6.724566	.4491872	14.97	0.000	5.844022	7.605109
C4790	35.40067	.5261018	67.29	0.000	34.36935	36.43199
C4794	5.572424	.3371836	16.53	0.000	4.911441	6.233406
C4806	1.823135	.3230084	5.64	0.000	1.18994	2.45633
C4814	4.933121	.3306006	14.92	0.000	4.285043	5.581198
C4826	1.279481	.422262	3.03	0.002	.4517185	2.107243
C4830	-1.835218	.3307606	-5.55	0.000	-2.483609	-1.186826
C4854	2.13272	.6258919	3.41	0.001	.9057813	3.359659
C4862	8.090517	.4313528	18.76	0.000	7.244934	8.9361
C4866	.2813616	.3276997	0.86	0.391	-.3610297	.9237529
C4870	2.831601	.4095729	6.91	0.000	2.028713	3.634489
C4890	3.957169	.3143236	12.59	0.000	3.340999	4.573339
C4902	5.600928	.2968293	18.87	0.000	5.019052	6.182804
C4918	7.619098	.3501097	21.76	0.000	6.932776	8.305419
C4934	14.59971	.3184248	45.85	0.000	13.9755	15.22392
C4942	-2.015695	.3139906	-6.42	0.000	-2.631213	-1.400178
C4962	8.404685	.3117322	26.96	0.000	7.793595	9.015775
C4966	2.140985	.5347022	4.00	0.000	1.092806	3.189164
C4970	4.102068	.313543	13.08	0.000	3.487428	4.716708
C4974	-2.287051	.3775066	-6.06	0.000	-3.027078	-1.547023
year						
2002	.4457902	.1478334	3.02	0.003	.1559917	.7355888
2003	.7395101	.1453687	5.09	0.000	.4545432	1.024477
2004	1.247117	.1398425	8.92	0.000	.9729831	1.521251
2005	1.124052	.1316549	8.54	0.000	.8659682	1.382135
2006	1.536324	.1229732	12.49	0.000	1.295259	1.777389
2007	2.015168	.1182389	17.04	0.000	1.783384	2.246953
2008	1.575125	.1169196	13.47	0.000	1.345928	1.804323
2009	2.125924	.1197093	17.76	0.000	1.891257	2.36059
2010	2.319829	.1149004	20.19	0.000	2.094589	2.545068
2011	1.986201	.1150565	17.26	0.000	1.760655	2.211746
2012	2.010986	.1172963	17.14	0.000	1.781049	2.240923
2013	1.862445	.11952	15.58	0.000	1.628149	2.09674
2014	2.354732	.1274714	18.47	0.000	2.104849	2.604614
2015	3.547946	.1262067	28.11	0.000	3.300543	3.79535
2016	3.560082	.1282439	27.76	0.000	3.308685	3.811479
2017	3.968831	.1450581	27.36	0.000	3.684473	4.253189
2018	4.29633	.1591177	27.00	0.000	3.984411	4.60825
2019	4.895994	.1699672	28.81	0.000	4.562806	5.229181
_cons	37.14772	.2997336	123.94	0.000	36.56015	37.73529

194 predict resid_avg_annual_pay, residuals

195 reg annual_avg_emplvl i.msa_factor i.year, robust

Linear regression

					Number of obs	=	7,372
					F(405, 6966)	=	4008.21
					Prob > F	=	0.0000
					R-squared	=	0.9963
					Root MSE	=	44.146

annual_avg~l	Coef.	Robust Std. Err.	t	P>|t|	[95% Conf. Interval]	
msa_factor						
C1038	-10.86058	4.608164	-2.36	0.018	-19.89398	-1.827175
C1042	252.2172	4.135901	60.98	0.000	244.1096	260.3248
C1050	-3.312842	4.680445	-0.71	0.479	-12.48794	5.862256
C1054	-21.78326	4.118006	-5.29	0.000	-29.85581	-13.71072
C1058	363.4595	3.186453	114.06	0.000	357.2131	369.7059
C1074	301.3225	3.81757	78.93	0.000	293.8389	308.8061
C1078	-2.559211	4.585899	-0.56	0.577	-11.54897	6.430548
C1090	267.8855	3.021689	88.65	0.000	261.962	273.8089
C1102	-5.268421	4.574371	-1.15	0.249	-14.23558	3.69874
C1110	45.70632	3.945871	11.58	0.000	37.97121	53.44142
C1118	-20.82863	4.237405	-4.92	0.000	-29.13524	-12.52203
C1126	102.0568	4.053232	25.18	0.000	94.11122	110.0024
C1146	133.0119	3.515904	37.83	0.000	126.1197	139.9041
C1150	-17.56142	4.78369	-3.67	0.000	-26.93891	-8.183931
C1154	51.53711	3.894284	13.23	0.000	43.90312	59.17109
C1164	-27.19958	4.807229	-5.66	0.000	-36.62321	-17.77595
C1170	108.557	3.105922	34.95	0.000	102.4684	114.6456
C1202	15.625	3.817951	4.09	0.000	8.140653	23.10935
C1206	2251.835	35.57968	63.29	0.000	2182.088	2321.582
C1210	71.86116	5.744746	12.51	0.000	60.5997	83.12261
C1222	-13.83447	3.726336	-3.71	0.000	-21.13923	-6.529719
C1226	146.6969	3.426559	42.81	0.000	139.9798	153.414
C1242	742.4767	27.09749	27.40	0.000	689.3574	795.5961
C1254	221.2273	4.781083	46.27	0.000	211.8549	230.5996
C1258	1189.984	8.059151	147.66	0.000	1174.186	1205.782
C1262	5.818474	4.543719	1.28	0.200	-3.0886	14.72555
C1270	28.75321	4.134541	6.95	0.000	20.64825	36.85817
C1294	296.7584	3.706754	80.06	0.000	289.4921	304.0248
C1298	-7.226368	4.781607	-1.51	0.131	-16.59977	2.147037
C1302	-27.75184	4.790782	-5.79	0.000	-37.14323	-18.36045
C1314	93.57584	4.282639	21.85	0.000	85.18057	101.9711
C1322	-20.45942	4.67401	-4.38	0.000	-29.6219	-11.29694
C1338	17.14589	3.665465	4.68	0.000	9.960467	24.33132
C1346	1.954053	3.249888	0.60	0.548	-4.416718	8.324823
C1374	14.75974	3.971485	3.72	0.000	6.974416	22.54506
C1378	40.64321	5.21898	7.79	0.000	30.41242	50.874
C1382	416.018	4.002751	103.93	0.000	408.1714	423.8646
C1390	-.5536316	3.899558	-0.14	0.887	-8.197953	7.09069
C1398	3.346842	4.270188	0.78	0.433	-5.024027	11.71771
C1401	25.94558	4.738559	5.48	0.000	16.65656	35.2346
C1402	2.165789	4.372947	0.50	0.620	-6.406518	10.7381
C1410	-24.46816	4.426662	-5.53	0.000	-33.14576	-15.79055
C1426	205.7781	4.287765	47.99	0.000	197.3728	214.1834
C1446	2377.143	27.84041	85.38	0.000	2322.568	2431.719
C1450	100.9871	3.598092	28.07	0.000	93.9337	108.0404
C1454	2.142684	3.834326	0.56	0.576	-5.373763	9.659131
C1474	18.62579	3.943852	4.72	0.000	10.89464	26.35694
C1486	350.6137	4.041567	86.75	0.000	342.691	358.5364
C1518	62.68116	3.520022	17.81	0.000	55.78084	69.58147
C1526	-22.83763	4.442622	-5.14	0.000	-31.54652	-14.12874
C1538	465.1362	3.56195	130.58	0.000	458.1537	472.1187
C1550	-5.009474	4.41107	-1.14	0.256	-13.65652	3.637568
C1554	50.78342	3.919033	12.96	0.000	43.10092	58.46592
C1568	-23.37889	4.175738	-5.60	0.000	-31.56461	-15.19318
C1594	102.3015	4.919701	20.79	0.000	92.65736	111.9456
C1598	151.9798	4.450699	34.15	0.000	143.2551	160.7045
C1602	-20.10105	4.545157	-4.42	0.000	-29.01094	-11.19116

C1606	-12.40737	4.422602	-2.81	0.005	-21.07702	-3.73772
C1618	-34.25068	4.592542	-7.46	0.000	-43.25347	-25.2479
C1622	-25.814	4.386898	-5.88	0.000	-34.41366	-17.21434
C1630	72.26158	3.923721	18.42	0.000	64.56989	79.95327
C1654	-8.713053	4.111233	-2.12	0.034	-16.77232	-.6537846
C1658	33.82474	4.483925	7.54	0.000	25.03488	42.6146
C1662	50.17579	5.539575	9.06	0.000	39.31654	61.03504
C1670	222.601	5.194909	42.85	0.000	212.4174	232.7846
C1674	941.7281	20.6667	45.57	0.000	901.215	982.2411
C1682	36.46079	3.531575	10.32	0.000	29.53783	43.38375
C1686	167.5512	3.60163	46.52	0.000	160.4909	174.6115
C1694	-21.01126	4.194997	-5.01	0.000	-29.23474	-12.78779
C1698	4237.452	29.28339	144.70	0.000	4180.047	4294.856
C1702	11.62279	3.925707	2.96	0.003	3.927207	19.31837
C1714	930.5742	5.711498	162.93	0.000	919.3779	941.7705
C1730	16.04974	3.77014	4.26	0.000	8.659115	23.44036
C1742	-23.389	4.119186	-5.68	0.000	-31.46386	-15.31414
C1746	952.0483	9.528599	99.91	0.000	933.3693	970.7272
C1766	-10.49347	3.789625	-2.77	0.006	-17.92229	-3.064654
C1778	32.27784	3.338962	9.67	0.000	25.73246	38.82322
C1782	190.3709	2.997372	63.51	0.000	184.4951	196.2467
C1786	20.80947	3.705911	5.62	0.000	13.54476	28.07419
C1790	278.5511	3.289891	84.67	0.000	272.1019	285.0002
C1798	51.64779	4.493737	11.49	0.000	42.8387	60.45688
C1802	-18.92837	3.947758	-4.79	0.000	-26.66718	-11.18956
C1814	873.4222	9.24092	94.52	0.000	855.3071	891.5372
C1858	113.6626	3.65435	31.10	0.000	106.499	120.8263
C1870	-28.65711	4.337314	-6.61	0.000	-37.15956	-20.15465
C1888	35.43147	3.602826	9.83	0.000	28.36884	42.49411
C1906	-27.06668	4.573702	-5.92	0.000	-36.03253	-18.10083
C1910	2938.652	68.68146	42.79	0.000	2804.016	3073.289
C1914	4.076579	5.020497	0.81	0.417	-5.765124	13.91828
C1918	-35.15547	4.78136	-7.35	0.000	-44.5284	-25.78255
C1930	-2.412579	3.495802	-0.69	0.490	-9.265415	4.440257
C1934	116.8138	4.425308	26.40	0.000	108.1388	125.4887
C1938	305.8018	6.413279	47.68	0.000	293.2298	318.3738
C1946	-10.91037	4.577717	-2.38	0.017	-19.88409	-1.93665
C1950	-13.15658	4.750406	-2.77	0.006	-22.46882	-3.844335
C1966	113.0801	3.301824	34.25	0.000	106.6075	119.5527
C1974	1205.162	24.48972	49.21	0.000	1157.155	1253.169
C1978	260.3355	4.143565	62.83	0.000	252.2128	268.4581
C1982	1794.967	26.20589	68.49	0.000	1743.595	1846.338
C2002	-7.382105	4.591839	-1.61	0.108	-16.38351	1.619297
C2010	-2.388421	3.99692	-0.60	0.550	-10.2236	5.44676
C2022	-9.408632	4.127356	-2.28	0.023	-17.49951	-1.317757
C2026	59.97642	4.192512	14.31	0.000	51.75782	68.19502
C2050	207.8684	3.15911	65.80	0.000	201.6756	214.0612
C2070	-8.877632	4.424232	-2.01	0.045	-17.55047	-.2047899
C2074	13.50989	4.028234	3.35	0.001	5.613329	21.40646
C2094	-5.886947	4.001529	-1.47	0.141	-13.73116	1.957268
C2106	-13.33537	4.130012	-3.23	0.001	-21.43145	-5.239287
C2114	54.78937	3.676835	14.90	0.000	47.58165	61.99708
C2130	-26.36789	4.803515	-5.49	0.000	-35.78425	-16.95154
C2134	211.8314	3.550089	59.67	0.000	204.8721	218.7906
C2150	60.90674	4.801183	12.69	0.000	51.49496	70.31852
C2166	80.00874	3.56575	22.44	0.000	73.01878	86.99869
C2178	86.33705	4.399014	19.63	0.000	77.71364	94.96046
C2182	-27.66053	4.490952	-6.16	0.000	-36.46416	-18.85689
C2202	56.14716	3.480262	16.13	0.000	49.32478	62.96953
C2214	-15.70626	4.530606	-3.47	0.001	-24.58763	-6.824896
C2218	60.31095	4.188273	14.40	0.000	52.10066	68.52124
C2222	136.8944	3.643791	37.57	0.000	129.7515	144.0374
C2238	-6.438789	4.049765	-1.59	0.112	-14.37756	1.499983
C2242	75.20105	5.757761	13.06	0.000	63.91409	86.48802
C2250	17.89679	4.39035	4.08	0.000	9.290366	26.50321
C2252	-12.09779	4.348533	-2.78	0.005	-20.62224	-3.573339
C2254	-18.31605	4.452421	-4.11	0.000	-27.04415	-9.587951
C2266	71.81379	3.060107	23.47	0.000	65.81505	77.81253
C2290	45.22832	4.807887	9.41	0.000	35.80339	54.65324
C2306	138.2133	3.889123	35.54	0.000	130.5894	145.8371
C2342	286.8317	3.447664	83.20	0.000	280.0732	293.5902
C2346	-28.44	4.516542	-6.30	0.000	-37.2938	-19.5862

C2354	61.51263	3.829919	16.06	0.000	54.00482	69.02044
C2358	9.775053	3.424914	2.85	0.004	3.061179	16.48893
C2390	-30.37021	4.391144	-6.92	0.000	-38.97819	-21.76223
C2402	-11.21184	4.427449	-2.53	0.011	-19.89099	-2.532694
C2414	-20.56442	4.699007	-4.38	0.000	-29.77591	-11.35294
C2422	-13.17947	4.325319	-3.05	0.002	-21.65842	-4.700531
C2426	-23.65589	4.323487	-5.47	0.000	-32.13125	-15.18054
C2430	-5.644579	4.147416	-1.36	0.174	-13.77478	2.485621
C2434	425.784	6.69208	63.63	0.000	412.6655	438.9025
C2442	-39.72468	4.252926	-9.34	0.000	-48.06171	-31.38765
C2450	-29.32695	4.464944	-6.57	0.000	-38.0796	-20.5743
C2454	23.50121	3.131246	7.51	0.000	17.36302	29.63941
C2458	100.5674	3.747982	26.83	0.000	93.22018	107.9146
C2466	281.7521	4.329238	65.08	0.000	273.2655	290.2387
C2478	7.017947	3.973246	1.77	0.077	-.7708249	14.80672
C2486	291.3842	3.587141	81.23	0.000	284.3523	298.4161
C2502	-47.79353	4.775889	-10.01	0.000	-57.15572	-38.43133
C2506	82.95763	4.596123	18.05	0.000	73.94783	91.96743
C2518	31.80989	4.015466	7.92	0.000	23.93836	39.68143
C2522	-23.49121	4.235179	-5.55	0.000	-31.79345	-15.18897
C2526	-21.74505	4.011029	-5.42	0.000	-29.60789	-13.88221
C2542	248.7456	3.466763	71.75	0.000	241.9497	255.5415
C2550	-4.049632	4.120272	-0.98	0.326	-12.12662	4.027356
C2554	539.6216	3.370691	160.09	0.000	533.014	546.2292
C2562	-7.940579	4.00805	-1.98	0.048	-15.79758	-.0835792
C2586	87.98295	5.412022	16.26	0.000	77.37374	98.59216
C2594	3.778684	3.785493	1.00	0.318	-3.642036	11.1994
C2598	-45.78016	4.403591	-10.40	0.000	-54.41254	-37.14778
C2614	-32.37258	4.444327	-7.28	0.000	-41.08481	-23.66035
C2630	-27.74237	4.46962	-6.21	0.000	-36.50418	-18.98055
C2638	24.613	4.778453	5.15	0.000	15.24578	33.98022
C2642	2516.802	60.40796	41.66	0.000	2398.384	2635.22
C2658	65.65442	4.690801	14.00	0.000	56.45902	74.84982
C2662	136.4979	3.320763	41.10	0.000	129.9882	143.0077
C2682	-5.472053	3.846049	-1.42	0.155	-13.01148	2.067375
C2690	851.7349	9.98276	85.32	0.000	832.1656	871.3041
C2698	19.89011	3.80839	5.22	0.000	12.4245	27.35571
C2706	-14.52163	4.468736	-3.25	0.001	-23.28172	-5.761547
C2710	-7.549053	4.546237	-1.66	0.097	-16.46106	1.362957
C2714	181.9108	3.42768	53.07	0.000	175.1915	188.6301
C2718	-2.142263	4.122962	-0.52	0.603	-10.22453	5.939999
C2726	523.2941	7.97934	65.58	0.000	507.6522	538.936
C2734	-18.82463	4.195676	-4.49	0.000	-27.04943	-10.59983
C2750	.3699474	4.381864	0.08	0.933	-8.219841	8.959736
C2762	10.52474	4.501916	2.34	0.019	1.699611	19.34986
C2774	10.68363	4.269017	2.50	0.012	2.315059	19.0522
C2778	-8.512211	4.969971	-1.71	0.087	-18.25487	1.230446
C2786	-14.39821	3.983098	-3.61	0.000	-22.2063	-6.590125
C2790	12.52005	4.390075	2.85	0.004	3.914169	21.12594
C2798	6.935	3.800642	1.82	0.068	-.5154157	14.38542
C2802	72.51032	4.261693	17.01	0.000	64.1561	80.86453
C2810	-21.15505	4.380041	-4.83	0.000	-29.74127	-12.56884
C2814	903.0753	6.935534	130.21	0.000	889.4795	916.671
C2842	41.69384	3.59694	11.59	0.000	34.64274	48.74494
C2866	59.80726	3.567228	16.77	0.000	52.81441	66.80012
C2870	52.23726	4.637809	11.26	0.000	43.14574	61.32878
C2874	-3.849368	4.569232	-0.84	0.400	-12.80646	5.107719
C2894	288.9183	3.208256	90.05	0.000	282.6292	295.2075
C2902	-24.71589	4.645883	-5.32	0.000	-33.82324	-15.60855
C2910	7.584158	4.243954	1.79	0.074	-.7352853	15.9036
C2918	136.8529	4.915538	27.84	0.000	127.2169	146.4888
C2920	21.38168	3.890799	5.50	0.000	13.75453	29.00883
C2934	28.92658	3.269451	8.85	0.000	22.51746	35.3357
C2942	-16.34111	4.351834	-3.75	0.000	-24.87203	-7.810185
C2946	135.7547	3.217808	42.19	0.000	129.4469	142.0626
C2954	162.5988	3.442935	47.23	0.000	155.8496	169.348
C2962	142.5228	4.640955	30.71	0.000	133.4251	151.6205
C2970	24.46953	3.49826	6.99	0.000	17.61187	31.32718
C2974	3.764947	4.086907	0.92	0.357	-4.246634	11.77653
C2982	798.8328	17.1074	46.70	0.000	765.2971	832.3685
C2994	-16.40716	4.392007	-3.74	0.000	-25.01683	-7.797486
C3002	-21.40484	4.403439	-4.86	0.000	-30.03692	-12.77276

C3014	-16.38253	4.266332	-3.84	0.000	-24.74584	-8.019216
C3030	-37.64811	4.452459	-8.46	0.000	-46.37628	-28.91993
C3034	-15.77726	4.429071	-3.56	0.000	-24.45959	-7.094936
C3046	182.5527	3.05222	59.81	0.000	176.5694	188.536
C3062	-11.60579	4.827738	-2.40	0.016	-21.06963	-2.141953
C3070	100.3039	3.438323	29.17	0.000	93.56373	107.0441
C3078	258.3331	3.553259	72.70	0.000	251.3676	265.2986
C3086	-13.17279	3.800524	-3.47	0.001	-20.62297	-5.722606
C3098	28.50421	4.225121	6.75	0.000	20.22169	36.78674
C3102	-27.078	4.376798	-6.19	0.000	-35.65786	-18.49814
C3108	5551.386	58.32925	95.17	0.000	5437.043	5665.729
C3114	522.6599	4.835598	108.09	0.000	513.1807	532.1391
C3118	65.44016	3.470055	18.86	0.000	58.63779	72.24252
C3134	34.71721	4.433604	7.83	0.000	26.026	43.40842
C3142	31.90458	4.350305	7.33	0.000	23.37666	40.4325
C3146	-18.71247	4.072825	-4.59	0.000	-26.69645	-10.7285
C3154	288.5816	3.328163	86.71	0.000	282.0574	295.1058
C3170	130.2742	3.764537	34.61	0.000	122.8945	137.6538
C3174	-27.40521	4.317106	-6.35	0.000	-35.86805	-18.94237
C3186	-12.81974	4.149953	-3.09	0.002	-20.95491	-4.684565
C3190	-10.09247	5.032433	-2.01	0.045	-19.95758	-.2273718
C3242	-26.96953	5.167162	-5.22	0.000	-37.09874	-16.84031
C3258	156.4162	5.161682	30.30	0.000	146.2977	166.5346
C3278	16.69558	3.834933	4.35	0.000	9.177943	24.21322
C3282	531.3224	4.192592	126.73	0.000	523.1037	539.5412
C3290	7.655368	3.799348	2.01	0.044	.2074885	15.10325
C3310	2231.299	31.9286	69.88	0.000	2168.709	2293.888
C3314	-21.30763	4.842388	-4.40	0.000	-30.80019	-11.81508
C3322	-28.42674	4.385694	-6.48	0.000	-37.02403	-19.82944
C3326	11.70168	3.530228	3.31	0.001	4.781362	18.62201
C3334	745.4393	4.736416	157.38	0.000	736.1545	754.7241
C3346	1707.685	15.8256	107.91	0.000	1676.662	1738.708
C3354	-8.724053	4.067038	-2.15	0.032	-16.69669	-.7514189
C3366	103.4567	4.222566	24.50	0.000	95.17922	111.7343
C3370	109.0326	3.295871	33.08	0.000	102.5717	115.4935
C3374	11.68147	4.592967	2.54	0.011	2.677859	20.68509
C3378	-23.27205	4.615211	-5.04	0.000	-32.31927	-14.22483
C3386	98.52595	4.361688	22.59	0.000	89.97571	107.0762
C3406	-6.230526	3.98931	-1.56	0.118	-14.05079	1.589737
C3410	-21.18868	4.411956	-4.80	0.000	-29.83746	-12.53991
C3458	-16.49511	4.147948	-3.98	0.000	-24.62635	-8.363863
C3462	-17.28968	4.789255	-3.61	0.000	-26.67808	-7.901286
C3474	-2.274211	4.482901	-0.51	0.612	-11.06206	6.513641
C3482	76.87	3.142431	24.46	0.000	70.70988	83.03012
C3490	5.234895	3.716099	1.41	0.159	-2.049792	12.51958
C3494	62.89174	3.172704	19.82	0.000	56.67227	69.1112
C3498	747.2991	16.18572	46.17	0.000	715.5701	779.028
C3510	-19.82789	4.525185	-4.38	0.000	-28.69864	-10.95715
C3530	295.8254	4.094615	72.25	0.000	287.7987	303.8521
C3538	478.5798	9.970842	48.00	0.000	459.0339	498.1257
C3562	8520.716	97.54638	87.35	0.000	8329.496	8711.937
C3566	-2.672368	4.587202	-0.58	0.560	-11.66468	6.319945
C3584	203.6205	4.288943	47.48	0.000	195.2129	212.0282
C3598	61.38816	4.856318	12.64	0.000	51.8683	70.90802
C3610	30.95016	3.808975	8.13	0.000	23.48341	38.41691
C3614	-22.89737	4.523214	-5.06	0.000	-31.76424	-14.03049
C3622	-.6656316	3.630533	-0.18	0.855	-7.782581	6.451318
C3626	156.9956	3.494016	44.93	0.000	150.1463	163.845
C3642	498.7889	5.215605	95.63	0.000	488.5647	509.0131
C3650	35.96063	3.343203	10.76	0.000	29.40694	42.51433
C3654	381.8925	3.371471	113.27	0.000	375.2834	388.5016
C3674	961.2488	24.65485	38.99	0.000	912.9178	1009.58
C3678	25.87137	4.232113	6.11	0.000	17.57514	34.1676
C3698	-14.23421	4.291014	-3.32	0.001	-22.6459	-5.822517
C3710	246.3986	3.315155	74.32	0.000	239.8999	252.8973
C3734	132.6268	3.602688	36.81	0.000	125.5645	139.6892
C3746	10.86689	3.951416	2.75	0.006	3.120916	18.61287
C3762	-24.53368	4.89047	-5.02	0.000	-34.12049	-14.94687
C3786	94.00237	3.347986	28.08	0.000	87.4393	100.5654
C3790	109.1832	4.941237	22.10	0.000	99.49688	118.8695
C3798	2595.517	13.70387	189.40	0.000	2568.653	2622.381
C3806	1728.72	32.62716	52.98	0.000	1664.761	1792.679

C3822	-28.60942	5.017371	-5.70	0.000	-38.445	-18.77385
C3830	1030.165	3.533598	291.53	0.000	1023.238	1037.092
C3834	-2.405947	4.568982	-0.53	0.599	-11.36254	6.55065
C3854	-31.46137	4.409474	-7.13	0.000	-40.10528	-22.81746
C3866	11.07505	5.151952	2.15	0.032	.9756571	21.17445
C3886	192.7905	3.302069	58.38	0.000	186.3174	199.2635
C3890	966.8713	16.68084	57.96	0.000	934.1717	999.5708
C3894	61.82989	3.219144	19.21	0.000	55.51939	68.1404
C3914	-6.048474	3.956906	-1.53	0.126	-13.80522	1.708268
C3930	613.0109	4.463166	137.35	0.000	604.2617	621.7601
C3934	121.1853	5.479137	22.12	0.000	110.4445	131.9261
C3938	-7.130316	4.143566	-1.72	0.085	-15.25297	.9923352
C3946	-20.91979	4.206983	-4.97	0.000	-29.16676	-12.67282
C3954	10.50874	4.530872	2.32	0.020	1.626848	19.39063
C3958	448.9616	12.28969	36.53	0.000	424.8701	473.0532
C3966	-1.424	4.13072	-0.34	0.730	-9.52147	6.67347
C3974	102.306	3.862102	26.49	0.000	94.7351	109.8769
C3982	.2091053	4.42963	0.05	0.962	-8.474319	8.89253
C3990	143.0827	3.642172	39.29	0.000	135.943	150.2225
C4006	528.6889	4.123599	128.21	0.000	520.6054	536.7724
C4014	1191.608	28.65889	41.58	0.000	1135.428	1247.788
C4022	86.18942	4.389335	19.64	0.000	77.58499	94.79386
C4034	45.67758	3.80427	12.01	0.000	38.22005	53.13511
C4038	434.1923	3.822881	113.58	0.000	426.6983	441.6863
C4042	81.31321	4.746332	17.13	0.000	72.00895	90.61747
C4058	-3.916947	4.984326	-0.79	0.432	-13.68774	5.85385
C4066	-24.81726	4.575221	-5.42	0.000	-33.78609	-15.84844
C4090	839.0358	9.409448	89.17	0.000	820.5904	857.4812
C4098	21.35737	4.877726	4.38	0.000	11.79554	30.9192
C4106	33.11716	3.832057	8.64	0.000	25.60516	40.62916
C4110	-13.39779	3.303784	-4.06	0.000	-19.87421	-6.921367
C4114	-10.05011	4.368298	-2.30	0.021	-18.6133	-1.48691
C4118	1217.905	6.441525	189.07	0.000	1205.277	1230.532
C4142	92.46805	3.142365	29.43	0.000	86.30806	98.62805
C4150	111.4069	3.188041	34.95	0.000	105.1574	117.6565
C4154	82.58479	3.592329	22.99	0.000	75.54273	89.62685
C4162	545.0836	12.00627	45.40	0.000	521.5476	568.6195
C4166	-17.95826	4.298795	-4.18	0.000	-26.38521	-9.531316
C4170	795.6774	19.44725	40.91	0.000	757.5548	833.7999
C4174	1253.115	15.44146	81.15	0.000	1222.845	1283.385
C4186	2041.591	36.44858	56.01	0.000	1970.141	2113.042
C4190	-42.70805	4.667952	-9.15	0.000	-51.85866	-33.55745
C4194	892.1745	18.51754	48.18	0.000	855.8745	928.4745
C4198	623.9958	14.0601	44.38	0.000	596.4338	651.5579
C4202	42.69547	3.51679	12.14	0.000	35.80149	49.58945
C4210	34.43916	4.038669	8.53	0.000	26.52214	42.35618
C4214	-2.509737	4.505355	-0.56	0.578	-11.34161	6.322132
C4220	122.5739	3.352949	36.56	0.000	116.0011	129.1467
C4222	127.4965	3.525939	36.16	0.000	120.5846	134.4084
C4234	87.84584	3.046142	28.84	0.000	81.87448	93.81721
C4254	185.1996	4.25728	43.50	0.000	176.8541	193.5452
C4266	1656.888	32.13606	51.56	0.000	1593.892	1719.885
C4268	-16.25279	4.12098	-3.94	0.000	-24.33117	-8.174413
C4270	-36.77695	4.503616	-8.17	0.000	-45.60541	-27.94849
C4310	-4.440105	4.419659	-1.00	0.315	-13.10398	4.223773
C4330	-20.60284	4.273907	-4.82	0.000	-28.981	-12.22468
C4334	115.1464	4.919366	23.41	0.000	105.503	124.7899
C4342	-28.567	4.662455	-6.13	0.000	-37.70683	-19.42717
C4358	20.79858	4.258519	4.88	0.000	12.45058	29.14657
C4362	70.10042	3.31339	21.16	0.000	63.60517	76.59567
C4378	65.99274	4.448129	14.84	0.000	57.27305	74.71243
C4390	65.20547	3.258261	20.01	0.000	58.81829	71.59266
C4406	153.2179	3.174723	48.26	0.000	146.9945	159.4414
C4410	68.98574	4.995314	13.81	0.000	59.1934	78.77807
C4414	196.8922	3.450739	57.06	0.000	190.1277	203.6567
C4418	121.8614	3.192079	38.18	0.000	115.604	128.1189
C4422	-14.12389	4.788526	-2.95	0.003	-23.51086	-4.736925
C4430	2.095526	4.284207	0.49	0.625	-6.302825	10.49388
C4442	-16.97195	4.416318	-3.84	0.000	-25.62928	-8.314619
C4470	157.2271	3.17186	49.57	0.000	151.0093	163.4449
C4494	-26.92847	4.565567	-5.90	0.000	-35.87838	-17.97857
C4506	235.7908	4.585046	51.43	0.000	226.8027	244.7789

C4522	101.0914	4.074945	24.81	0.000	93.10329	109.0796
C4530	1111.53	13.07357	85.02	0.000	1085.902	1137.158
C4546	3.610789	4.713649	0.77	0.444	-5.629399	12.85098
C4550	-5.711684	4.558039	-1.25	0.210	-14.64683	3.22346
C4554	-43.68574	3.735717	-11.69	0.000	-51.00888	-36.36259
C4578	228.2209	5.385278	42.38	0.000	217.6642	238.7777
C4582	44.15126	4.553953	9.70	0.000	35.22413	53.0784
C4594	166.8968	3.121002	53.48	0.000	160.7787	173.0149
C4606	288.2382	3.859247	74.69	0.000	280.6729	295.8035
C4614	345.4824	3.306086	104.50	0.000	339.0015	351.9634
C4622	28.26579	3.690987	7.66	0.000	21.03033	35.50125
C4634	29.79663	3.644277	8.18	0.000	22.65274	36.94053
C4652	381.3083	3.644748	104.62	0.000	374.1634	388.4531
C4654	59.66532	4.817935	12.38	0.000	50.2207	69.10994
C4666	-10.98211	4.360853	-2.52	0.012	-19.53071	-2.433505
C4670	64.383	3.621299	17.78	0.000	57.28415	71.48185
C4702	-24.18916	4.412199	-5.48	0.000	-32.83841	-15.5399
C4722	-4.501158	4.608452	-0.98	0.329	-13.53513	4.532811
C4726	660.0218	3.710868	177.86	0.000	652.7474	667.2962
C4730	83.77279	3.307854	25.33	0.000	77.28839	90.25719
C4738	43.13505	3.76219	11.47	0.000	35.76001	50.51009
C4746	-36.425	4.429045	-8.22	0.000	-45.10728	-27.74272
C4758	2.786421	3.987207	0.70	0.485	-5.02972	10.60256
C4790	2857.727	30.28899	94.35	0.000	2798.352	2917.103
C4794	22.10268	4.306751	5.13	0.000	13.66014	30.54523
C4806	-23.16489	4.517088	-5.13	0.000	-32.01976	-14.31003
C4814	4.497684	4.270349	1.05	0.292	-3.8735	12.86887
C4826	-21.45632	5.119993	-4.19	0.000	-31.49306	-11.41957
C4830	-13.53779	3.942692	-3.43	0.001	-21.26667	-5.808912
C4854	-.7100526	4.541261	-0.16	0.876	-9.612308	8.192203
C4862	223.4353	4.001438	55.84	0.000	215.5912	231.2793
C4866	-5.874105	4.628926	-1.27	0.204	-14.94821	3.2
C4870	-11.97258	4.60584	-2.60	0.009	-21.00143	-2.943729
C4890	46.84295	3.299408	14.20	0.000	40.3751	53.31079
C4902	-8.554947	4.001407	-2.14	0.033	-16.39892	-.7109717
C4918	186.3368	3.903794	47.73	0.000	178.6842	193.9894
C4934	299.1468	3.06666	97.55	0.000	293.1352	305.1584
C4942	38.48684	3.547483	10.85	0.000	31.5327	45.44099
C4962	108.1326	3.866192	27.97	0.000	100.5537	115.7115
C4966	159.0706	6.470143	24.59	0.000	146.3871	171.754
C4970	-19.11137	4.197331	-4.55	0.000	-27.33942	-10.88332
C4974	-.6013684	4.109461	-0.15	0.884	-8.657164	7.454428
year						
2002	-2.839412	3.193908	-0.89	0.374	-9.100445	3.421621
2003	-3.385946	3.266361	-1.04	0.300	-9.789009	3.017118
2004	.039183	3.051025	0.01	0.990	-5.941756	6.020122
2005	5.31676	2.73002	1.95	0.052	-.0349095	10.66843
2006	10.56275	2.471465	4.27	0.000	5.717929	15.40758
2007	14.19594	2.299178	6.17	0.000	9.688847	18.70302
2008	13.01222	2.223993	5.85	0.000	8.652521	17.37193
2009	-.9204794	2.886283	-0.32	0.750	-6.578472	4.737514
2010	-2.873747	3.049618	-0.94	0.346	-8.851927	3.104433
2011	.6325979	2.76869	0.23	0.819	-4.794878	6.060074
2012	5.909175	2.433553	2.43	0.015	1.13867	10.67968
2013	11.18817	2.28248	4.90	0.000	6.713813	15.66253
2014	17.18329	2.411429	7.13	0.000	12.45615	21.91042
2015	23.98447	2.817747	8.51	0.000	18.46082	29.50811
2016	29.81161	3.319503	8.98	0.000	23.30437	36.31885
2017	34.45862	3.836025	8.98	0.000	26.93884	41.9784
2018	39.74388	4.443082	8.95	0.000	31.03409	48.45367
2019	44.58902	5.065824	8.80	0.000	34.65846	54.51957
_cons	51.28089	3.619519	14.17	0.000	44.18553	58.37625

196 predict resid_annual_avg_emplvl, residuals

197 reg federal_funding i.msa_factor i.year, robust

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Linear regression                              Number of obs   =      7,372
                                               F(405, 6966)    =      63.07
                                               Prob > F        =     0.0000
                                               R-squared       =     0.9558
                                               Root MSE        =     60.096
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federal_fu~g	Coef.	Robust Std. Err.	t	P>|t|	[95% Conf.	Interval]
msa_factor						
C1038	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C1042	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C1050	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C1054	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C1058	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C1074	2572.906	72.57753	35.45	0.000	2430.632	2715.18
C1078	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C1090	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C1102	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C1110	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C1118	37.82812	2.097932	18.03	0.000	33.71553	41.94071
C1126	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C1146	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C1150	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C1154	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C1164	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C1170	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C1202	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C1206	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C1210	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C1222	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C1226	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C1242	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C1254	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C1258	52.40229	17.77742	2.95	0.003	17.55314	87.25145
C1262	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C1270	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C1294	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C1298	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C1302	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C1314	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C1322	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C1338	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C1346	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C1374	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C1378	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C1382	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C1390	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C1398	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C1401	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C1402	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C1410	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C1426	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C1446	863.0488	31.88927	27.06	0.000	800.5362	925.5615
C1450	180.202	5.864321	30.73	0.000	168.7062	191.6979
C1454	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C1474	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C1486	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C1518	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C1526	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C1538	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C1550	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C1554	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C1568	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C1594	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C1598	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C1602	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991

C1606	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C1618	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C1622	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C1630	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C1654	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C1658	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C1662	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C1670	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C1674	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C1682	97.67016	9.096216	10.74	0.000	79.83881	115.5015
C1686	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C1694	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C1698	1080.892	16.11041	67.09	0.000	1049.31	1112.473
C1702	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C1714	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C1730	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C1742	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C1746	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C1766	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C1778	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C1782	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C1786	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C1790	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C1798	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C1802	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C1814	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C1858	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C1870	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C1888	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C1906	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C1910	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C1914	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C1918	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C1930	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C1934	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C1938	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C1946	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C1950	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C1966	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C1974	330.7296	12.68349	26.08	0.000	305.8661	355.5932
C1978	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C1982	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C2002	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C2010	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C2022	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C2026	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C2050	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C2070	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C2074	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C2094	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C2106	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C2114	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C2130	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C2134	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C2150	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C2166	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C2178	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C2182	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C2202	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C2214	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C2218	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C2222	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C2238	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C2242	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C2250	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C2252	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C2254	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C2266	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C2290	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C2306	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C2342	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C2346	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991

C2354	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C2358	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C2390	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C2402	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C2414	-3.41e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C2422	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C2426	-3.41e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C2430	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C2434	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C2442	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C2450	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C2454	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C2458	-3.41e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C2466	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C2478	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C2486	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C2502	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C2506	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C2518	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C2522	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C2526	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C2542	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C2550	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C2554	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C2562	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C2586	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C2594	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C2598	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C2614	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C2630	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C2638	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C2642	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C2658	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C2662	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C2682	414.3259	25.86782	16.02	0.000	363.6171	465.0347
C2690	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C2698	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C2706	9.102392	3.282695	2.77	0.006	2.667309	15.53747
C2710	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C2714	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C2718	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C2726	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C2734	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C2750	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C2762	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C2774	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C2778	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C2786	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C2790	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C2798	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C2802	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C2810	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C2814	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C2842	1006.735	31.74647	31.71	0.000	944.5021	1068.968
C2866	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C2870	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C2874	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C2894	1321.085	63.60786	20.77	0.000	1196.394	1445.776
C2902	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C2910	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C2918	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C2920	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C2934	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C2942	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C2946	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C2954	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C2962	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C2970	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C2974	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C2982	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C2994	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C3002	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991

C3014	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C3030	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C3034	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C3046	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C3062	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C3070	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C3078	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C3086	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C3098	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C3102	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C3108	2709.9	140.8451	19.24	0.000	2433.801	2986
C3114	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C3118	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C3134	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C3142	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C3146	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C3154	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C3170	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C3174	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C3186	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C3190	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C3242	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C3258	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C3278	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C3282	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C3290	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C3310	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C3314	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C3322	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C3326	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C3334	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C3346	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C3354	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C3366	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C3370	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C3374	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C3378	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C3386	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C3406	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C3410	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C3458	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C3462	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C3474	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C3482	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C3490	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C3494	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C3498	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C3510	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C3530	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C3538	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C3562	588.9107	8.224357	71.61	0.000	572.7885	605.033
C3566	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C3584	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C3598	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C3610	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C3614	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C3622	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C3626	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C3642	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C3650	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C3654	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C3674	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C3678	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C3698	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C3710	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C3734	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C3746	-3.44e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C3762	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C3786	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C3790	-3.44e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C3798	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C3806	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991

C3822	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C3830	107.0844	6.759424	15.84	0.000	93.83392	120.335
C3834	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C3854	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C3866	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C3886	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C3890	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C3894	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C3914	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C3930	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C3934	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C3938	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C3946	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C3954	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C3958	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C3966	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C3974	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C3982	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C3990	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C4006	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C4014	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C4022	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C4034	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C4038	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C4042	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C4058	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C4066	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C4090	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C4098	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C4106	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C4110	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C4114	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C4118	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C4142	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C4150	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C4154	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C4162	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C4166	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C4170	15.65788	2.9942	5.23	0.000	9.788331	21.52742
C4174	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C4186	2533.079	35.13125	72.10	0.000	2464.211	2601.947
C4190	-3.41e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C4194	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C4198	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C4202	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C4210	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C4214	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C4220	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C4222	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C4234	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C4254	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C4266	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C4268	-3.41e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C4270	-3.41e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C4310	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C4330	-3.41e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C4334	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C4342	-3.41e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C4358	-3.41e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C4362	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C4378	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C4390	-3.41e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C4406	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C4410	-3.41e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C4414	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C4418	-3.41e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C4422	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C4430	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C4442	-3.41e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C4470	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C4494	-3.41e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C4506	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991

C4522	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C4530	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C4546	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C4550	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C4554	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C4578	-3.41e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C4582	-3.41e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C4594	94.92335	3.155301	30.08	0.000	88.738	101.1087
C4606	43.7146	5.159514	8.47	0.000	33.60038	53.82882
C4614	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C4622	-3.41e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C4634	-3.41e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C4652	-3.41e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C4654	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C4666	-3.41e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C4670	-3.43e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C4702	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C4722	-3.41e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C4726	120.4385	5.347394	22.52	0.000	109.9559	130.921
C4730	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C4738	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C4746	-3.40e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C4758	-3.41e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C4790	1881.87	197.3537	9.54	0.000	1494.996	2268.743
C4794	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C4806	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C4814	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C4826	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C4830	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C4854	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C4862	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C4866	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C4870	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C4890	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C4902	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C4918	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C4934	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C4942	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C4962	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C4966	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C4970	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
C4974	-3.42e-12	1.963976	-0.00	1.000	-3.849991	3.849991
year						
2002	2.477603	5.911926	0.42	0.675	-9.111574	14.06678
2003	3.452325	5.763734	0.60	0.549	-7.846349	14.751
2004	4.851499	5.544049	0.88	0.382	-6.016526	15.71952
2005	5.290826	5.518162	0.96	0.338	-5.526452	16.1081
2006	3.704133	5.593726	0.66	0.508	-7.261274	14.66954
2007	4.853649	5.395984	0.90	0.368	-5.724124	15.43142
2008	8.887534	5.04249	1.76	0.078	-.9972824	18.77235
2009	11.06651	4.996207	2.21	0.027	1.272427	20.8606
2010	16.95776	5.412474	3.13	0.002	6.347663	27.56786
2011	15.54785	5.046115	3.08	0.002	5.655932	25.43978
2012	14.19088	4.91645	2.89	0.004	4.553138	23.82862
2013	12.90293	4.722068	2.73	0.006	3.646235	22.15962
2014	12.14507	4.685611	2.59	0.010	2.959842	21.33029
2015	13.92218	4.78034	2.91	0.004	4.551262	23.29311
2016	15.08104	5.073935	2.97	0.003	5.134585	25.0275
2017	16.2945	5.557139	2.93	0.003	5.400817	27.18819
2018	17.57834	6.200408	2.84	0.005	5.423648	29.73302
2019	19.87669	6.42443	3.09	0.002	7.282848	32.47053
_cons	-10.47796	4.54244	-2.31	0.021	-19.38253	-1.573399

198 predict resid_federal_funding, residuals

199 reg federal_funding i.msa_factor i.year if ffrdc_count > 0, robust

```
  Linear regression                          Number of obs  =        379
                                             F(38, 340)     =     259.92
                                             Prob > F       =     0.0000
                                             R-squared      =     0.9393
                                             Root MSE       =     245.05
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federal_fu~g	Coef.	Robust Std. Err.	t	P>|t|	[95% Conf. Interval]	
msa_factor						
C1118	-2535.078	61.48774	-41.23	0.000	-2656.022	-2414.133
C1258	-2526.937	61.60691	-41.02	0.000	-2648.116	-2405.759
C1446	-1709.857	56.52547	-30.25	0.000	-1821.04	-1598.673
C1450	-2392.704	62.41244	-38.34	0.000	-2515.467	-2269.94
C1682	-2475.235	60.905	-40.64	0.000	-2595.034	-2355.437
C1698	-1492.014	60.20543	-24.78	0.000	-1610.436	-1373.592
C1974	-2242.176	58.14818	-38.56	0.000	-2356.551	-2127.801
C2682	-2158.58	59.45661	-36.31	0.000	-2275.529	-2041.631
C2706	-2488.736	63.82957	-38.99	0.000	-2614.286	-2363.185
C2842	-1566.171	61.19526	-25.59	0.000	-1686.54	-1445.802
C2894	-1251.821	71.45808	-17.52	0.000	-1392.377	-1111.265
C3108	136.9948	133.6178	1.03	0.306	-125.8269	399.8164
C3562	-1983.995	63.85521	-31.07	0.000	-2109.596	-1858.394
C3830	-2465.821	58.94104	-41.84	0.000	-2581.756	-2349.886
C4170	-2557.248	62.29979	-41.05	0.000	-2679.789	-2434.706
C4186	-39.82669	67.82798	-0.59	0.557	-173.242	93.58863
C4594	-2477.982	62.30521	-39.77	0.000	-2600.534	-2355.43
C4606	-2529.191	63.24849	-39.99	0.000	-2653.599	-2404.783
C4726	-2452.467	62.9562	-38.96	0.000	-2576.3	-2328.634
C4790	-691.036	186.0079	-3.72	0.000	-1056.907	-325.1649
year						
2002	48.06549	101.7978	0.47	0.637	-152.1673	248.2983
2003	66.9751	99.85536	0.67	0.503	-129.437	263.3872
2004	94.11908	96.65306	0.97	0.331	-95.99418	284.2323
2005	102.642	96.55818	1.06	0.289	-87.2846	292.5686
2006	71.86019	96.30509	0.75	0.456	-117.5686	261.289
2007	94.16079	93.27148	1.01	0.313	-89.30101	277.6226
2008	172.4182	88.46705	1.95	0.052	-1.593499	346.4298
2009	214.6904	87.69365	2.45	0.015	42.19996	387.1808
2010	328.9806	92.70575	3.55	0.000	146.6315	511.3296
2011	301.6284	85.99923	3.51	0.001	132.4709	470.7859
2012	283.4645	85.04355	3.33	0.001	116.1867	450.7422
2013	252.2269	81.04814	3.11	0.002	92.80795	411.6458
2014	237.5244	80.63145	2.95	0.003	78.92507	396.1237
2015	272.0005	81.70541	3.33	0.001	111.2887	432.7122
2016	294.4823	87.47688	3.37	0.001	122.4183	466.5463
2017	318.0234	97.27655	3.27	0.001	126.6838	509.363
2018	342.9298	110.3145	3.11	0.002	125.945	559.9146
2019	387.5178	111.9765	3.46	0.001	167.264	607.7717
_cons	2368.5	95.53624	24.79	0.000	2180.583	2556.416

200 predict resid_federal_funding_hasffrdc, residuals

```
201
202 label variable resid_avg_annual_pay "Avg annual pay of employed workers, resid. by y
  > ear and MSA (thousands 2019$)"

203 label variable resid_annual_avg_emplvl "Annual average of total employment, residual
  > ized by year and MSA (thousands)"

204 label variable resid_federal_funding "Total federal FFRDC funding, residualized by y
  > ear and MSA (millions 2019$)"

205 label variable resid_federal_funding_hasffrdc "Total federal FFRDC funding, residual
  > ized by year and MSA (millions 2019$)"

206
207 hist resid_avg_annual_pay, title("Residualized wages across all MSA-years, 2001-2019
  > ")
  (bin=38, start=-16.540426, width=1.1476872)

208 graph export "output/resid_wg.png", as(png) replace
  (file output/resid_wg.png written in PNG format)

209 hist resid_annual_avg_emplvl, title("Residualized employment across all MSA-years, 2
  > 001-2019")
  (bin=38, start=-424.27225, width=35.535422)

210 graph export "output/resid_emp.png", as(png) replace
  (file output/resid_emp.png written in PNG format)

211 hist resid_federal_funding, title("Residualized FFRDC funding across all MSA-years,"
  >  "2001-2019")
  (bin=38, start=-1250.9167, width=65.874737)

212 graph export "output/resid_fedfunding.png", as(png) replace
  (file output/resid_fedfunding.png written in PNG format)

213 hist resid_federal_funding_hasffrdc if ffrdc_count > 0, title("Residualized FFRDC fu
  > nding across MSA-years" "with at least one FFRDC, 2001-2019")
  (bin=19, start=-1056.9889, width=114.62571)

214 graph export "output/resid_fedfunding_has_ffrdc.png", as(png) replace
  (file output/resid_fedfunding_has_ffrdc.png written in PNG format)

215
216 //split summary by year and by FFRDC presence
217 estimates clear

218 keep if year == 2019 | year == 2010 | year == 2001
  (6,208 observations deleted)

219
220 by year has_ffrdc: eststo: estpost summarize avg_annual_pay annual_avg_emplvl federa
  > l_funding, listwise
```

-> 2001 no FFRDC

	e(count)	e(sum_w)	e(mean)	e(Var)	e(sd)	e(min)	e(max)	e(sum)
avg_annual~y	368	368	43.2182	54.82167	7.404166	23.06184	94.39566	15904.3
annual_avg~l	368	368	220.3616	142907.3	378.0308	8.577	2733.67	81093.09
federal_fu~g	368	368	0	0	0	0	0	0

(est1 stored)

-> 2001 with FFRDC

```
              |   e(count)    e(sum_w)      e(mean)       e(Var)        e(sd)       e(min)       e(
> max)       e(sum)
  _____|
avg_annual~y |         20           20      55.02088      139.2868      11.80198      42.53715        76.3
> 7328    1100.418
annual_avg~l |         20           20      1539.659       4848789      2201.997         40.84        8290
> .331    30793.17
federal_fu~g |         20           20      599.8527        506996      712.0365      15.85201        2214
> .013    11997.05
(est2 stored)
```

_____

-> 2010 no FFRDC

```
              |   e(count)    e(sum_w)      e(mean)       e(Var)        e(sd)       e(min)       e(
> max)       e(sum)
  _____|
avg_annual~y |        368          368      45.49178      58.15709       7.62608      24.16018        103.
> 8225    16740.98
annual_avg~l |        368          368      219.1062      139881.6      374.0074        16.906        2821
> .806     80631.1
federal_fu~g |        368          368             0             0             0             0
>    0           0
(est3 stored)
```

_____

-> 2010 with FFRDC

```
              |   e(count)    e(sum_w)      e(mean)       e(Var)        e(sd)       e(min)       e(
> max)       e(sum)
  _____|
avg_annual~y |         20           20      58.19161      140.6604      11.86003      45.03121        78.3
> 5011    1163.832
annual_avg~l |         20           20      1507.007       4585201      2141.308        41.739        8212
> .537    30140.15
federal_fu~g |         20           20      928.8333       1140068      1067.739      15.34023         309
> 5.86    18576.67
(est4 stored)
```

_____

-> 2019 no FFRDC

```
              |   e(count)    e(sum_w)      e(mean)       e(Var)        e(sd)       e(min)       e(
> max)       e(sum)
  _____|
avg_annual~y |        368          368      47.93572      83.05889      9.113665      19.45275        136.
> 9359    17640.35
annual_avg~l |        368          368      252.3155      205121.6      452.9036        13.519        3627
> .902    92852.12
federal_fu~g |        368          368             0             0             0             0
>    0           0
(est5 stored)
```

_____

-> 2019 with FFRDC

```
              |   e(count)    e(sum_w)      e(mean)       e(Var)        e(sd)       e(min)       e(
> max)       e(sum)
  _____|
avg_annual~y |         20           20      63.20078      224.8499        14.995      45.80163        102.
> 0835    1264.016
annual_avg~l |         20           20      1816.734       6043058      2458.263        46.194         954
> 2.66    36334.68
federal_fu~g |         20           20      985.4605       1488830      1220.176          6.34        3925
> .795    19709.21
(est6 stored)
```

```
221 esttab using output/summarystats_by_year_ffrdc.csv, cells("mean(fmt(2)) sd(fmt(2))")
    >  label nodepvar replace
    (output written to output/summarystats_by_year_ffrdc.csv)

222
223
224
225
226
227
228 //--------------------------OLS-----------------------------------------------
229
230
231 use data/intermediate/merged_MetroMSAs_allind_post01, clear

232
233
234 //take logs
235 gen log_avg_annual_pay = asinh(avg_annual_pay)

236 gen log_annual_avg_emplvl = asinh(annual_avg_emplvl)

237 gen log_federal_funding = asinh(federal_funding * 1000)

238
239 //OLS regression
240 encode msacode, gen(msa_factor)

241
242 reg log_avg_annual_pay log_federal_funding, robust cluster(msa_factor)
```

Linear regression			Number of obs	=	7,372
			F(1, 387)	=	31.30
			Prob > F	=	0.0000
			R-squared	=	0.0992
			Root MSE	=	.16608

(Std. Err. adjusted for **388** clusters in msa_factor)

log_avg_annual_pay	Coef.	Robust Std. Err.	t	P>|t|	[95% Conf. Interval]	
log_federal_funding	.0123032	.0021992	5.59	0.000	.0079793	.016627
_cons	11.40125	.0082997	1373.69	0.000	11.38493	11.41756

```
243 outreg2 using output/ols_avg_annual_pay.doc, replace keep(log_federal_funding) addte
    > xt(MSA FE, No, Year FE, No, FFRDC count FE, No)
    output/ols_avg_annual_pay.doc
    dir : seeout

244 reg log_avg_annual_pay log_federal_funding i.msa_factor, robust cluster(msa_factor)
```

Linear regression			Number of obs	=	7,372
			F(1, 387)	=	.
			Prob > F	=	.
			R-squared	=	0.9462
			Root MSE	=	.04171

(Std. Err. adjusted for **388** clusters in msa_factor)

log_avg_annual_pay	Coef.	Robust Std. Err.	t	P>|t|	[95% Conf. Interval]	
log_federal_funding	-.0002026	.0026312	-0.08	0.939	-.0053758	.0049705
msa_factor						
C1038	-.4508553	1.23e-13	-3.7e+12	0.000	-.4508553	-.4508553
C1042	.2166845	1.23e-13	1.8e+12	0.000	.2166845	.2166845
C1050	.0493491	1.23e-13	4.0e+11	0.000	.0493491	.0493491
C1054	.0764216	1.23e-13	6.2e+11	0.000	.0764216	.0764216
C1058	.3118894	1.23e-13	2.5e+12	0.000	.3118894	.3118894

C1074	.1812276	.0588179	3.08	0.002	.065585	.2968702
C1078	.033	1.23e-13	2.7e+11	0.000	.033	.033
C1090	.2589237	1.23e-13	2.1e+12	0.000	.2589237	.2589237
C1102	.0223425	1.23e-13	1.8e+11	0.000	.0223425	.0223425
C1110	.1238719	1.23e-13	1.0e+12	0.000	.1238719	.1238719
C1118	.1776214	.0477011	3.72	0.000	.0838357	.271407
C1126	.3615476	1.23e-13	2.9e+12	0.000	.3615476	.3615476
C1146	.4095228	1.23e-13	3.3e+12	0.000	.4095228	.4095228
C1150	.0430921	1.23e-13	3.5e+11	0.000	.0430921	.0430921
C1154	.1476945	1.23e-13	1.2e+12	0.000	.1476945	.1476945
C1164	-.443843	1.23e-13	-3.6e+12	0.000	-.443843	-.443843
C1170	.0418258	1.23e-13	3.4e+11	0.000	.0418258	.0418258
C1202	.0930833	1.23e-13	7.6e+11	0.000	.0930833	.0930833
C1206	.4032619	1.23e-13	3.3e+12	0.000	.4032619	.4032619
C1210	.1855375	1.23e-13	1.5e+12	0.000	.1855375	.1855375
C1222	-.0129151	1.23e-13	-1.1e+11	0.000	-.0129151	-.0129151
C1226	.1584132	1.23e-13	1.3e+12	0.000	.1584132	.1584132
C1242	.4010153	1.23e-13	3.3e+12	0.000	.4010153	.4010153
C1254	.1709027	1.23e-13	1.4e+12	0.000	.1709027	.1709027
C1258	.3975505	.0186655	21.30	0.000	.3608521	.4342489
C1262	.0421595	1.23e-13	3.4e+11	0.000	.0421595	.0421595
C1270	.1716549	1.23e-13	1.4e+12	0.000	.1716549	.1716549
C1294	.2276011	1.23e-13	1.9e+12	0.000	.2276011	.2276011
C1298	.2585374	1.23e-13	2.1e+12	0.000	.2585374	.2585374
C1302	.1095102	1.23e-13	8.9e+11	0.000	.1095102	.1095102
C1314	.2720066	1.23e-13	2.2e+12	0.000	.2720066	.2720066
C1322	.0297519	1.23e-13	2.4e+11	0.000	.0297519	.0297519
C1338	.1082066	1.23e-13	8.8e+11	0.000	.1082066	.1082066
C1346	.0760447	1.23e-13	6.2e+11	0.000	.0760447	.0760447
C1374	.1170802	1.23e-13	9.5e+11	0.000	.1170802	.1170802
C1378	.1310824	1.23e-13	1.1e+12	0.000	.1310824	.1310824
C1382	.2833285	1.23e-13	2.3e+12	0.000	.2833285	.2833285
C1390	.1473118	1.23e-13	1.2e+12	0.000	.1473118	.1473118
C1398	.0697056	1.23e-13	5.7e+11	0.000	.0697056	.0697056
C1401	.2966344	1.23e-13	2.4e+12	0.000	.2966344	.2966344
C1402	.0534138	1.23e-13	4.4e+11	0.000	.0534138	.0534138
C1410	.1934641	1.23e-13	1.6e+12	0.000	.1934641	.1934641
C1426	.1481158	1.23e-13	1.2e+12	0.000	.1481158	.1481158
C1446	.6375846	.0559242	11.40	0.000	.5276313	.7475379
C1450	.5073987	.0518213	9.79	0.000	.4055122	.6092852
C1454	.036808	1.23e-13	3.0e+11	0.000	.036808	.036808
C1474	.2332954	1.23e-13	1.9e+12	0.000	.2332954	.2332954
C1486	.8463431	1.23e-13	6.9e+12	0.000	.8463431	.8463431
C1518	-.1587772	1.23e-13	-1.3e+12	0.000	-.1587772	-.1587772
C1526	.0430021	1.23e-13	3.5e+11	0.000	.0430021	.0430021
C1538	.1911978	1.23e-13	1.6e+12	0.000	.1911978	.1911978
C1550	.0318365	1.23e-13	2.6e+11	0.000	.0318365	.0318365
C1554	.2811225	1.23e-13	2.3e+12	0.000	.2811225	.2811225
C1568	.5014507	1.23e-13	4.1e+12	0.000	.5014507	.5014507
C1594	.0675612	1.23e-13	5.5e+11	0.000	.0675612	.0675612
C1598	.1265817	1.23e-13	1.0e+12	0.000	.1265817	.1265817
C1602	.0033471	1.23e-13	2.7e+10	0.000	.0033471	.0033471
C1606	.0203362	1.23e-13	1.7e+11	0.000	.0203362	.0203362
C1618	.2483128	1.23e-13	2.0e+12	0.000	.2483128	.2483128
C1622	.2228824	1.23e-13	1.8e+12	0.000	.2228824	.2228824
C1630	.2591339	1.23e-13	2.1e+12	0.000	.2591339	.2591339
C1654	.0755357	1.23e-13	6.2e+11	0.000	.0755357	.0755357
C1658	.1509476	1.23e-13	1.2e+12	0.000	.1509476	.1509476
C1662	.1931875	1.23e-13	1.6e+12	0.000	.1931875	.1931875
C1670	.1598182	1.23e-13	1.3e+12	0.000	.1598182	.1598182
C1674	.344547	1.23e-13	2.8e+12	0.000	.344547	.344547
C1682	.2468213	.0500244	4.93	0.000	.1484677	.3451749
C1686	.1543024	1.23e-13	1.3e+12	0.000	.1543024	.1543024
C1694	.1346126	1.23e-13	1.1e+12	0.000	.1346126	.1346126
C1698	.4581164	.0565493	8.10	0.000	.3469342	.5692986
C1702	.0391187	1.23e-13	3.2e+11	0.000	.0391187	.0391187
C1714	.307783	1.23e-13	2.5e+12	0.000	.307783	.307783
C1730	-.0007618	1.23e-13	-6.2e+09	0.000	-.0007618	-.0007618
C1742	.0577086	1.23e-13	4.7e+11	0.000	.0577086	.0577086
C1746	.2965866	1.23e-13	2.4e+12	0.000	.2965866	.2965866
C1766	-.0399876	1.23e-13	-3.3e+11	0.000	-.0399876	-.0399876
C1778	.0239311	1.23e-13	1.9e+11	0.000	.0239311	.0239311

C1782	.2322649	1.23e-13	1.9e+12	0.000	.2322649	.2322649
C1786	.0826244	1.23e-13	6.7e+11	0.000	.0826244	.0826244
C1790	.1344712	1.23e-13	1.1e+12	0.000	.1344712	.1344712
C1798	.074643	1.23e-13	6.1e+11	0.000	.074643	.074643
C1802	.2823988	1.23e-13	2.3e+12	0.000	.2823988	.2823988
C1814	.2952142	1.23e-13	2.4e+12	0.000	.2952142	.2952142
C1858	.1560992	1.23e-13	1.3e+12	0.000	.1560992	.1560992
C1870	.2655134	1.23e-13	2.2e+12	0.000	.2655134	.2655134
C1888	.0746703	1.23e-13	6.1e+11	0.000	.0746703	.0746703
C1906	-.0057896	1.23e-13	-4.7e+10	0.000	-.0057896	-.0057896
C1910	.4332167	1.23e-13	3.5e+12	0.000	.4332167	.4332167
C1914	.0806531	1.23e-13	6.6e+11	0.000	.0806531	.0806531
C1918	.0753536	1.23e-13	6.1e+11	0.000	.0753536	.0753536
C1930	-.0820786	1.23e-13	-6.7e+11	0.000	-.0820786	-.0820786
C1934	.208952	1.23e-13	1.7e+12	0.000	.208952	.208952
C1938	.227318	1.23e-13	1.9e+12	0.000	.227318	.227318
C1946	.1248838	1.23e-13	1.0e+12	0.000	.1248838	.1248838
C1950	.2483034	1.23e-13	2.0e+12	0.000	.2483034	.2483034
C1966	-.0043503	1.23e-13	-3.5e+10	0.000	-.0043503	-.0043503
C1974	.4673182	.0533967	8.75	0.000	.3623342	.5723021
C1978	.3084287	1.23e-13	2.5e+12	0.000	.3084287	.3084287
C1982	.4254101	1.23e-13	3.5e+12	0.000	.4254101	.4254101
C2002	.0262591	1.23e-13	2.1e+11	0.000	.0262591	.0262591
C2010	.1004494	1.23e-13	8.2e+11	0.000	.1004494	.1004494
C2022	.1049333	1.23e-13	8.6e+11	0.000	.1049333	.1049333
C2026	.1149538	1.23e-13	9.4e+11	0.000	.1149538	.1149538
C2050	.4863665	1.23e-13	4.0e+12	0.000	.4863665	.4863665
C2070	.099252	1.23e-13	8.1e+11	0.000	.099252	.099252
C2074	.0571578	1.23e-13	4.7e+11	0.000	.0571578	.0571578
C2094	.0056486	1.23e-13	4.6e+10	0.000	.0056486	.0056486
C2106	.0511009	1.23e-13	4.2e+11	0.000	.0511009	.0511009
C2114	.1519741	1.23e-13	1.2e+12	0.000	.1519741	.1519741
C2130	.1334544	1.23e-13	1.1e+12	0.000	.1334544	.1334544
C2134	-.0174046	1.23e-13	-1.4e+11	0.000	-.0174046	-.0174046
C2150	.0858557	1.23e-13	7.0e+11	0.000	.0858557	.0858557
C2166	.0847455	1.23e-13	6.9e+11	0.000	.0847455	.0847455
C2178	.1452915	1.23e-13	1.2e+12	0.000	.1452915	.1452915
C2182	.3002024	1.23e-13	2.4e+12	0.000	.3002024	.3002024
C2202	.1457939	1.23e-13	1.2e+12	0.000	.1457939	.1457939
C2214	.1659079	1.23e-13	1.4e+12	0.000	.1659079	.1659079
C2218	.0575566	1.23e-13	4.7e+11	0.000	.0575566	.0575566
C2222	.2078244	1.23e-13	1.7e+12	0.000	.2078244	.2078244
C2238	.0637518	1.23e-13	5.2e+11	0.000	.0637518	.0637518
C2242	.1952921	1.23e-13	1.6e+12	0.000	.1952921	.1952921
C2250	.0710881	1.23e-13	5.8e+11	0.000	.0710881	.0710881
C2252	-.0136446	1.23e-13	-1.1e+11	0.000	-.0136446	-.0136446
C2254	.1038633	1.23e-13	8.5e+11	0.000	.1038633	.1038633
C2266	.2248664	1.23e-13	1.8e+12	0.000	.2248664	.2248664
C2290	-.0031856	1.23e-13	-2.6e+10	0.000	-.0031856	-.0031856
C2306	.1407288	1.23e-13	1.1e+12	0.000	.1407288	.1407288
C2342	.089765	1.23e-13	7.3e+11	0.000	.089765	.089765
C2346	-.04144	1.23e-13	-3.4e+11	0.000	-.04144	-.04144
C2354	.1257651	1.23e-13	1.0e+12	0.000	.1257651	.1257651
C2358	.146779	1.23e-13	1.2e+12	0.000	.146779	.146779
C2390	.0309392	1.23e-13	2.5e+11	0.000	.0309392	.0309392
C2402	.0752736	1.23e-13	6.1e+11	0.000	.0752736	.0752736
C2414	-.0517596	1.23e-13	-4.2e+11	0.000	-.0517596	-.0517596
C2422	.0300505	1.23e-13	2.4e+11	0.000	.0300505	.0300505
C2426	-.0310162	1.23e-13	-2.5e+11	0.000	-.0310162	-.0310162
C2430	.1011779	1.23e-13	8.2e+11	0.000	.1011779	.1011779
C2434	.2032243	1.23e-13	1.7e+12	0.000	.2032243	.2032243
C2442	-.0788725	1.23e-13	-6.4e+11	0.000	-.0788725	-.0788725
C2450	-.0121321	1.23e-13	-9.9e+10	0.000	-.0121321	-.0121321
C2454	.1788399	1.23e-13	1.5e+12	0.000	.1788399	.1788399
C2458	.1881875	1.23e-13	1.5e+12	0.000	.1881875	.1881875
C2466	.1566508	1.23e-13	1.3e+12	0.000	.1566508	.1566508
C2478	.0965391	1.23e-13	7.9e+11	0.000	.0965391	.0965391
C2486	.1331346	1.23e-13	1.1e+12	0.000	.1331346	.1331346
C2502	-.2754564	1.23e-13	-2.2e+12	0.000	-.2754564	-.2754564
C2506	.1140472	1.23e-13	9.3e+11	0.000	.1140472	.1140472
C2518	.0969598	1.23e-13	7.9e+11	0.000	.0969598	.0969598
C2522	-.0799955	1.23e-13	-6.5e+11	0.000	-.0799955	-.0799955

C2526	.0566929	1.23e-13	4.6e+11	0.000	.0566929	.0566929
C2542	.2757251	1.23e-13	2.2e+12	0.000	.2757251	.2757251
C2550	.0338619	1.23e-13	2.8e+11	0.000	.0338619	.0338619
C2554	.511422	1.23e-13	4.2e+12	0.000	.511422	.511422
C2562	-.0336177	1.23e-13	-2.7e+11	0.000	-.0336177	-.0336177
C2586	.0111011	1.23e-13	9.0e+10	0.000	.0111011	.0111011
C2594	-.0083875	1.23e-13	-6.8e+10	0.000	-.0083875	-.0083875
C2598	.0178147	1.23e-13	1.5e+11	0.000	.0178147	.0178147
C2614	-.0151962	1.23e-13	-1.2e+11	0.000	-.0151962	-.0151962
C2630	-.0945319	1.23e-13	-7.7e+11	0.000	-.0945319	-.0945319
C2638	.2482335	1.23e-13	2.0e+12	0.000	.2482335	.2482335
C2642	.5102034	1.23e-13	4.2e+12	0.000	.5102034	.5102034
C2658	.1042495	1.23e-13	8.5e+11	0.000	.1042495	.1042495
C2662	.3808442	1.23e-13	3.1e+12	0.000	.3808442	.3808442
C2682	.1103434	.0539151	2.05	0.041	.0043403	.2163465
C2690	.2746736	1.23e-13	2.2e+12	0.000	.2746736	.2746736
C2698	.1889509	1.23e-13	1.5e+12	0.000	.1889509	.1889509
C2706	.2569087	.0262967	9.77	0.000	.2052064	.3086109
C2710	.1855859	1.23e-13	1.5e+12	0.000	.1855859	.1855859
C2714	.1079894	1.23e-13	8.8e+11	0.000	.1079894	.1079894
C2718	.0843138	1.23e-13	6.9e+11	0.000	.0843138	.0843138
C2726	.2410595	1.23e-13	2.0e+12	0.000	.2410595	.2410595
C2734	-.1462344	1.23e-13	-1.2e+12	0.000	-.1462344	-.1462344
C2750	.1450296	1.23e-13	1.2e+12	0.000	.1450296	.1450296
C2762	.0442393	1.23e-13	3.6e+11	0.000	.0442393	.0442393
C2774	.0170371	1.23e-13	1.4e+11	0.000	.0170371	.0170371
C2778	-.0067502	1.23e-13	-5.5e+10	0.000	-.0067502	-.0067502
C2786	-.031105	1.23e-13	-2.5e+11	0.000	-.031105	-.031105
C2790	-.0076097	1.23e-13	-6.2e+10	0.000	-.0076097	-.0076097
C2798	.1212327	1.23e-13	9.9e+11	0.000	.1212327	.1212327
C2802	.220941	1.23e-13	1.8e+12	0.000	.220941	.220941
C2810	.0657074	1.23e-13	5.4e+11	0.000	.0657074	.0657074
C2814	.3015696	1.23e-13	2.5e+12	0.000	.3015696	.3015696
C2842	.2619298	.0563429	4.65	0.000	.1511533	.3727064
C2866	.074669	1.23e-13	6.1e+11	0.000	.074669	.074669
C2870	.1228937	1.23e-13	1.0e+12	0.000	.1228937	.1228937
C2874	.0777582	1.23e-13	6.3e+11	0.000	.0777582	.0777582
C2894	.2020955	.0570199	3.54	0.000	.0899879	.3142031
C2902	.3089332	1.23e-13	2.5e+12	0.000	.3089332	.3089332
C2910	.0646439	1.23e-13	5.3e+11	0.000	.0646439	.0646439
C2918	.1878166	1.23e-13	1.5e+12	0.000	.1878166	.1878166
C2920	.1580437	1.23e-13	1.3e+12	0.000	.1580437	.1580437
C2934	.1947588	1.23e-13	1.6e+12	0.000	.1947588	.1947588
C2942	-.0370094	1.23e-13	-3.0e+11	0.000	-.0370094	-.0370094
C2946	.0716219	1.23e-13	5.8e+11	0.000	.0716219	.0716219
C2954	.157875	1.23e-13	1.3e+12	0.000	.157875	.157875
C2962	.2556262	1.23e-13	2.1e+12	0.000	.2556262	.2556262
C2970	-.080211	1.23e-13	-6.5e+11	0.000	-.080211	-.080211
C2974	-.0234979	1.23e-13	-1.9e+11	0.000	-.0234979	-.0234979
C2982	.2299317	1.23e-13	1.9e+12	0.000	.2299317	.2299317
C2994	-.0182621	1.23e-13	-1.5e+11	0.000	-.0182621	-.0182621
C3002	-.0205926	1.23e-13	-1.7e+11	0.000	-.0205926	-.0205926
C3014	.0518192	1.23e-13	4.2e+11	0.000	.0518192	.0518192
C3030	.0156839	1.23e-13	1.3e+11	0.000	.0156839	.0156839
C3034	.0537636	1.23e-13	4.4e+11	0.000	.0537636	.0537636
C3046	.2045599	1.23e-13	1.7e+12	0.000	.2045599	.2045599
C3062	.1057852	1.23e-13	8.6e+11	0.000	.1057852	.1057852
C3070	.1084575	1.23e-13	8.8e+11	0.000	.1084575	.1084575
C3078	.1715269	1.23e-13	1.4e+12	0.000	.1715269	.1715269
C3086	-.1072827	1.23e-13	-8.7e+11	0.000	-.1072827	-.1072827
C3098	.1386349	1.23e-13	1.1e+12	0.000	.1386349	.1386349
C3102	.1728344	1.23e-13	1.4e+12	0.000	.1728344	.1728344
C3108	.4606014	.0589125	7.82	0.000	.3447728	.5764301
C3114	.2338122	1.23e-13	1.9e+12	0.000	.2338122	.2338122
C3118	.0513368	1.23e-13	4.2e+11	0.000	.0513368	.0513368
C3134	.0743731	1.23e-13	6.1e+11	0.000	.0743731	.0743731
C3142	.0844871	1.23e-13	6.9e+11	0.000	.0844871	.0844871
C3146	.0385783	1.23e-13	3.1e+11	0.000	.0385783	.0385783
C3154	.2684662	1.23e-13	2.2e+12	0.000	.2684662	.2684662
C3170	.4242656	1.23e-13	3.5e+12	0.000	.4242656	.4242656
C3174	-.0142091	1.23e-13	-1.2e+11	0.000	-.0142091	-.0142091
C3186	.0484912	1.23e-13	4.0e+11	0.000	.0484912	.0484912

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C3190    .0271666   1.23e-13   2.2e+11   0.000    .0271666    .0271666
C3242   -.4294459   1.23e-13  -3.5e+12   0.000   -.4294459   -.4294459
C3258   -.1401562   1.23e-13  -1.1e+12   0.000   -.1401562   -.1401562
C3278    .0416435   1.23e-13   3.4e+11   0.000    .0416435    .0416435
C3282    .2791211   1.23e-13   2.3e+12   0.000    .2791211    .2791211
C3290    .0297061   1.23e-13   2.4e+11   0.000    .0297061    .0297061
C3310    .2965066   1.23e-13   2.4e+12   0.000    .2965066    .2965066
C3314    .0262864   1.23e-13   2.1e+11   0.000    .0262864    .0262864
C3322    .4479839   1.23e-13   3.7e+12   0.000    .4479839    .4479839
C3326    .425763    1.23e-13   3.5e+12   0.000    .425763     .425763
C3334    .3031038   1.23e-13   2.5e+12   0.000    .3031038    .3031038
C3346    .4374375   1.23e-13   3.6e+12   0.000    .4374375    .4374375
C3354    .0207826   1.23e-13   1.7e+11   0.000    .0207826    .0207826
C3366    .1601031   1.23e-13   1.3e+12   0.000    .1601031    .1601031
C3370    .1515763   1.23e-13   1.2e+12   0.000    .1515763    .1515763
C3374    .005739    1.23e-13   4.7e+10   0.000    .005739     .005739
C3378    .2483004   1.23e-13   2.0e+12   0.000    .2483004    .2483004
C3386    .130424    1.23e-13   1.1e+12   0.000    .130424     .130424
C3406    .1545865   1.23e-13   1.3e+12   0.000    .1545865    .1545865
C3410    .0407872   1.23e-13   3.3e+11   0.000    .0407872    .0407872
C3458    .1145992   1.23e-13   9.3e+11   0.000    .1145992    .1145992
C3462    .0153834   1.23e-13   1.3e+11   0.000    .0153834    .0153834
C3474    .1016484   1.23e-13   8.3e+11   0.000    .1016484    .1016484
C3482   -.1154151   1.23e-13  -9.4e+11   0.000   -.1154151   -.1154151
C3490    .3057666   1.23e-13   2.5e+12   0.000    .3057666    .3057666
C3494    .1974112   1.23e-13   1.6e+12   0.000    .1974112    .1974112
C3498    .2982562   1.23e-13   2.4e+12   0.000    .2982562    .2982562
C3510    .0740147   1.23e-13   6.0e+11   0.000    .0740147    .0740147
C3530    .3858719   1.23e-13   3.1e+12   0.000    .3858719    .3858719
C3538    .2677887   1.23e-13   2.2e+12   0.000    .2677887    .2677887
C3562    .6716579   .0549534     12.22   0.000    .5636133    .7797026
C3566    .1844804   1.23e-13   1.5e+12   0.000    .1844804    .1844804
C3584    .111273    1.23e-13   9.1e+11   0.000    .111273     .111273
C3598    .3488348   1.23e-13   2.8e+12   0.000    .3488348    .3488348
C3610   -.0160446   1.23e-13  -1.3e+11   0.000   -.0160446   -.0160446
C3614    .0027306   1.23e-13   2.2e+10   0.000    .0027306    .0027306
C3622    .2868689   1.23e-13   2.3e+12   0.000    .2868689    .2868689
C3626    .0780743   1.23e-13   6.4e+11   0.000    .0780743    .0780743
C3642    .1815654   1.23e-13   1.5e+12   0.000    .1815654    .1815654
C3650    .2270088   1.23e-13   1.8e+12   0.000    .2270088    .2270088
C3654    .2106219   1.23e-13   1.7e+12   0.000    .2106219    .2106219
C3674    .1787156   1.23e-13   1.5e+12   0.000    .1787156    .1787156
C3678    .2614613   1.23e-13   2.1e+12   0.000    .2614613    .2614613
C3698    .0772773   1.23e-13   6.3e+11   0.000    .0772773    .0772773
C3710    .3647911   1.23e-13   3.0e+12   0.000    .3647911    .3647911
C3734    .2395644   1.23e-13   2.0e+12   0.000    .2395644    .2395644
C3746    .0352871   1.23e-13   2.9e+11   0.000    .0352871    .0352871
C3762    .0410513   1.23e-13   3.3e+11   0.000    .0410513    .0410513
C3786    .0659017   1.23e-13   5.4e+11   0.000    .0659017    .0659017
C3790    .3032353   1.23e-13   2.5e+12   0.000    .3032353    .3032353
C3798    .4541929   1.23e-13   3.7e+12   0.000    .4541929    .4541929
C3806    .3040095   1.23e-13   2.5e+12   0.000    .3040095    .3040095
C3822    .0341735   1.23e-13   2.8e+11   0.000    .0341735    .0341735
C3830    .3148439   .0503305      6.26   0.000    .2158886    .4137993
C3834    .1665091   1.23e-13   1.4e+12   0.000    .1665091    .1665091
C3854   -.0770118   1.23e-13  -6.3e+11   0.000   -.0770118   -.0770118
C3866   -.4381102   1.23e-13  -3.6e+12   0.000   -.4381102   -.4381102
C3886    .1996331   1.23e-13   1.6e+12   0.000    .1996331    .1996331
C3890    .3543585   1.23e-13   2.9e+12   0.000    .3543585    .3543585
C3894    .073465    1.23e-13   6.0e+11   0.000    .073465     .073465
C3914   -.0146396   1.23e-13  -1.2e+11   0.000   -.0146396   -.0146396
C3930    .2594404   1.23e-13   2.1e+12   0.000    .2594404    .2594404
C3934    .0870508   1.23e-13   7.1e+11   0.000    .0870508    .0870508
C3938    .0512498   1.23e-13   4.2e+11   0.000    .0512498    .0512498
C3946   -.0161817   1.23e-13  -1.3e+11   0.000   -.0161817   -.0161817
C3954    .2219277   1.23e-13   1.8e+12   0.000    .2219277    .2219277
C3958    .3111016   1.23e-13   2.5e+12   0.000    .3111016    .3111016
C3966    .001508    1.23e-13   1.2e+10   0.000    .001508     .001508
C3974    .2223849   1.23e-13   1.8e+12   0.000    .2223849    .2223849
C3982    .0799489   1.23e-13   6.5e+11   0.000    .0799489    .0799489
C3990    .2420402   1.23e-13   2.0e+12   0.000    .2420402    .2420402
C4006    .3089129   1.23e-13   2.5e+12   0.000    .3089129    .3089129
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C4014	.1557646	1.23e-13	1.3e+12	0.000	.1557646	.1557646
C4022	.1144947	1.23e-13	9.3e+11	0.000	.1144947	.1144947
C4034	.3401488	1.23e-13	2.8e+12	0.000	.3401488	.3401488
C4038	.2410089	1.23e-13	2.0e+12	0.000	.2410089	.2410089
C4042	.1803082	1.23e-13	1.5e+12	0.000	.1803082	.1803082
C4058	.0206326	1.23e-13	1.7e+11	0.000	.0206326	.0206326
C4066	.0917491	1.23e-13	7.5e+11	0.000	.0917491	.0917491
C4090	.383214	1.23e-13	3.1e+12	0.000	.383214	.383214
C4098	.1657216	1.23e-13	1.4e+12	0.000	.1657216	.1657216
C4106	.1001855	1.23e-13	8.2e+11	0.000	.1001855	.1001855
C4110	-.1217747	1.23e-13	-9.9e+11	0.000	-.1217747	-.1217747
C4114	.0428994	1.23e-13	3.5e+11	0.000	.0428994	.0428994
C4118	.2994834	1.23e-13	2.4e+12	0.000	.2994834	.2994834
C4142	.0825778	1.23e-13	6.7e+11	0.000	.0825778	.0825778
C4150	.1878526	1.23e-13	1.5e+12	0.000	.1878526	.1878526
C4154	.0107388	1.23e-13	8.7e+10	0.000	.0107388	.0107388
C4162	.2657913	1.23e-13	2.2e+12	0.000	.2657913	.2657913
C4166	.028703	1.23e-13	2.3e+11	0.000	.028703	.028703
C4170	.194372	.0451487	4.31	0.000	.1056045	.2831395
C4174	.4152027	1.23e-13	3.4e+12	0.000	.4152027	.4152027
C4186	.7449092	.0587911	12.67	0.000	.6293192	.8604991
C4190	-.5441144	1.23e-13	-4.4e+12	0.000	-.5441144	-.5441144
C4194	.9944586	1.23e-13	8.1e+12	0.000	.9944586	.9944586
C4198	-.2228027	1.23e-13	-1.8e+12	0.000	-.2228027	-.2228027
C4202	.1457735	1.23e-13	1.2e+12	0.000	.1457735	.1457735
C4210	.2478261	1.23e-13	2.0e+12	0.000	.2478261	.2478261
C4214	.1433414	1.23e-13	1.2e+12	0.000	.1433414	.1433414
C4220	.2778951	1.23e-13	2.3e+12	0.000	.2778951	.2778951
C4222	.2896005	1.23e-13	2.4e+12	0.000	.2896005	.2896005
C4234	.1453107	1.23e-13	1.2e+12	0.000	.1453107	.1453107
C4254	.0791807	1.23e-13	6.5e+11	0.000	.0791807	.0791807
C4266	.5409253	1.23e-13	4.4e+12	0.000	.5409253	.5409253
C4268	.0742422	1.23e-13	6.0e+11	0.000	.0742422	.0742422
C4270	-.142764	1.23e-13	-1.2e+12	0.000	-.142764	-.142764
C4310	.1722952	1.23e-13	1.4e+12	0.000	.1722952	.1722952
C4330	.101805	1.23e-13	8.3e+11	0.000	.101805	.101805
C4334	.0891687	1.23e-13	7.3e+11	0.000	.0891687	.0891687
C4342	.1374697	1.23e-13	1.1e+12	0.000	.1374697	.1374697
C4358	.0742422	1.23e-13	6.0e+11	0.000	.0742422	.0742422
C4362	.1463204	1.23e-13	1.2e+12	0.000	.1463204	.1463204
C4378	.1278525	1.23e-13	1.0e+12	0.000	.1278525	.1278525
C4390	.1634392	1.23e-13	1.3e+12	0.000	.1634392	.1634392
C4406	.1334975	1.23e-13	1.1e+12	0.000	.1334975	.1334975
C4410	.3166625	1.23e-13	2.6e+12	0.000	.3166625	.3166625
C4414	.226777	1.23e-13	1.8e+12	0.000	.226777	.226777
C4418	.019805	1.23e-13	1.6e+11	0.000	.019805	.019805
C4422	.0285219	1.23e-13	2.3e+11	0.000	.0285219	.0285219
C4430	.1813098	1.23e-13	1.5e+12	0.000	.1813098	.1813098
C4442	.0356687	1.23e-13	2.9e+11	0.000	.0356687	.0356687
C4470	.1654542	1.23e-13	1.3e+12	0.000	.1654542	.1654542
C4494	-.0499449	1.23e-13	-4.1e+11	0.000	-.0499449	-.0499449
C4506	.2244166	1.23e-13	1.8e+12	0.000	.2244166	.2244166
C4522	.1179417	1.23e-13	9.6e+11	0.000	.1179417	.1179417
C4530	.2208131	1.23e-13	1.8e+12	0.000	.2208131	.2208131
C4546	.025543	1.23e-13	2.1e+11	0.000	.025543	.025543
C4550	.0573223	1.23e-13	4.7e+11	0.000	.0573223	.0573223
C4554	.0236511	1.23e-13	1.9e+11	0.000	.0236511	.0236511
C4578	.1867202	1.23e-13	1.5e+12	0.000	.1867202	.1867202
C4582	.1154606	1.23e-13	9.4e+11	0.000	.1154606	.1154606
C4594	.5994953	.050147	11.95	0.000	.5009007	.6980899
C4606	.1798466	.0479106	3.75	0.000	.0856489	.2740443
C4614	.2067273	1.23e-13	1.7e+12	0.000	.2067273	.2067273
C4622	.135879	1.23e-13	1.1e+12	0.000	.135879	.135879
C4634	.1526344	1.23e-13	1.2e+12	0.000	.1526344	.1526344
C4652	.2569152	1.23e-13	2.1e+12	0.000	.2569152	.2569152
C4654	.0671838	1.23e-13	5.5e+11	0.000	.0671838	.0671838
C4666	-.1110911	1.23e-13	-9.1e+11	0.000	-.1110911	-.1110911
C4670	.3210919	1.23e-13	2.6e+12	0.000	.3210919	.3210919
C4702	.1268795	1.23e-13	1.0e+12	0.000	.1268795	.1268795
C4722	.1961789	1.23e-13	1.6e+12	0.000	.1961789	.1961789
C4726	.1724411	.0507517	3.40	0.001	.0726575	.2722247
C4730	-.0248259	1.23e-13	-2.0e+11	0.000	-.0248259	-.0248259

C4738	.1014421	1.23e-13	8.3e+11	0.000	.1014421	.1014421
C4746	.057745	1.23e-13	4.7e+11	0.000	.057745	.057745
C4758	.1594181	1.23e-13	1.3e+12	0.000	.1594181	.1594181
C4790	.6472249	.0576528	11.23	0.000	.5338731	.7605768
C4794	.1333863	1.23e-13	1.1e+12	0.000	.1333863	.1333863
C4806	.0467011	1.23e-13	3.8e+11	0.000	.0467011	.0467011
C4814	.1193102	1.23e-13	9.7e+11	0.000	.1193102	.1193102
C4826	.0335144	1.23e-13	2.7e+11	0.000	.0335144	.0335144
C4830	-.0470937	1.23e-13	-3.8e+11	0.000	-.0470937	-.0470937
C4854	.0512418	1.23e-13	4.2e+11	0.000	.0512418	.0512418
C4862	.1887257	1.23e-13	1.5e+12	0.000	.1887257	.1887257
C4866	.0084296	1.23e-13	6.9e+10	0.000	.0084296	.0084296
C4870	.0700377	1.23e-13	5.7e+11	0.000	.0700377	.0700377
C4890	.0971766	1.23e-13	7.9e+11	0.000	.0971766	.0971766
C4902	.1344184	1.23e-13	1.1e+12	0.000	.1344184	.1344184
C4918	.178512	1.23e-13	1.5e+12	0.000	.178512	.178512
C4934	.3172888	1.23e-13	2.6e+12	0.000	.3172888	.3172888
C4942	-.0519192	1.23e-13	-4.2e+11	0.000	-.0519192	-.0519192
C4962	.1951662	1.23e-13	1.6e+12	0.000	.1951662	.1951662
C4966	.0544985	1.23e-13	4.4e+11	0.000	.0544985	.0544985
C4970	.1002079	1.23e-13	8.2e+11	0.000	.1002079	.1002079
C4974	-.0597813	1.23e-13	-4.9e+11	0.000	-.0597813	-.0597813
_cons	11.2713	1.23e-13	9.2e+13	0.000	11.2713	11.2713

245 outreg2 using output/ols_avg_annual_pay.doc, append keep(log_federal_funding) addtex
> t(MSA FE, Yes, Year FE, No, FFRDC count FE, No)
output/ols_avg_annual_pay.doc
dir : seeout

246 reg log_avg_annual_pay log_federal_funding i.year i.msa_factor, robust cluster(msa_f
> actor)

Linear regression

Number of obs	=	7,372
F(18, 387)	=	.
Prob > F	=	.
R-squared	=	0.9697
Root MSE	=	.03134

(Std. Err. adjusted for **388** clusters in msa_factor)

log_avg_annual_pay	Coef.	Robust Std. Err.	t	P>|t|	[95% Conf. Interval]	
log_federal_funding	-.0005358	.0010069	-0.53	0.595	-.0025155	.0014439
year						
2002	.011367	.0007941	14.31	0.000	.0098057	.0129283
2003	.0179966	.0010613	16.96	0.000	.01591	.0200831
2004	.028849	.0012246	23.56	0.000	.0264414	.0312567
2005	.0261112	.0014696	17.77	0.000	.0232217	.0290006
2006	.0350442	.0017851	19.63	0.000	.0315345	.038554
2007	.0450902	.0020866	21.61	0.000	.0409877	.0491928
2008	.0359452	.0024326	14.78	0.000	.0311624	.040728
2009	.0490292	.0026413	18.56	0.000	.0438362	.0542222
2010	.0524685	.0027789	18.88	0.000	.0470048	.0579322
2011	.0444776	.0028943	15.37	0.000	.0387871	.050168
2012	.0445292	.0030522	14.59	0.000	.0385283	.0505301
2013	.0411676	.0031462	13.08	0.000	.0349818	.0473534
2014	.0511753	.0033513	15.27	0.000	.0445862	.0577643
2015	.0764701	.0031926	23.95	0.000	.0701932	.0827471
2016	.0768171	.0031091	24.71	0.000	.0707043	.0829299
2017	.0847069	.0033335	25.41	0.000	.0781529	.0912608
2018	.0911055	.0035492	25.67	0.000	.0841273	.0980837
2019	.1029308	.0037188	27.68	0.000	.0956191	.1102424
msa_factor						
C1038	-.4508553	1.23e-13	-3.7e+12	0.000	-.4508553	-.4508553
C1042	.2166845	1.23e-13	1.8e+12	0.000	.2166845	.2166845
C1050	.0493491	1.23e-13	4.0e+11	0.000	.0493491	.0493491
C1054	.0764216	1.23e-13	6.2e+11	0.000	.0764216	.0764216

C1058	.3118894	1.23e-13	2.5e+12	0.000	.3118894	.3118894
C1074	.188675	.022509	8.38	0.000	.1444199	.2329301
C1078	.033	1.23e-13	2.7e+11	0.000	.033	.033
C1090	.2589237	1.23e-13	2.1e+12	0.000	.2589237	.2589237
C1102	.0223425	1.23e-13	1.8e+11	0.000	.0223425	.0223425
C1110	.1238719	1.23e-13	1.0e+12	0.000	.1238719	.1238719
C1118	.1836612	.0182547	10.06	0.000	.1477704	.2195519
C1126	.3615476	1.23e-13	2.9e+12	0.000	.3615476	.3615476
C1146	.4095228	1.23e-13	3.3e+12	0.000	.4095228	.4095228
C1150	.0430921	1.23e-13	3.5e+11	0.000	.0430921	.0430921
C1154	.1476945	1.23e-13	1.2e+12	0.000	.1476945	.1476945
C1164	-.443843	1.23e-13	-3.6e+12	0.000	-.443843	-.443843
C1170	.0418258	1.23e-13	3.4e+11	0.000	.0418258	.0418258
C1202	.0930833	1.23e-13	7.6e+11	0.000	.0930833	.0930833
C1206	.4032619	1.23e-13	3.3e+12	0.000	.4032619	.4032619
C1210	.1855375	1.23e-13	1.5e+12	0.000	.1855375	.1855375
C1222	-.0129151	1.23e-13	-1.1e+11	0.000	-.0129151	-.0129151
C1226	.1584132	1.23e-13	1.3e+12	0.000	.1584132	.1584132
C1242	.4010153	1.23e-13	3.3e+12	0.000	.4010153	.4010153
C1254	.1709027	1.23e-13	1.4e+12	0.000	.1709027	.1709027
C1258	.3999138	.0071431	55.99	0.000	.3858698	.4139579
C1262	.0421595	1.23e-13	3.4e+11	0.000	.0421595	.0421595
C1270	.1716549	1.23e-13	1.4e+12	0.000	.1716549	.1716549
C1294	.2276011	1.23e-13	1.9e+12	0.000	.2276011	.2276011
C1298	.2585374	1.23e-13	2.1e+12	0.000	.2585374	.2585374
C1302	.1095102	1.23e-13	8.9e+11	0.000	.1095102	.1095102
C1314	.2720066	1.23e-13	2.2e+12	0.000	.2720066	.2720066
C1322	.0297519	1.23e-13	2.4e+11	0.000	.0297519	.0297519
C1338	.1082066	1.23e-13	8.8e+11	0.000	.1082066	.1082066
C1346	.0760447	1.23e-13	6.2e+11	0.000	.0760447	.0760447
C1374	.1170802	1.23e-13	9.6e+11	0.000	.1170802	.1170802
C1378	.1310824	1.23e-13	1.1e+12	0.000	.1310824	.1310824
C1382	.2833285	1.23e-13	2.3e+12	0.000	.2833285	.2833285
C1390	.1473118	1.23e-13	1.2e+12	0.000	.1473118	.1473118
C1398	.0697056	1.23e-13	5.7e+11	0.000	.0697056	.0697056
C1401	.2966344	1.23e-13	2.4e+12	0.000	.2966344	.2966344
C1402	.0534138	1.23e-13	4.4e+11	0.000	.0534138	.0534138
C1410	.1934641	1.23e-13	1.6e+12	0.000	.1934641	.1934641
C1426	.1481158	1.23e-13	1.2e+12	0.000	.1481158	.1481158
C1446	.6446657	.0214016	30.12	0.000	.6025878	.6867436
C1450	.5139602	.0198314	25.92	0.000	.4749694	.552951
C1454	.036808	1.23e-13	3.0e+11	0.000	.036808	.036808
C1474	.2332954	1.23e-13	1.9e+12	0.000	.2332954	.2332954
C1486	.8463431	1.23e-13	6.9e+12	0.000	.8463431	.8463431
C1518	-.1587772	1.23e-13	-1.3e+12	0.000	-.1587772	-.1587772
C1526	.0430021	1.23e-13	3.5e+11	0.000	.0430021	.0430021
C1538	.1911978	1.23e-13	1.6e+12	0.000	.1911978	.1911978
C1550	.0318365	1.23e-13	2.6e+11	0.000	.0318365	.0318365
C1554	.2811225	1.23e-13	2.3e+12	0.000	.2811225	.2811225
C1568	.5014507	1.23e-13	4.1e+12	0.000	.5014507	.5014507
C1594	.0675612	1.23e-13	5.5e+11	0.000	.0675612	.0675612
C1598	.1265817	1.23e-13	1.0e+12	0.000	.1265817	.1265817
C1602	.0033471	1.23e-13	2.7e+10	0.000	.0033471	.0033471
C1606	.0203362	1.23e-13	1.7e+11	0.000	.0203362	.0203362
C1618	.2483128	1.23e-13	2.0e+12	0.000	.2483128	.2483128
C1622	.2228824	1.23e-13	1.8e+12	0.000	.2228824	.2228824
C1630	.2591339	1.23e-13	2.1e+12	0.000	.2591339	.2591339
C1654	.0755357	1.23e-13	6.2e+11	0.000	.0755357	.0755357
C1658	.1509476	1.23e-13	1.2e+12	0.000	.1509476	.1509476
C1662	.1931875	1.23e-13	1.6e+12	0.000	.1931875	.1931875
C1670	.1598182	1.23e-13	1.3e+12	0.000	.1598182	.1598182
C1674	.344547	1.23e-13	2.8e+12	0.000	.344547	.344547
C1682	.2531553	.0191438	13.22	0.000	.2155165	.2907942
C1686	.1543024	1.23e-13	1.3e+12	0.000	.1543024	.1543024
C1694	.1346126	1.23e-13	1.1e+12	0.000	.1346126	.1346126
C1698	.4652766	.0216408	21.50	0.000	.4227284	.5078248
C1702	.0391187	1.23e-13	3.2e+11	0.000	.0391187	.0391187
C1714	.307783	1.23e-13	2.5e+12	0.000	.307783	.307783
C1730	-.0007618	1.23e-13	-6.2e+09	0.000	-.0007618	-.0007618
C1742	.0577086	1.23e-13	4.7e+11	0.000	.0577086	.0577086
C1746	.2965866	1.23e-13	2.4e+12	0.000	.2965866	.2965866
C1766	-.0399876	1.23e-13	-3.3e+11	0.000	-.0399876	-.0399876

C1778	.0239311	1.23e-13	2.0e+11	0.000	.0239311	.0239311
C1782	.2322649	1.23e-13	1.9e+12	0.000	.2322649	.2322649
C1786	.0826244	1.23e-13	6.7e+11	0.000	.0826244	.0826244
C1790	.1344712	1.23e-13	1.1e+12	0.000	.1344712	.1344712
C1798	.074643	1.23e-13	6.1e+11	0.000	.074643	.074643
C1802	.2823988	1.23e-13	2.3e+12	0.000	.2823988	.2823988
C1814	.2952142	1.23e-13	2.4e+12	0.000	.2952142	.2952142
C1858	.1560992	1.23e-13	1.3e+12	0.000	.1560992	.1560992
C1870	.2655134	1.23e-13	2.2e+12	0.000	.2655134	.2655134
C1888	.0746703	1.23e-13	6.1e+11	0.000	.0746703	.0746703
C1906	-.0057896	1.23e-13	-4.7e+10	0.000	-.0057896	-.0057896
C1910	.4332167	1.23e-13	3.5e+12	0.000	.4332167	.4332167
C1914	.0806531	1.23e-13	6.6e+11	0.000	.0806531	.0806531
C1918	.0753536	1.23e-13	6.1e+11	0.000	.0753536	.0753536
C1930	-.0820786	1.23e-13	-6.7e+11	0.000	-.0820786	-.0820786
C1934	.208952	1.23e-13	1.7e+12	0.000	.208952	.208952
C1938	.227318	1.23e-13	1.9e+12	0.000	.227318	.227318
C1946	.1248838	1.23e-13	1.0e+12	0.000	.1248838	.1248838
C1950	.2483034	1.23e-13	2.0e+12	0.000	.2483034	.2483034
C1966	-.0043503	1.23e-13	-3.5e+10	0.000	-.0043503	-.0043503
C1974	.4740792	.0204343	23.20	0.000	.433903	.5142553
C1978	.3084287	1.23e-13	2.5e+12	0.000	.3084287	.3084287
C1982	.4254101	1.23e-13	3.5e+12	0.000	.4254101	.4254101
C2002	.0262591	1.23e-13	2.1e+11	0.000	.0262591	.0262591
C2010	.1004494	1.23e-13	8.2e+11	0.000	.1004494	.1004494
C2022	.1049333	1.23e-13	8.6e+11	0.000	.1049333	.1049333
C2026	.1149538	1.23e-13	9.4e+11	0.000	.1149538	.1149538
C2050	.4863665	1.23e-13	4.0e+12	0.000	.4863665	.4863665
C2070	.099252	1.23e-13	8.1e+11	0.000	.099252	.099252
C2074	.0571578	1.23e-13	4.7e+11	0.000	.0571578	.0571578
C2094	.0056486	1.23e-13	4.6e+10	0.000	.0056486	.0056486
C2106	.0511009	1.23e-13	4.2e+11	0.000	.0511009	.0511009
C2114	.1519741	1.23e-13	1.2e+12	0.000	.1519741	.1519741
C2130	.1334544	1.23e-13	1.1e+12	0.000	.1334544	.1334544
C2134	-.0174046	1.23e-13	-1.4e+11	0.000	-.0174046	-.0174046
C2150	.0858557	1.23e-13	7.0e+11	0.000	.0858557	.0858557
C2166	.0847455	1.23e-13	6.9e+11	0.000	.0847455	.0847455
C2178	.1452915	1.23e-13	1.2e+12	0.000	.1452915	.1452915
C2182	.3002024	1.23e-13	2.4e+12	0.000	.3002024	.3002024
C2202	.1457939	1.23e-13	1.2e+12	0.000	.1457939	.1457939
C2214	.1659079	1.23e-13	1.4e+12	0.000	.1659079	.1659079
C2218	.0575566	1.23e-13	4.7e+11	0.000	.0575566	.0575566
C2222	.2078244	1.23e-13	1.7e+12	0.000	.2078244	.2078244
C2238	.0637518	1.23e-13	5.2e+11	0.000	.0637518	.0637518
C2242	.1952921	1.23e-13	1.6e+12	0.000	.1952921	.1952921
C2250	.0710881	1.23e-13	5.8e+11	0.000	.0710881	.0710881
C2252	-.0136446	1.23e-13	-1.1e+11	0.000	-.0136446	-.0136446
C2254	.1038633	1.23e-13	8.5e+11	0.000	.1038633	.1038633
C2266	.2248664	1.23e-13	1.8e+12	0.000	.2248664	.2248664
C2290	-.0031856	1.23e-13	-2.6e+10	0.000	-.0031856	-.0031856
C2306	.1407288	1.23e-13	1.1e+12	0.000	.1407288	.1407288
C2342	.089765	1.23e-13	7.3e+11	0.000	.089765	.089765
C2346	-.04144	1.23e-13	-3.4e+11	0.000	-.04144	-.04144
C2354	.1257651	1.23e-13	1.0e+12	0.000	.1257651	.1257651
C2358	.146779	1.23e-13	1.2e+12	0.000	.146779	.146779
C2390	.0309392	1.23e-13	2.5e+11	0.000	.0309392	.0309392
C2402	.0752736	1.23e-13	6.1e+11	0.000	.0752736	.0752736
C2414	-.0517596	1.23e-13	-4.2e+11	0.000	-.0517596	-.0517596
C2422	.0300505	1.23e-13	2.5e+11	0.000	.0300505	.0300505
C2426	-.0310162	1.23e-13	-2.5e+11	0.000	-.0310162	-.0310162
C2430	.1011779	1.23e-13	8.3e+11	0.000	.1011779	.1011779
C2434	.2032243	1.23e-13	1.7e+12	0.000	.2032243	.2032243
C2442	-.0788725	1.23e-13	-6.4e+11	0.000	-.0788725	-.0788725
C2450	-.0121321	1.23e-13	-9.9e+10	0.000	-.0121321	-.0121321
C2454	.1788399	1.23e-13	1.5e+12	0.000	.1788399	.1788399
C2458	.1881875	1.23e-13	1.5e+12	0.000	.1881875	.1881875
C2466	.1566508	1.23e-13	1.3e+12	0.000	.1566508	.1566508
C2478	.0965391	1.23e-13	7.9e+11	0.000	.0965391	.0965391
C2486	.1331346	1.23e-13	1.1e+12	0.000	.1331346	.1331346
C2502	-.2754564	1.23e-13	-2.2e+12	0.000	-.2754564	-.2754564
C2506	.1140472	1.23e-13	9.3e+11	0.000	.1140472	.1140472
C2518	.0969598	1.23e-13	7.9e+11	0.000	.0969598	.0969598

C2522	-.0799955	1.23e-13	-6.5e+11	0.000	-.0799955	-.0799955
C2526	.0566929	1.23e-13	4.6e+11	0.000	.0566929	.0566929
C2542	.2757251	1.23e-13	2.2e+12	0.000	.2757251	.2757251
C2550	.0338619	1.23e-13	2.8e+11	0.000	.0338619	.0338619
C2554	.511422	1.23e-13	4.2e+12	0.000	.511422	.511422
C2562	-.0336177	1.23e-13	-2.7e+11	0.000	-.0336177	-.0336177
C2586	.0111011	1.23e-13	9.1e+10	0.000	.0111011	.0111011
C2594	-.0083875	1.23e-13	-6.8e+10	0.000	-.0083875	-.0083875
C2598	.0178147	1.23e-13	1.5e+11	0.000	.0178147	.0178147
C2614	-.0151962	1.23e-13	-1.2e+11	0.000	-.0151962	-.0151962
C2630	-.0945319	1.23e-13	-7.7e+11	0.000	-.0945319	-.0945319
C2638	.2482335	1.23e-13	2.0e+12	0.000	.2482335	.2482335
C2642	.5102034	1.23e-13	4.2e+12	0.000	.5102034	.5102034
C2658	.1042495	1.23e-13	8.5e+11	0.000	.1042495	.1042495
C2662	.3808442	1.23e-13	3.1e+12	0.000	.3808442	.3808442
C2682	.11717	.0206327	5.68	0.000	.0766038	.1577362
C2690	.2746736	1.23e-13	2.2e+12	0.000	.2746736	.2746736
C2698	.1889509	1.23e-13	1.5e+12	0.000	.1889509	.1889509
C2706	.2602383	.0100634	25.86	0.000	.2404524	.2800242
C2710	.1855859	1.23e-13	1.5e+12	0.000	.1855859	.1855859
C2714	.1079894	1.23e-13	8.8e+11	0.000	.1079894	.1079894
C2718	.0843138	1.23e-13	6.9e+11	0.000	.0843138	.0843138
C2726	.2410595	1.23e-13	2.0e+12	0.000	.2410595	.2410595
C2734	-.1462344	1.23e-13	-1.2e+12	0.000	-.1462344	-.1462344
C2750	.1450296	1.23e-13	1.2e+12	0.000	.1450296	.1450296
C2762	.0442393	1.23e-13	3.6e+11	0.000	.0442393	.0442393
C2774	.0170371	1.23e-13	1.4e+11	0.000	.0170371	.0170371
C2778	-.0067502	1.23e-13	-5.5e+10	0.000	-.0067502	-.0067502
C2786	-.031105	1.23e-13	-2.5e+11	0.000	-.031105	-.031105
C2790	-.0076097	1.23e-13	-6.2e+10	0.000	-.0076097	-.0076097
C2798	.1212327	1.23e-13	9.9e+11	0.000	.1212327	.1212327
C2802	.220941	1.23e-13	1.8e+12	0.000	.220941	.220941
C2810	.0657074	1.23e-13	5.4e+11	0.000	.0657074	.0657074
C2814	.3015696	1.23e-13	2.5e+12	0.000	.3015696	.3015696
C2842	.2690639	.0215618	12.48	0.000	.2266709	.3114568
C2866	.074669	1.23e-13	6.1e+11	0.000	.074669	.074669
C2870	.1228937	1.23e-13	1.0e+12	0.000	.1228937	.1228937
C2874	.0777582	1.23e-13	6.3e+11	0.000	.0777582	.0777582
C2894	.2093153	.0218209	9.59	0.000	.1664129	.2522176
C2902	.3089332	1.23e-13	2.5e+12	0.000	.3089332	.3089332
C2910	.0646439	1.23e-13	5.3e+11	0.000	.0646439	.0646439
C2918	.1878166	1.23e-13	1.5e+12	0.000	.1878166	.1878166
C2920	.1580437	1.23e-13	1.3e+12	0.000	.1580437	.1580437
C2934	.1947588	1.23e-13	1.6e+12	0.000	.1947588	.1947588
C2942	-.0370094	1.23e-13	-3.0e+11	0.000	-.0370094	-.0370094
C2946	.0716219	1.23e-13	5.8e+11	0.000	.0716219	.0716219
C2954	.157875	1.23e-13	1.3e+12	0.000	.157875	.157875
C2962	.2556262	1.23e-13	2.1e+12	0.000	.2556262	.2556262
C2970	-.080211	1.23e-13	-6.5e+11	0.000	-.080211	-.080211
C2974	-.0234979	1.23e-13	-1.9e+11	0.000	-.0234979	-.0234979
C2982	.2299317	1.23e-13	1.9e+12	0.000	.2299317	.2299317
C2994	-.0182621	1.23e-13	-1.5e+11	0.000	-.0182621	-.0182621
C3002	-.0205926	1.23e-13	-1.7e+11	0.000	-.0205926	-.0205926
C3014	.0518192	1.23e-13	4.2e+11	0.000	.0518192	.0518192
C3030	.0156839	1.23e-13	1.3e+11	0.000	.0156839	.0156839
C3034	.0537636	1.23e-13	4.4e+11	0.000	.0537636	.0537636
C3046	.2045599	1.23e-13	1.7e+12	0.000	.2045599	.2045599
C3062	.1057852	1.23e-13	8.6e+11	0.000	.1057852	.1057852
C3070	.1084575	1.23e-13	8.8e+11	0.000	.1084575	.1084575
C3078	.1715269	1.23e-13	1.4e+12	0.000	.1715269	.1715269
C3086	-.1072827	1.23e-13	-8.8e+11	0.000	-.1072827	-.1072827
C3098	.1386349	1.23e-13	1.1e+12	0.000	.1386349	.1386349
C3102	.1728344	1.23e-13	1.4e+12	0.000	.1728344	.1728344
C3108	.4680608	.0225452	20.76	0.000	.4237345	.5123872
C3114	.2338122	1.23e-13	1.9e+12	0.000	.2338122	.2338122
C3118	.0513368	1.23e-13	4.2e+11	0.000	.0513368	.0513368
C3134	.0743731	1.23e-13	6.1e+11	0.000	.0743731	.0743731
C3142	.0844871	1.23e-13	6.9e+11	0.000	.0844871	.0844871
C3146	.0385783	1.23e-13	3.1e+11	0.000	.0385783	.0385783
C3154	.2684662	1.23e-13	2.2e+12	0.000	.2684662	.2684662
C3170	.4242656	1.23e-13	3.5e+12	0.000	.4242656	.4242656
C3174	-.0142091	1.23e-13	-1.2e+11	0.000	-.0142091	-.0142091

C3186	.0484912	1.23e-13	4.0e+11	0.000	.0484912	.0484912
C3190	.0271666	1.23e-13	2.2e+11	0.000	.0271666	.0271666
C3242	-.4294459	1.23e-13	-3.5e+12	0.000	-.4294459	-.4294459
C3258	-.1401562	1.23e-13	-1.1e+12	0.000	-.1401562	-.1401562
C3278	.0416435	1.23e-13	3.4e+11	0.000	.0416435	.0416435
C3282	.2791211	1.23e-13	2.3e+12	0.000	.2791211	.2791211
C3290	.0297061	1.23e-13	2.4e+11	0.000	.0297061	.0297061
C3310	.2965066	1.23e-13	2.4e+12	0.000	.2965066	.2965066
C3314	.0262864	1.23e-13	2.1e+11	0.000	.0262864	.0262864
C3322	.4479839	1.23e-13	3.7e+12	0.000	.4479839	.4479839
C3326	.425763	1.23e-13	3.5e+12	0.000	.425763	.425763
C3334	.3031038	1.23e-13	2.5e+12	0.000	.3031038	.3031038
C3346	.4374375	1.23e-13	3.6e+12	0.000	.4374375	.4374375
C3354	.0207826	1.23e-13	1.7e+11	0.000	.0207826	.0207826
C3366	.1601031	1.23e-13	1.3e+12	0.000	.1601031	.1601031
C3370	.1515763	1.23e-13	1.2e+12	0.000	.1515763	.1515763
C3374	.005739	1.23e-13	4.7e+10	0.000	.005739	.005739
C3378	.2483004	1.23e-13	2.0e+12	0.000	.2483004	.2483004
C3386	.130424	1.23e-13	1.1e+12	0.000	.130424	.130424
C3406	.1545865	1.23e-13	1.3e+12	0.000	.1545865	.1545865
C3410	.0407872	1.23e-13	3.3e+11	0.000	.0407872	.0407872
C3458	.1145992	1.23e-13	9.3e+11	0.000	.1145992	.1145992
C3462	.0153834	1.23e-13	1.3e+11	0.000	.0153834	.0153834
C3474	.1016484	1.23e-13	8.3e+11	0.000	.1016484	.1016484
C3482	-.1154151	1.23e-13	-9.4e+11	0.000	-.1154151	-.1154151
C3490	.3057666	1.23e-13	2.5e+12	0.000	.3057666	.3057666
C3494	.1974112	1.23e-13	1.6e+12	0.000	.1974112	.1974112
C3498	.2982562	1.23e-13	2.4e+12	0.000	.2982562	.2982562
C3510	.0740147	1.23e-13	6.0e+11	0.000	.0740147	.0740147
C3530	.3858719	1.23e-13	3.1e+12	0.000	.3858719	.3858719
C3538	.2677887	1.23e-13	2.2e+12	0.000	.2677887	.2677887
C3562	.678616	.0210301	32.27	0.000	.6372686	.7199635
C3566	.1844804	1.23e-13	1.5e+12	0.000	.1844804	.1844804
C3584	.111273	1.23e-13	9.1e+11	0.000	.111273	.111273
C3598	.3488348	1.23e-13	2.8e+12	0.000	.3488348	.3488348
C3610	-.0160446	1.23e-13	-1.3e+11	0.000	-.0160446	-.0160446
C3614	.0027306	1.23e-13	2.2e+10	0.000	.0027306	.0027306
C3622	.2868689	1.23e-13	2.3e+12	0.000	.2868689	.2868689
C3626	.0780743	1.23e-13	6.4e+11	0.000	.0780743	.0780743
C3642	.1815654	1.23e-13	1.5e+12	0.000	.1815654	.1815654
C3650	.2270088	1.23e-13	1.9e+12	0.000	.2270088	.2270088
C3654	.2106219	1.23e-13	1.7e+12	0.000	.2106219	.2106219
C3674	.1787156	1.23e-13	1.5e+12	0.000	.1787156	.1787156
C3678	.2614613	1.23e-13	2.1e+12	0.000	.2614613	.2614613
C3698	.0772773	1.23e-13	6.3e+11	0.000	.0772773	.0772773
C3710	.3647911	1.23e-13	3.0e+12	0.000	.3647911	.3647911
C3734	.2395644	1.23e-13	2.0e+12	0.000	.2395644	.2395644
C3746	.0352871	1.23e-13	2.9e+11	0.000	.0352871	.0352871
C3762	.0410513	1.23e-13	3.3e+11	0.000	.0410513	.0410513
C3786	.0659017	1.23e-13	5.4e+11	0.000	.0659017	.0659017
C3790	.3032353	1.23e-13	2.5e+12	0.000	.3032353	.3032353
C3798	.4541929	1.23e-13	3.7e+12	0.000	.4541929	.4541929
C3806	.3040095	1.23e-13	2.5e+12	0.000	.3040095	.3040095
C3822	.0341735	1.23e-13	2.8e+11	0.000	.0341735	.0341735
C3830	.3212167	.0192609	16.68	0.000	.2833476	.3590858
C3834	.1665091	1.23e-13	1.4e+12	0.000	.1665091	.1665091
C3854	-.0770118	1.23e-13	-6.3e+11	0.000	-.0770118	-.0770118
C3866	-.4381102	1.23e-13	-3.6e+12	0.000	-.4381102	-.4381102
C3886	.1996331	1.23e-13	1.6e+12	0.000	.1996331	.1996331
C3890	.3543585	1.23e-13	2.9e+12	0.000	.3543585	.3543585
C3894	.073465	1.23e-13	6.0e+11	0.000	.073465	.073465
C3914	-.0146396	1.23e-13	-1.2e+11	0.000	-.0146396	-.0146396
C3930	.2594404	1.23e-13	2.1e+12	0.000	.2594404	.2594404
C3934	.0870508	1.23e-13	7.1e+11	0.000	.0870508	.0870508
C3938	.0512498	1.23e-13	4.2e+11	0.000	.0512498	.0512498
C3946	-.0161817	1.23e-13	-1.3e+11	0.000	-.0161817	-.0161817
C3954	.2219277	1.23e-13	1.8e+12	0.000	.2219277	.2219277
C3958	.3111016	1.23e-13	2.5e+12	0.000	.3111016	.3111016
C3966	.001508	1.23e-13	1.2e+10	0.000	.001508	.001508
C3974	.2223849	1.23e-13	1.8e+12	0.000	.2223849	.2223849
C3982	.0799489	1.23e-13	6.5e+11	0.000	.0799489	.0799489
C3990	.2420402	1.23e-13	2.0e+12	0.000	.2420402	.2420402

C4006	.3089129	1.23e-13	2.5e+12	0.000	.3089129	.3089129
C4014	.1557646	1.23e-13	1.3e+12	0.000	.1557646	.1557646
C4022	.1144947	1.23e-13	9.3e+11	0.000	.1144947	.1144947
C4034	.3401488	1.23e-13	2.8e+12	0.000	.3401488	.3401488
C4038	.2410089	1.23e-13	2.0e+12	0.000	.2410089	.2410089
C4042	.1803082	1.23e-13	1.5e+12	0.000	.1803082	.1803082
C4058	.0206326	1.23e-13	1.7e+11	0.000	.0206326	.0206326
C4066	.0917491	1.23e-13	7.5e+11	0.000	.0917491	.0917491
C4090	.383214	1.23e-13	3.1e+12	0.000	.383214	.383214
C4098	.1657216	1.23e-13	1.4e+12	0.000	.1657216	.1657216
C4106	.1001855	1.23e-13	8.2e+11	0.000	.1001855	.1001855
C4110	-.1217747	1.23e-13	-9.9e+11	0.000	-.1217747	-.1217747
C4114	.0428994	1.23e-13	3.5e+11	0.000	.0428994	.0428994
C4118	.2994834	1.23e-13	2.4e+12	0.000	.2994834	.2994834
C4142	.0825778	1.23e-13	6.7e+11	0.000	.0825778	.0825778
C4150	.1878526	1.23e-13	1.5e+12	0.000	.1878526	.1878526
C4154	.0107388	1.23e-13	8.8e+10	0.000	.0107388	.0107388
C4162	.2657913	1.23e-13	2.2e+12	0.000	.2657913	.2657913
C4166	.028703	1.23e-13	2.3e+11	0.000	.028703	.028703
C4170	.2000886	.0172779	11.58	0.000	.1661183	.2340589
C4174	.4152027	1.23e-13	3.4e+12	0.000	.4152027	.4152027
C4186	.7523532	.0224987	33.44	0.000	.7081182	.7965882
C4190	-.5441144	1.23e-13	-4.4e+12	0.000	-.5441144	-.5441144
C4194	.9944586	1.23e-13	8.1e+12	0.000	.9944586	.9944586
C4198	-.2228027	1.23e-13	-1.8e+12	0.000	-.2228027	-.2228027
C4202	.1457735	1.23e-13	1.2e+12	0.000	.1457735	.1457735
C4210	.2478261	1.23e-13	2.0e+12	0.000	.2478261	.2478261
C4214	.1433414	1.23e-13	1.2e+12	0.000	.1433414	.1433414
C4220	.2778951	1.23e-13	2.3e+12	0.000	.2778951	.2778951
C4222	.2896005	1.23e-13	2.4e+12	0.000	.2896005	.2896005
C4234	.1453107	1.23e-13	1.2e+12	0.000	.1453107	.1453107
C4254	.0791807	1.23e-13	6.5e+11	0.000	.0791807	.0791807
C4266	.5409253	1.23e-13	4.4e+12	0.000	.5409253	.5409253
C4268	.0742422	1.23e-13	6.1e+11	0.000	.0742422	.0742422
C4270	-.142764	1.23e-13	-1.2e+12	0.000	-.142764	-.142764
C4310	.1722952	1.23e-13	1.4e+12	0.000	.1722952	.1722952
C4330	.101805	1.23e-13	8.3e+11	0.000	.101805	.101805
C4334	.0891687	1.23e-13	7.3e+11	0.000	.0891687	.0891687
C4342	.1374697	1.23e-13	1.1e+12	0.000	.1374697	.1374697
C4358	.0742422	1.23e-13	6.1e+11	0.000	.0742422	.0742422
C4362	.1463204	1.23e-13	1.2e+12	0.000	.1463204	.1463204
C4378	.1278525	1.23e-13	1.0e+12	0.000	.1278525	.1278525
C4390	.1634392	1.23e-13	1.3e+12	0.000	.1634392	.1634392
C4406	.1334975	1.23e-13	1.1e+12	0.000	.1334975	.1334975
C4410	.3166625	1.23e-13	2.6e+12	0.000	.3166625	.3166625
C4414	.226777	1.23e-13	1.8e+12	0.000	.226777	.226777
C4418	.019805	1.23e-13	1.6e+11	0.000	.019805	.019805
C4422	.0285219	1.23e-13	2.3e+11	0.000	.0285219	.0285219
C4430	.1813098	1.23e-13	1.5e+12	0.000	.1813098	.1813098
C4442	.0356687	1.23e-13	2.9e+11	0.000	.0356687	.0356687
C4470	.1654542	1.23e-13	1.3e+12	0.000	.1654542	.1654542
C4494	-.0499449	1.23e-13	-4.1e+11	0.000	-.0499449	-.0499449
C4506	.2244166	1.23e-13	1.8e+12	0.000	.2244166	.2244166
C4522	.1179417	1.23e-13	9.6e+11	0.000	.1179417	.1179417
C4530	.2208131	1.23e-13	1.8e+12	0.000	.2208131	.2208131
C4546	.025543	1.23e-13	2.1e+11	0.000	.025543	.025543
C4550	.0573223	1.23e-13	4.7e+11	0.000	.0573223	.0573223
C4554	.0236511	1.23e-13	1.9e+11	0.000	.0236511	.0236511
C4578	.1867202	1.23e-13	1.5e+12	0.000	.1867202	.1867202
C4582	.1154606	1.23e-13	9.4e+11	0.000	.1154606	.1154606
C4594	.6058448	.0191907	31.57	0.000	.5681137	.6435759
C4606	.185913	.0183349	10.14	0.000	.1498646	.2219614
C4614	.2067273	1.23e-13	1.7e+12	0.000	.2067273	.2067273
C4622	.135879	1.23e-13	1.1e+12	0.000	.135879	.135879
C4634	.1526344	1.23e-13	1.2e+12	0.000	.1526344	.1526344
C4652	.2569152	1.23e-13	2.1e+12	0.000	.2569152	.2569152
C4654	.0671838	1.23e-13	5.5e+11	0.000	.0671838	.0671838
C4666	-.1110911	1.23e-13	-9.1e+11	0.000	-.1110911	-.1110911
C4670	.3210919	1.23e-13	2.6e+12	0.000	.3210919	.3210919
C4702	.1268795	1.23e-13	1.0e+12	0.000	.1268795	.1268795
C4722	.1961789	1.23e-13	1.6e+12	0.000	.1961789	.1961789
C4726	.1788672	.0194221	9.21	0.000	.1406811	.2170533

C4730	-.0248259	1.23e-13	-2.0e+11	0.000	-.0248259	-.0248259
C4738	.1014421	1.23e-13	8.3e+11	0.000	.1014421	.1014421
C4746	.057745	1.23e-13	4.7e+11	0.000	.057745	.057745
C4758	.1594181	1.23e-13	1.3e+12	0.000	.1594181	.1594181
C4790	.6545248	.0220631	29.67	0.000	.6111463	.6979033
C4794	.1333863	1.23e-13	1.1e+12	0.000	.1333863	.1333863
C4806	.0467011	1.23e-13	3.8e+11	0.000	.0467011	.0467011
C4814	.1193102	1.23e-13	9.7e+11	0.000	.1193102	.1193102
C4826	.0335144	1.23e-13	2.7e+11	0.000	.0335144	.0335144
C4830	-.0470937	1.23e-13	-3.8e+11	0.000	-.0470937	-.0470937
C4854	.0512418	1.23e-13	4.2e+11	0.000	.0512418	.0512418
C4862	.1887257	1.23e-13	1.5e+12	0.000	.1887257	.1887257
C4866	.0084296	1.23e-13	6.9e+10	0.000	.0084296	.0084296
C4870	.0700377	1.23e-13	5.7e+11	0.000	.0700377	.0700377
C4890	.0971766	1.23e-13	7.9e+11	0.000	.0971766	.0971766
C4902	.1344184	1.23e-13	1.1e+12	0.000	.1344184	.1344184
C4918	.178512	1.23e-13	1.5e+12	0.000	.178512	.178512
C4934	.3172888	1.23e-13	2.6e+12	0.000	.3172888	.3172888
C4942	-.0519192	1.23e-13	-4.2e+11	0.000	-.0519192	-.0519192
C4962	.1951662	1.23e-13	1.6e+12	0.000	.1951662	.1951662
C4966	.0544985	1.23e-13	4.4e+11	0.000	.0544985	.0544985
C4970	.1002079	1.23e-13	8.2e+11	0.000	.1002079	.1002079
C4974	-.0597813	1.23e-13	-4.9e+11	0.000	-.0597813	-.0597813
_cons	11.22313	.0020721	5416.19	0.000	11.21905	11.2272

247 outreg2 using output/ols_avg_annual_pay.doc, append keep(log_federal_funding) addtex
> t(MSA FE, Yes, Year FE, Yes, FFRDC count FE, No)
output/ols_avg_annual_pay.doc
dir : seeout

248 reg log_avg_annual_pay log_federal_funding i.year i.msa_factor i.ffrdc_count, robust
> cluster(msa_factor)
note: 2.ffrdc_count omitted because of collinearity
note: 3.ffrdc_count omitted because of collinearity
note: 5.ffrdc_count omitted because of collinearity
note: 13.ffrdc_count omitted because of collinearity

Linear regression				Number of obs	=	7,372
				$F_{(19, 387)}$	=	.
				Prob > F	=	.
				R-squared	=	0.9697
				Root MSE	=	.03132

(Std. Err. adjusted for **388** clusters in msa_factor)

log_avg_annual_pay	Coef.	Robust Std. Err.	t	P>|t|	[95% Conf. Interval]	
log_federal_funding	.0120934	.0081153	1.49	0.137	-.0038622	.0280489
year						
2002	.011323	.0007967	14.21	0.000	.0097567	.0128893
2003	.0179377	.0010625	16.88	0.000	.0158486	.0200267
2004	.0287896	.0012262	23.48	0.000	.0263787	.0312004
2005	.0260345	.0014715	17.69	0.000	.0231413	.0289278
2006	.0349532	.0017887	19.54	0.000	.0314364	.0384701
2007	.0449558	.0020912	21.50	0.000	.0408444	.0490673
2008	.0357773	.0024395	14.67	0.000	.030981	.0405736
2009	.0487629	.0026524	18.38	0.000	.0435481	.0539777
2010	.0521664	.0027939	18.67	0.000	.0466732	.0576596
2011	.0442323	.0029095	15.20	0.000	.0385118	.0499527
2012	.0442622	.0030705	14.42	0.000	.0382253	.0502991
2013	.0409513	.0031629	12.95	0.000	.0347327	.0471698
2014	.0509288	.0033681	15.12	0.000	.0443068	.0575508
2015	.0762047	.0032107	23.73	0.000	.069892	.0825173
2016	.0765648	.0031282	24.48	0.000	.0704145	.0827152
2017	.0844684	.0033494	25.22	0.000	.0778832	.0910537
2018	.0908828	.003565	25.49	0.000	.0838736	.0978921
2019	.1026559	.0037413	27.44	0.000	.0953001	.1100117

msa_factor						
C1038	-.4508553	1.22e-13	-3.7e+12	0.000	-.4508553	-.4508553
C1042	.2166845	1.22e-13	1.8e+12	0.000	.2166845	.2166845
C1050	.0493491	1.22e-13	4.0e+11	0.000	.0493491	.0493491
C1054	.0764216	1.22e-13	6.3e+11	0.000	.0764216	.0764216
C1058	.3118894	1.22e-13	2.6e+12	0.000	.3118894	.3118894
C1074	.1402136	.0335436	4.18	0.000	.074263	.2061642
C1078	.033	1.22e-13	2.7e+11	0.000	.033	.033
C1090	.2589237	1.22e-13	2.1e+12	0.000	.2589237	.2589237
C1102	.0223425	1.22e-13	1.8e+11	0.000	.0223425	.0223425
C1110	.1238719	1.22e-13	1.0e+12	0.000	.1238719	.1238719
C1118	.1885587	.0095469	19.75	0.000	.1697884	.207329
C1126	.3615476	1.22e-13	3.0e+12	0.000	.3615476	.3615476
C1146	.4095228	1.22e-13	3.4e+12	0.000	.4095228	.4095228
C1150	.0430921	1.22e-13	3.5e+11	0.000	.0430921	.0430921
C1154	.1476945	1.22e-13	1.2e+12	0.000	.1476945	.1476945
C1164	-.443843	1.22e-13	-3.6e+12	0.000	-.443843	-.443843
C1170	.0418258	1.22e-13	3.4e+11	0.000	.0418258	.0418258
C1202	.0930833	1.22e-13	7.6e+11	0.000	.0930833	.0930833
C1206	.4032619	1.22e-13	3.3e+12	0.000	.4032619	.4032619
C1210	.1855375	1.22e-13	1.5e+12	0.000	.1855375	.1855375
C1222	-.0129151	1.22e-13	-1.1e+11	0.000	-.0129151	-.0129151
C1226	.1584132	1.22e-13	1.3e+12	0.000	.1584132	.1584132
C1242	.4010153	1.22e-13	3.3e+12	0.000	.4010153	.4010153
C1254	.1709027	1.22e-13	1.4e+12	0.000	.1709027	.1709027
C1258	.3964797	.0043105	91.98	0.000	.3880048	.4049547
C1262	.0421595	1.22e-13	3.5e+11	0.000	.0421595	.0421595
C1270	.1716549	1.22e-13	1.4e+12	0.000	.1716549	.1716549
C1294	.2276011	1.22e-13	1.9e+12	0.000	.2276011	.2276011
C1298	.2585374	1.22e-13	2.1e+12	0.000	.2585374	.2585374
C1302	.1095102	1.22e-13	9.0e+11	0.000	.1095102	.1095102
C1314	.2720066	1.22e-13	2.2e+12	0.000	.2720066	.2720066
C1322	.0297519	1.22e-13	2.4e+11	0.000	.0297519	.0297519
C1338	.1082066	1.22e-13	8.9e+11	0.000	.1082066	.1082066
C1346	.0760447	1.22e-13	6.2e+11	0.000	.0760447	.0760447
C1374	.1170802	1.22e-13	9.6e+11	0.000	.1170802	.1170802
C1378	.1310824	1.22e-13	1.1e+12	0.000	.1310824	.1310824
C1382	.2833285	1.22e-13	2.3e+12	0.000	.2833285	.2833285
C1390	.1473118	1.22e-13	1.2e+12	0.000	.1473118	.1473118
C1398	.0697056	1.22e-13	5.7e+11	0.000	.0697056	.0697056
C1401	.2966344	1.22e-13	2.4e+12	0.000	.2966344	.2966344
C1402	.0534138	1.22e-13	4.4e+11	0.000	.0534138	.0534138
C1410	.1934641	1.22e-13	1.6e+12	0.000	.1934641	.1934641
C1426	.1481158	1.22e-13	1.2e+12	0.000	.1481158	.1481158
C1446	.6100935	.025093	24.31	0.000	.5607578	.6594292
C1450	.4990813	.0141476	35.28	0.000	.4712654	.5268971
C1454	.036808	1.22e-13	3.0e+11	0.000	.036808	.036808
C1474	.2332954	1.22e-13	1.9e+12	0.000	.2332954	.2332954
C1486	.8463431	1.22e-13	6.9e+12	0.000	.8463431	.8463431
C1518	-.1587772	1.22e-13	-1.3e+12	0.000	-.1587772	-.1587772
C1526	.0430021	1.22e-13	3.5e+11	0.000	.0430021	.0430021
C1538	.1911978	1.22e-13	1.6e+12	0.000	.1911978	.1911978
C1550	.0318365	1.22e-13	2.6e+11	0.000	.0318365	.0318365
C1554	.2811225	1.22e-13	2.3e+12	0.000	.2811225	.2811225
C1568	.5014507	1.22e-13	4.1e+12	0.000	.5014507	.5014507
C1594	.0675612	1.22e-13	5.5e+11	0.000	.0675612	.0675612
C1598	.1265817	1.22e-13	1.0e+12	0.000	.1265817	.1265817
C1602	.0033471	1.22e-13	2.7e+10	0.000	.0033471	.0033471
C1606	.0203362	1.22e-13	1.7e+11	0.000	.0203362	.0203362
C1618	.2483128	1.22e-13	2.0e+12	0.000	.2483128	.2483128
C1622	.2228824	1.22e-13	1.8e+12	0.000	.2228824	.2228824
C1630	.2591339	1.22e-13	2.1e+12	0.000	.2591339	.2591339
C1654	.0755357	1.22e-13	6.2e+11	0.000	.0755357	.0755357
C1658	.1509476	1.22e-13	1.2e+12	0.000	.1509476	.1509476
C1662	.1931875	1.22e-13	1.6e+12	0.000	.1931875	.1931875
C1670	.1598182	1.22e-13	1.3e+12	0.000	.1598182	.1598182
C1674	.344547	1.22e-13	2.8e+12	0.000	.344547	.344547
C1682	.2469011	.0106254	23.24	0.000	.2260103	.2677919
C1686	.1543024	1.22e-13	1.3e+12	0.000	.1543024	.1543024
C1694	.1346126	1.22e-13	1.1e+12	0.000	.1346126	.1346126
C1698	.1938501	.1744139	1.11	0.267	-.1490673	.5367675
C1702	.0391187	1.22e-13	3.2e+11	0.000	.0391187	.0391187

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C1714      .307783    1.22e-13   2.5e+12   0.000      .307783     .307783
C1730    -.0007618    1.22e-13  -6.2e+09   0.000    -.0007618   -.0007618
C1742     .0577086    1.22e-13   4.7e+11   0.000     .0577086    .0577086
C1746     .2965866    1.22e-13   2.4e+12   0.000     .2965866    .2965866
C1766    -.0399876    1.22e-13  -3.3e+11   0.000    -.0399876   -.0399876
C1778     .0239311    1.22e-13   2.0e+11   0.000     .0239311    .0239311
C1782     .2322649    1.22e-13   1.9e+12   0.000     .2322649    .2322649
C1786     .0826244    1.22e-13   6.8e+11   0.000     .0826244    .0826244
C1790     .1344712    1.22e-13   1.1e+12   0.000     .1344712    .1344712
C1798      .074643    1.22e-13   6.1e+11   0.000      .074643     .074643
C1802     .2823988    1.22e-13   2.3e+12   0.000     .2823988    .2823988
C1814     .2952142    1.22e-13   2.4e+12   0.000     .2952142    .2952142
C1858     .1560992    1.22e-13   1.3e+12   0.000     .1560992    .1560992
C1870     .2655134    1.22e-13   2.2e+12   0.000     .2655134    .2655134
C1888     .0746703    1.22e-13   6.1e+11   0.000     .0746703    .0746703
C1906    -.0057896    1.22e-13  -4.7e+10   0.000    -.0057896   -.0057896
C1910     .4332167    1.22e-13   3.5e+12   0.000     .4332167    .4332167
C1914     .0806531    1.22e-13   6.6e+11   0.000     .0806531    .0806531
C1918     .0753536    1.22e-13   6.2e+11   0.000     .0753536    .0753536
C1930    -.0820786    1.22e-13  -6.7e+11   0.000    -.0820786   -.0820786
C1934      .208952    1.22e-13   1.7e+12   0.000      .208952     .208952
C1938      .227318    1.22e-13   1.9e+12   0.000      .227318     .227318
C1946     .1248838    1.22e-13   1.0e+12   0.000     .1248838    .1248838
C1950     .2483034    1.22e-13   2.0e+12   0.000     .2483034    .2483034
C1966    -.0043503    1.22e-13  -3.6e+10   0.000    -.0043503   -.0043503
C1974     .4516386    .0180885     24.97   0.000     .4160745    .4872027
C1978     .3084287    1.22e-13   2.5e+12   0.000     .3084287    .3084287
C1982     .4254101    1.22e-13   3.5e+12   0.000     .4254101    .4254101
C2002     .0262591    1.22e-13   2.2e+11   0.000     .0262591    .0262591
C2010     .1004494    1.22e-13   8.2e+11   0.000     .1004494    .1004494
C2022     .1049333    1.22e-13   8.6e+11   0.000     .1049333    .1049333
C2026     .1149538    1.22e-13   9.4e+11   0.000     .1149538    .1149538
C2050     .4863665    1.22e-13   4.0e+12   0.000     .4863665    .4863665
C2070      .099252    1.22e-13   8.1e+11   0.000      .099252     .099252
C2074     .0571578    1.22e-13   4.7e+11   0.000     .0571578    .0571578
C2094     .0056486    1.22e-13   4.6e+10   0.000     .0056486    .0056486
C2106     .0511009    1.22e-13   4.2e+11   0.000     .0511009    .0511009
C2114     .1519741    1.22e-13   1.2e+12   0.000     .1519741    .1519741
C2130     .1334544    1.22e-13   1.1e+12   0.000     .1334544    .1334544
C2134    -.0174046    1.22e-13  -1.4e+11   0.000    -.0174046   -.0174046
C2150     .0858557    1.22e-13   7.0e+11   0.000     .0858557    .0858557
C2166     .0847455    1.22e-13   6.9e+11   0.000     .0847455    .0847455
C2178     .1452915    1.22e-13   1.2e+12   0.000     .1452915    .1452915
C2182     .3002024    1.22e-13   2.5e+12   0.000     .3002024    .3002024
C2202     .1457939    1.22e-13   1.2e+12   0.000     .1457939    .1457939
C2214     .1659079    1.22e-13   1.4e+12   0.000     .1659079    .1659079
C2218     .0575566    1.22e-13   4.7e+11   0.000     .0575566    .0575566
C2222     .2078244    1.22e-13   1.7e+12   0.000     .2078244    .2078244
C2238     .0637518    1.22e-13   5.2e+11   0.000     .0637518    .0637518
C2242     .1952921    1.22e-13   1.6e+12   0.000     .1952921    .1952921
C2250     .0710881    1.22e-13   5.8e+11   0.000     .0710881    .0710881
C2252    -.0136446    1.22e-13  -1.1e+11   0.000    -.0136446   -.0136446
C2254     .1038633    1.22e-13   8.5e+11   0.000     .1038633    .1038633
C2266     .2248664    1.22e-13   1.8e+12   0.000     .2248664    .2248664
C2290    -.0031856    1.22e-13  -2.6e+10   0.000    -.0031856   -.0031856
C2306     .1407288    1.22e-13   1.2e+12   0.000     .1407288    .1407288
C2342      .089765    1.22e-13   7.4e+11   0.000      .089765     .089765
C2346      -.04144    1.22e-13  -3.4e+11   0.000      -.04144     -.04144
C2354     .1257651    1.22e-13   1.0e+12   0.000     .1257651    .1257651
C2358      .146779    1.22e-13   1.2e+12   0.000      .146779     .146779
C2390     .0309392    1.22e-13   2.5e+11   0.000     .0309392    .0309392
C2402     .0752736    1.22e-13   6.2e+11   0.000     .0752736    .0752736
C2414    -.0517596    1.22e-13  -4.2e+11   0.000    -.0517596   -.0517596
C2422     .0300505    1.22e-13   2.5e+11   0.000     .0300505    .0300505
C2426    -.0310162    1.22e-13  -2.5e+11   0.000    -.0310162   -.0310162
C2430     .1011779    1.22e-13   8.3e+11   0.000     .1011779    .1011779
C2434     .2032243    1.22e-13   1.7e+12   0.000     .2032243    .2032243
C2442    -.0788725    1.22e-13  -6.5e+11   0.000    -.0788725   -.0788725
C2450    -.0121321    1.22e-13  -9.9e+10   0.000    -.0121321   -.0121321
C2454     .1788399    1.22e-13   1.5e+12   0.000     .1788399    .1788399
C2458     .1881875    1.22e-13   1.5e+12   0.000     .1881875    .1881875
C2466     .1566508    1.22e-13   1.3e+12   0.000     .1566508    .1566508
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C2478	.0965391	1.22e-13	7.9e+11	0.000	.0965391	.0965391
C2486	.1331346	1.22e-13	1.1e+12	0.000	.1331346	.1331346
C2502	-.2754564	1.22e-13	-2.3e+12	0.000	-.2754564	-.2754564
C2506	.1140472	1.22e-13	9.3e+11	0.000	.1140472	.1140472
C2518	.0969598	1.22e-13	7.9e+11	0.000	.0969598	.0969598
C2522	-.0799955	1.22e-13	-6.6e+11	0.000	-.0799955	-.0799955
C2526	.0566929	1.22e-13	4.6e+11	0.000	.0566929	.0566929
C2542	.2757251	1.22e-13	2.3e+12	0.000	.2757251	.2757251
C2550	.0338619	1.22e-13	2.8e+11	0.000	.0338619	.0338619
C2554	.511422	1.22e-13	4.2e+12	0.000	.511422	.511422
C2562	-.0336177	1.22e-13	-2.8e+11	0.000	-.0336177	-.0336177
C2586	.0111011	1.22e-13	9.1e+10	0.000	.0111011	.0111011
C2594	-.0083875	1.22e-13	-6.9e+10	0.000	-.0083875	-.0083875
C2598	.0178147	1.22e-13	1.5e+11	0.000	.0178147	.0178147
C2614	-.0151962	1.22e-13	-1.2e+11	0.000	-.0151962	-.0151962
C2630	-.0945319	1.22e-13	-7.7e+11	0.000	-.0945319	-.0945319
C2638	.2482335	1.22e-13	2.0e+12	0.000	.2482335	.2482335
C2642	.5102034	1.22e-13	4.2e+12	0.000	.5102034	.5102034
C2658	.1042495	1.22e-13	8.5e+11	0.000	.1042495	.1042495
C2662	.3808442	1.22e-13	3.1e+12	0.000	.3808442	.3808442
C2682	.0922414	.0194761	4.74	0.000	.0539491	.1305336
C2690	.2746736	1.22e-13	2.3e+12	0.000	.2746736	.2746736
C2698	.1889509	1.22e-13	1.5e+12	0.000	.1889509	.1889509
C2706	.2694081	.0075399	35.73	0.000	.2545839	.2842323
C2710	.1855859	1.22e-13	1.5e+12	0.000	.1855859	.1855859
C2714	.1079894	1.22e-13	8.8e+11	0.000	.1079894	.1079894
C2718	.0843138	1.22e-13	6.9e+11	0.000	.0843138	.0843138
C2726	.2410595	1.22e-13	2.0e+12	0.000	.2410595	.2410595
C2734	-.1462344	1.22e-13	-1.2e+12	0.000	-.1462344	-.1462344
C2750	.1450296	1.22e-13	1.2e+12	0.000	.1450296	.1450296
C2762	.0442393	1.22e-13	3.6e+11	0.000	.0442393	.0442393
C2774	.0170371	1.22e-13	1.4e+11	0.000	.0170371	.0170371
C2778	-.0067502	1.22e-13	-5.5e+10	0.000	-.0067502	-.0067502
C2786	-.031105	1.22e-13	-2.5e+11	0.000	-.031105	-.031105
C2790	-.0076097	1.22e-13	-6.2e+10	0.000	-.0076097	-.0076097
C2798	.1212327	1.22e-13	9.9e+11	0.000	.1212327	.1212327
C2802	.220941	1.22e-13	1.8e+12	0.000	.220941	.220941
C2810	.0657074	1.22e-13	5.4e+11	0.000	.0657074	.0657074
C2814	.3015696	1.22e-13	2.5e+12	0.000	.3015696	.3015696
C2842	.2324819	.0262965	8.84	0.000	.1807801	.2841837
C2866	.074669	1.22e-13	6.1e+11	0.000	.074669	.074669
C2870	.1228937	1.22e-13	1.0e+12	0.000	.1228937	.1228937
C2874	.0777582	1.22e-13	6.4e+11	0.000	.0777582	.0777582
C2894	.1694839	.0282586	6.00	0.000	.1139243	.2250435
C2902	.3089332	1.22e-13	2.5e+12	0.000	.3089332	.3089332
C2910	.0646439	1.22e-13	5.3e+11	0.000	.0646439	.0646439
C2918	.1878166	1.22e-13	1.5e+12	0.000	.1878166	.1878166
C2920	.1580437	1.22e-13	1.3e+12	0.000	.1580437	.1580437
C2934	.1947588	1.22e-13	1.6e+12	0.000	.1947588	.1947588
C2942	-.0370094	1.22e-13	-3.0e+11	0.000	-.0370094	-.0370094
C2946	.0716219	1.22e-13	5.9e+11	0.000	.0716219	.0716219
C2954	.157875	1.22e-13	1.3e+12	0.000	.157875	.157875
C2962	.2556262	1.22e-13	2.1e+12	0.000	.2556262	.2556262
C2970	-.080211	1.22e-13	-6.6e+11	0.000	-.080211	-.080211
C2974	-.0234979	1.22e-13	-1.9e+11	0.000	-.0234979	-.0234979
C2982	.2299317	1.22e-13	1.9e+12	0.000	.2299317	.2299317
C2994	-.0182621	1.22e-13	-1.5e+11	0.000	-.0182621	-.0182621
C3002	-.0205926	1.22e-13	-1.7e+11	0.000	-.0205926	-.0205926
C3014	.0518192	1.22e-13	4.2e+11	0.000	.0518192	.0518192
C3030	.0156839	1.22e-13	1.3e+11	0.000	.0156839	.0156839
C3034	.0537636	1.22e-13	4.4e+11	0.000	.0537636	.0537636
C3046	.2045599	1.22e-13	1.7e+12	0.000	.2045599	.2045599
C3062	.1057852	1.22e-13	8.7e+11	0.000	.1057852	.1057852
C3070	.1084575	1.22e-13	8.9e+11	0.000	.1084575	.1084575
C3078	.1715269	1.22e-13	1.4e+12	0.000	.1715269	.1715269
C3086	-.1072827	1.22e-13	-8.8e+11	0.000	-.1072827	-.1072827
C3098	.1386349	1.22e-13	1.1e+12	0.000	.1386349	.1386349
C3102	.1728344	1.22e-13	1.4e+12	0.000	.1728344	.1728344
C3108	.1852911	.1817029	1.02	0.308	-.1719573	.5425394
C3114	.2338122	1.22e-13	1.9e+12	0.000	.2338122	.2338122
C3118	.0513368	1.22e-13	4.2e+11	0.000	.0513368	.0513368
C3134	.0743731	1.22e-13	6.1e+11	0.000	.0743731	.0743731

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C3142        .0844871    1.22e-13   6.9e+11    0.000      .0844871     .0844871
C3146        .0385783    1.22e-13   3.2e+11    0.000      .0385783     .0385783
C3154        .2684662    1.22e-13   2.2e+12    0.000      .2684662     .2684662
C3170        .4242656    1.22e-13   3.5e+12    0.000      .4242656     .4242656
C3174       -.0142091    1.22e-13  -1.2e+11    0.000     -.0142091    -.0142091
C3186        .0484912    1.22e-13   4.0e+11    0.000      .0484912     .0484912
C3190        .0271666    1.22e-13   2.2e+11    0.000      .0271666     .0271666
C3242       -.4294459    1.22e-13  -3.5e+12    0.000     -.4294459    -.4294459
C3258       -.1401562    1.22e-13  -1.1e+12    0.000     -.1401562    -.1401562
C3278        .0416435    1.22e-13   3.4e+11    0.000      .0416435     .0416435
C3282        .2791211    1.22e-13   2.3e+12    0.000      .2791211     .2791211
C3290        .0297061    1.22e-13   2.4e+11    0.000      .0297061     .0297061
C3310        .2965066    1.22e-13   2.4e+12    0.000      .2965066     .2965066
C3314        .0262864    1.22e-13   2.2e+11    0.000      .0262864     .0262864
C3322        .4479839    1.22e-13   3.7e+12    0.000      .4479839     .4479839
C3326        .425763     1.22e-13   3.5e+12    0.000      .425763      .425763
C3334        .3031038    1.22e-13   2.5e+12    0.000      .3031038     .3031038
C3346        .4374375    1.22e-13   3.6e+12    0.000      .4374375     .4374375
C3354        .0207826    1.22e-13   1.7e+11    0.000      .0207826     .0207826
C3366        .1601031    1.22e-13   1.3e+12    0.000      .1601031     .1601031
C3370        .1515763    1.22e-13   1.2e+12    0.000      .1515763     .1515763
C3374        .005739     1.22e-13   4.7e+10    0.000      .005739      .005739
C3378        .2483004    1.22e-13   2.0e+12    0.000      .2483004     .2483004
C3386        .130424     1.22e-13   1.1e+12    0.000      .130424      .130424
C3406        .1545865    1.22e-13   1.3e+12    0.000      .1545865     .1545865
C3410        .0407872    1.22e-13   3.3e+11    0.000      .0407872     .0407872
C3458        .1145992    1.22e-13   9.4e+11    0.000      .1145992     .1145992
C3462        .0153834    1.22e-13   1.3e+11    0.000      .0153834     .0153834
C3474        .1016484    1.22e-13   8.3e+11    0.000      .1016484     .1016484
C3482       -.1154151    1.22e-13  -9.5e+11    0.000     -.1154151    -.1154151
C3490        .3057666    1.22e-13   2.5e+12    0.000      .3057666     .3057666
C3494        .1974112    1.22e-13   1.6e+12    0.000      .1974112     .1974112
C3498        .2982562    1.22e-13   2.4e+12    0.000      .2982562     .2982562
C3510        .0740147    1.22e-13   6.1e+11    0.000      .0740147     .0740147
C3530        .3858719    1.22e-13   3.2e+12    0.000      .3858719     .3858719
C3538        .2677887    1.22e-13   2.2e+12    0.000      .2677887     .2677887
C3562        .6487034    .0223408     29.04    0.000      .6047789     .692628
C3566        .1844804    1.22e-13   1.5e+12    0.000      .1844804     .1844804
C3584        .111273     1.22e-13   9.1e+11    0.000      .111273      .111273
C3598        .3488348    1.22e-13   2.9e+12    0.000      .3488348     .3488348
C3610       -.0160446    1.22e-13  -1.3e+11    0.000     -.0160446    -.0160446
C3614        .0027306    1.22e-13   2.2e+10    0.000      .0027306     .0027306
C3622        .2868689    1.22e-13   2.4e+12    0.000      .2868689     .2868689
C3626        .0780743    1.22e-13   6.4e+11    0.000      .0780743     .0780743
C3642        .1815654    1.22e-13   1.5e+12    0.000      .1815654     .1815654
C3650        .2270088    1.22e-13   1.9e+12    0.000      .2270088     .2270088
C3654        .2106219    1.22e-13   1.7e+12    0.000      .2106219     .2106219
C3674        .1787156    1.22e-13   1.5e+12    0.000      .1787156     .1787156
C3678        .2614613    1.22e-13   2.1e+12    0.000      .2614613     .2614613
C3698        .0772773    1.22e-13   6.3e+11    0.000      .0772773     .0772773
C3710        .3647911    1.22e-13   3.0e+12    0.000      .3647911     .3647911
C3734        .2395644    1.22e-13   2.0e+12    0.000      .2395644     .2395644
C3746        .0352871    1.22e-13   2.9e+11    0.000      .0352871     .0352871
C3762        .0410513    1.22e-13   3.4e+11    0.000      .0410513     .0410513
C3786        .0659017    1.22e-13   5.4e+11    0.000      .0659017     .0659017
C3790        .3032353    1.22e-13   2.5e+12    0.000      .3032353     .3032353
C3798        .4541929    1.22e-13   3.7e+12    0.000      .4541929     .4541929
C3806        .3040095    1.22e-13   2.5e+12    0.000      .3040095     .3040095
C3822        .0341735    1.22e-13   2.8e+11    0.000      .0341735     .0341735
C3830        .3134936    .0111095     28.22    0.000      .2916511     .335336
C3834        .1665091    1.22e-13   1.4e+12    0.000      .1665091     .1665091
C3854       -.0770118    1.22e-13  -6.3e+11    0.000     -.0770118    -.0770118
C3866       -.4381102    1.22e-13  -3.6e+12    0.000     -.4381102    -.4381102
C3886        .1996331    1.22e-13   1.6e+12    0.000      .1996331     .1996331
C3890        .3543585    1.22e-13   2.9e+12    0.000      .3543585     .3543585
C3894        .073465     1.22e-13   6.0e+11    0.000      .073465      .073465
C3914       -.0146396    1.22e-13  -1.2e+11    0.000     -.0146396    -.0146396
C3930        .2594404    1.22e-13   2.1e+12    0.000      .2594404     .2594404
C3934        .0870508    1.22e-13   7.1e+11    0.000      .0870508     .0870508
C3938        .0512498    1.22e-13   4.2e+11    0.000      .0512498     .0512498
C3946       -.0161817    1.22e-13  -1.3e+11    0.000     -.0161817    -.0161817
C3954        .2219277    1.22e-13   1.8e+12    0.000      .2219277     .2219277
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C3958	.3111016	1.22e-13	2.5e+12	0.000	.3111016	.3111016
C3966	.001508	1.22e-13	1.2e+10	0.000	.001508	.001508
C3974	.2223849	1.22e-13	1.8e+12	0.000	.2223849	.2223849
C3982	.0799489	1.22e-13	6.5e+11	0.000	.0799489	.0799489
C3990	.2420402	1.22e-13	2.0e+12	0.000	.2420402	.2420402
C4006	.3089129	1.22e-13	2.5e+12	0.000	.3089129	.3089129
C4014	.1557646	1.22e-13	1.3e+12	0.000	.1557646	.1557646
C4022	.1144947	1.22e-13	9.4e+11	0.000	.1144947	.1144947
C4034	.3401488	1.22e-13	2.8e+12	0.000	.3401488	.3401488
C4038	.2410089	1.22e-13	2.0e+12	0.000	.2410089	.2410089
C4042	.1803082	1.22e-13	1.5e+12	0.000	.1803082	.1803082
C4058	.0206326	1.22e-13	1.7e+11	0.000	.0206326	.0206326
C4066	.0917491	1.22e-13	7.5e+11	0.000	.0917491	.0917491
C4090	.383214	1.22e-13	3.1e+12	0.000	.383214	.383214
C4098	.1657216	1.22e-13	1.4e+12	0.000	.1657216	.1657216
C4106	.1001855	1.22e-13	8.2e+11	0.000	.1001855	.1001855
C4110	-.1217747	1.22e-13	-1.0e+12	0.000	-.1217747	-.1217747
C4114	.0428994	1.22e-13	3.5e+11	0.000	.0428994	.0428994
C4118	.2994834	1.22e-13	2.5e+12	0.000	.2994834	.2994834
C4142	.0825778	1.22e-13	6.8e+11	0.000	.0825778	.0825778
C4150	.1878526	1.22e-13	1.5e+12	0.000	.1878526	.1878526
C4154	.0107388	1.22e-13	8.8e+10	0.000	.0107388	.0107388
C4162	.2657913	1.22e-13	2.2e+12	0.000	.2657913	.2657913
C4166	.028703	1.22e-13	2.4e+11	0.000	.028703	.028703
C4170	.2172369	.0136244	15.94	0.000	.1904498	.2440239
C4174	.4152027	1.22e-13	3.4e+12	0.000	.4152027	.4152027
C4186	.4701662	.1813284	2.59	0.010	.1136541	.8266783
C4190	-.5441144	1.22e-13	-4.5e+12	0.000	-.5441144	-.5441144
C4194	.9944586	1.22e-13	8.1e+12	0.000	.9944586	.9944586
C4198	-.2228027	1.22e-13	-1.8e+12	0.000	-.2228027	-.2228027
C4202	.1457735	1.22e-13	1.2e+12	0.000	.1457735	.1457735
C4210	.2478261	1.22e-13	2.0e+12	0.000	.2478261	.2478261
C4214	.1433414	1.22e-13	1.2e+12	0.000	.1433414	.1433414
C4220	.2778951	1.22e-13	2.3e+12	0.000	.2778951	.2778951
C4222	.2896005	1.22e-13	2.4e+12	0.000	.2896005	.2896005
C4234	.1453107	1.22e-13	1.2e+12	0.000	.1453107	.1453107
C4254	.0791807	1.22e-13	6.5e+11	0.000	.0791807	.0791807
C4266	.5409253	1.22e-13	4.4e+12	0.000	.5409253	.5409253
C4268	.0742422	1.22e-13	6.1e+11	0.000	.0742422	.0742422
C4270	-.142764	1.22e-13	-1.2e+12	0.000	-.142764	-.142764
C4310	.1722952	1.22e-13	1.4e+12	0.000	.1722952	.1722952
C4330	.101805	1.22e-13	8.3e+11	0.000	.101805	.101805
C4334	.0891687	1.22e-13	7.3e+11	0.000	.0891687	.0891687
C4342	.1374697	1.22e-13	1.1e+12	0.000	.1374697	.1374697
C4358	.0742422	1.22e-13	6.1e+11	0.000	.0742422	.0742422
C4362	.1463204	1.22e-13	1.2e+12	0.000	.1463204	.1463204
C4378	.1278525	1.22e-13	1.0e+12	0.000	.1278525	.1278525
C4390	.1634392	1.22e-13	1.3e+12	0.000	.1634392	.1634392
C4406	.1334975	1.22e-13	1.1e+12	0.000	.1334975	.1334975
C4410	.3166625	1.22e-13	2.6e+12	0.000	.3166625	.3166625
C4414	.226777	1.22e-13	1.9e+12	0.000	.226777	.226777
C4418	.019805	1.22e-13	1.6e+11	0.000	.019805	.019805
C4422	.0285219	1.22e-13	2.3e+11	0.000	.0285219	.0285219
C4430	.1813098	1.22e-13	1.5e+12	0.000	.1813098	.1813098
C4442	.0356687	1.22e-13	2.9e+11	0.000	.0356687	.0356687
C4470	.1654542	1.22e-13	1.4e+12	0.000	.1654542	.1654542
C4494	-.0499449	1.22e-13	-4.1e+11	0.000	-.0499449	-.0499449
C4506	.2244166	1.22e-13	1.8e+12	0.000	.2244166	.2244166
C4522	.1179417	1.22e-13	9.7e+11	0.000	.1179417	.1179417
C4530	.2208131	1.22e-13	1.8e+12	0.000	.2208131	.2208131
C4546	.025543	1.22e-13	2.1e+11	0.000	.025543	.025543
C4550	.0573223	1.22e-13	4.7e+11	0.000	.0573223	.0573223
C4554	.0236511	1.22e-13	1.9e+11	0.000	.0236511	.0236511
C4578	.1867202	1.22e-13	1.5e+12	0.000	.1867202	.1867202
C4582	.1154606	1.22e-13	9.5e+11	0.000	.1154606	.1154606
C4594	.5990023	.010812	55.40	0.000	.5777446	.6202599
C4606	.1898046	.0094282	20.13	0.000	.1712676	.2083416
C4614	.2067273	1.22e-13	1.7e+12	0.000	.2067273	.2067273
C4622	.135879	1.22e-13	1.1e+12	0.000	.135879	.135879
C4634	.1526344	1.22e-13	1.3e+12	0.000	.1526344	.1526344
C4652	.2569152	1.22e-13	2.1e+12	0.000	.2569152	.2569152
C4654	.0671838	1.22e-13	5.5e+11	0.000	.0671838	.0671838

C4666	-.1110911	1.22e-13	-9.1e+11	0.000	-.1110911	-.1110911
C4670	.3210919	1.22e-13	2.6e+12	0.000	.3210919	.3210919
C4702	.1268795	1.22e-13	1.0e+12	0.000	.1268795	.1268795
C4722	.1961789	1.22e-13	1.6e+12	0.000	.1961789	.1961789
C4726	.169122	.0118667	14.25	0.000	.1457909	.1924532
C4730	-.0248259	1.22e-13	-2.0e+11	0.000	-.0248259	-.0248259
C4738	.1014421	1.22e-13	8.3e+11	0.000	.1014421	.1014421
C4746	.057745	1.22e-13	4.7e+11	0.000	.057745	.057745
C4758	.1594181	1.22e-13	1.3e+12	0.000	.1594181	.1594181
C4790	.37665	.1813419	2.08	0.038	.0201114	.7331886
C4794	.1333863	1.22e-13	1.1e+12	0.000	.1333863	.1333863
C4806	.0467011	1.22e-13	3.8e+11	0.000	.0467011	.0467011
C4814	.1193102	1.22e-13	9.8e+11	0.000	.1193102	.1193102
C4826	.0335144	1.22e-13	2.7e+11	0.000	.0335144	.0335144
C4830	-.0470937	1.22e-13	-3.9e+11	0.000	-.0470937	-.0470937
C4854	.0512418	1.22e-13	4.2e+11	0.000	.0512418	.0512418
C4862	.1887257	1.22e-13	1.5e+12	0.000	.1887257	.1887257
C4866	.0084296	1.22e-13	6.9e+10	0.000	.0084296	.0084296
C4870	.0700377	1.22e-13	5.7e+11	0.000	.0700377	.0700377
C4890	.0971766	1.22e-13	8.0e+11	0.000	.0971766	.0971766
C4902	.1344184	1.22e-13	1.1e+12	0.000	.1344184	.1344184
C4918	.178512	1.22e-13	1.5e+12	0.000	.178512	.178512
C4934	.3172888	1.22e-13	2.6e+12	0.000	.3172888	.3172888
C4942	-.0519192	1.22e-13	-4.3e+11	0.000	-.0519192	-.0519192
C4962	.1951662	1.22e-13	1.6e+12	0.000	.1951662	.1951662
C4966	.0544985	1.22e-13	4.5e+11	0.000	.0544985	.0544985
C4970	.1002079	1.22e-13	8.2e+11	0.000	.1002079	.1002079
C4974	-.0597813	1.22e-13	-4.9e+11	0.000	-.0597813	-.0597813
ffrdc_count						
1	-.2338542	.1494793	-1.56	0.119	-.5277474	.060039
2	0	(omitted)				
3	0	(omitted)				
5	0	(omitted)				
8	-.0165941	.0100001	-1.66	0.098	-.0362555	.0030673
9	.0056643	.0090879	0.62	0.533	-.0122036	.0235322
10	.0069063	.0048771	1.42	0.158	-.0026825	.0164952
11	.0197839	.0023161	8.54	0.000	.0152301	.0243376
12	.0114519	.0017311	6.62	0.000	.0080483	.0148554
13	0	(omitted)				
_cons	11.22331	.0020832	5387.41	0.000	11.21921	11.22741

```
249 outreg2 using output/ols_avg_annual_pay.doc, append keep(log_federal_funding) addtex
  > t(MSA FE, Yes, Year FE, Yes, FFRDC count FE, Yes)
  output/ols_avg_annual_pay.doc
  dir : seeout

250
251 reg log_annual_avg_emplvl log_federal_funding, robust cluster(msa_factor)
```

Linear regression			Number of obs	=	7,372
			F(1, 387)	=	24.40
			Prob > F	=	0.0000
			R-squared	=	0.1085
			Root MSE	=	1.0612

(Std. Err. adjusted for **388** clusters in msa_factor)

log_annual_avg_em~l	Coef.	Robust Std. Err.	t	P>|t|	[95% Conf. Interval]	
log_federal_funding	.0826247	.0167275	4.94	0.000	.0497365	.1155128
_cons	12.35168	.0536272	230.32	0.000	12.24624	12.45711

```
252 outreg2 using output/ols_annual_avg_emplvl.doc, replace keep(log_federal_funding) ad
  > dtext(MSA FE, No, Year FE, No, FFRDC count FE, No)
   output/ols_annual_avg_emplvl.doc
   dir : seeout

253 reg log_annual_avg_emplvl log_federal_funding i.msa_factor, robust cluster(msa_facto
  > r)
```

Linear regression				Number of obs	=	7,372

Number of obs   =   7,372
F(1, 387)   =   .
Prob > F   =   .
R-squared   =   0.9966
Root MSE   =   .06717

(Std. Err. adjusted for **388** clusters in msa_factor)

log_annual_avg_em~l	Coef.	Robust Std. Err.	t	P>|t|	[95% Conf. Interval]	
log_federal_funding	.0014772	.0015984	0.92	0.356	-.0016654	.0046198
msa_factor						
C1038	-.1858595	6.17e-14	-3.0e+12	0.000	-.1858595	-.1858595
C1042	1.598843	6.17e-14	2.6e+13	0.000	1.598843	1.598843
C1050	-.0527424	6.17e-14	-8.5e+11	0.000	-.0527424	-.0527424
C1054	-.4176549	6.18e-14	-6.8e+12	0.000	-.4176549	-.4176549
C1058	1.900301	6.18e-14	3.1e+13	0.000	1.900301	1.900301
C1074	1.710011	.0357302	47.86	0.000	1.639761	1.78026
C1078	-.0404502	6.18e-14	-6.6e+11	0.000	-.0404502	-.0404502
C1090	1.646502	6.17e-14	2.7e+13	0.000	1.646502	1.646502
C1102	-.0851516	6.18e-14	-1.4e+12	0.000	-.0851516	-.0851516
C1110	.5392121	6.17e-14	8.7e+12	0.000	.5392121	.5392121
C1118	-.4211079	.028977	-14.53	0.000	-.47808	-.3641358
C1126	.9534633	6.17e-14	1.5e+13	0.000	.9534633	.9534633
C1146	1.12477	6.18e-14	1.8e+13	0.000	1.12477	1.12477
C1150	-.3214098	6.17e-14	-5.2e+12	0.000	-.3214098	-.3214098
C1154	.5913284	6.17e-14	9.6e+12	0.000	.5913284	.5913284
C1164	-.5547216	6.17e-14	-9.0e+12	0.000	-.5547216	-.5547216
C1170	.9913567	6.18e-14	1.6e+13	0.000	.9913567	.9913567
C1202	.2177449	6.18e-14	3.5e+12	0.000	.2177449	.2177449
C1206	3.587937	6.17e-14	5.8e+13	0.000	3.587937	3.587937
C1210	.7523179	6.17e-14	1.2e+13	0.000	.7523179	.7523179
C1222	-.2493473	6.17e-14	-4.0e+12	0.000	-.2493473	-.2493473
C1226	1.192321	6.17e-14	1.9e+13	0.000	1.192321	1.192321
C1242	2.523324	6.17e-14	4.1e+13	0.000	2.523324	2.523324
C1254	1.491161	6.17e-14	2.4e+13	0.000	1.491161	1.491161
C1258	2.965756	.0113387	261.56	0.000	2.943463	2.988049
C1262	.0878989	6.17e-14	1.4e+12	0.000	.0878989	.0878989
C1270	.3717389	6.17e-14	6.0e+12	0.000	.3717389	.3717389
C1294	1.729443	6.17e-14	2.8e+13	0.000	1.729443	1.729443
C1298	-.1201835	6.17e-14	-1.9e+12	0.000	-.1201835	-.1201835
C1302	-.5694083	6.17e-14	-9.2e+12	0.000	-.5694083	-.5694083
C1314	.902232	6.18e-14	1.5e+13	0.000	.902232	.902232
C1322	-.3851193	6.18e-14	-6.2e+12	0.000	-.3851193	-.3851193
C1338	.2352391	6.18e-14	3.8e+12	0.000	.2352391	.2352391
C1346	.0207459	6.17e-14	3.4e+11	0.000	.0207459	.0207459
C1374	.206685	6.17e-14	3.3e+12	0.000	.206685	.206685
C1378	.4919571	6.17e-14	8.0e+12	0.000	.4919571	.4919571
C1382	2.016216	6.18e-14	3.3e+13	0.000	2.016216	2.016216
C1390	-.0133653	6.17e-14	-2.2e+11	0.000	-.0133653	-.0133653
C1398	.0515284	6.17e-14	8.3e+11	0.000	.0515284	.0515284
C1401	.3413415	6.17e-14	5.5e+12	0.000	.3413415	.3413415
C1402	.0339085	6.17e-14	5.5e+11	0.000	.0339085	.0339085
C1410	-.4822284	6.18e-14	-7.8e+12	0.000	-.4822284	-.4822284
C1426	1.43531	6.18e-14	2.3e+13	0.000	1.43531	1.43531
C1446	3.610269	.0339723	106.27	0.000	3.543475	3.677062
C1450	.9166764	.0314799	29.12	0.000	.8547833	.9785695
C1454	.0313583	6.17e-14	5.1e+11	0.000	.0313583	.0313583
C1474	.255118	6.17e-14	4.1e+12	0.000	.255118	.255118
C1486	1.869919	6.17e-14	3.0e+13	0.000	1.869919	1.869919
C1518	.6813686	6.17e-14	1.1e+13	0.000	.6813686	.6813686
C1526	-.4417857	6.17e-14	-7.2e+12	0.000	-.4417857	-.4417857

C1538	2.113909	6.17e-14	3.4e+13	0.000	2.113909	2.113909
C1550	-.0812934	6.17e-14	-1.3e+12	0.000	-.0812934	-.0812934
C1554	.5847571	6.17e-14	9.5e+12	0.000	.5847571	.5847571
C1568	-.4571407	6.17e-14	-7.4e+12	0.000	-.4571407	-.4571407
C1594	.9555489	6.17e-14	1.5e+13	0.000	.9555489	.9555489
C1598	1.20959	6.17e-14	2.0e+13	0.000	1.20959	1.20959
C1602	-.3766399	6.17e-14	-6.1e+12	0.000	-.3766399	-.3766399
C1606	-.2150362	6.17e-14	-3.5e+12	0.000	-.2150362	-.2150362
C1618	-.7678165	6.17e-14	-1.2e+13	0.000	-.7678165	-.7678165
C1622	-.5191554	6.18e-14	-8.4e+12	0.000	-.5191554	-.5191554
C1630	.7563112	6.18e-14	1.2e+13	0.000	.7563112	.7563112
C1654	-.1478437	6.17e-14	-2.4e+12	0.000	-.1478437	-.1478437
C1658	.4253509	6.17e-14	6.9e+12	0.000	.4253509	.4253509
C1662	.5789356	6.17e-14	9.4e+12	0.000	.5789356	.5789356
C1670	1.494764	6.18e-14	2.4e+13	0.000	1.494764	1.494764
C1674	2.751424	6.17e-14	4.5e+13	0.000	2.751424	2.751424
C1682	.4214869	.0303884	13.87	0.000	.36174	.4812339
C1686	1.286637	6.17e-14	2.1e+13	0.000	1.286637	1.286637
C1694	-.3999036	6.17e-14	-6.5e+12	0.000	-.3999036	-.3999036
C1698	4.177318	.034352	121.60	0.000	4.109778	4.244858
C1702	.1664572	6.17e-14	2.7e+12	0.000	.1664572	.1664572
C1714	2.744598	6.18e-14	4.4e+13	0.000	2.744598	2.744598
C1730	.2225617	6.17e-14	3.6e+12	0.000	.2225617	.2225617
C1742	-.4571936	6.18e-14	-7.4e+12	0.000	-.4571936	-.4571936
C1746	2.76591	6.17e-14	4.5e+13	0.000	2.76591	2.76591
C1766	-.1836833	6.18e-14	-3.0e+12	0.000	-.1836833	-.1836833
C1778	.4038435	6.18e-14	6.5e+12	0.000	.4038435	.4038435
C1782	1.379696	6.18e-14	2.2e+13	0.000	1.379696	1.379696
C1786	.2799164	6.18e-14	4.5e+12	0.000	.2799164	.2799164
C1790	1.677458	6.17e-14	2.7e+13	0.000	1.677458	1.677458
C1798	.5928419	6.17e-14	9.6e+12	0.000	.5928419	.5928419
C1802	-.3543558	6.17e-14	-5.7e+12	0.000	-.3543558	-.3543558
C1814	2.684481	6.18e-14	4.3e+13	0.000	2.684481	2.684481
C1858	1.021177	6.17e-14	1.7e+13	0.000	1.021177	1.021177
C1870	-.5943215	6.17e-14	-9.6e+12	0.000	-.5943215	-.5943215
C1888	.4394683	6.17e-14	7.1e+12	0.000	.4394683	.4394683
C1906	-.5495389	6.17e-14	-8.9e+12	0.000	-.5495389	-.5495389
C1910	3.845133	6.17e-14	6.2e+13	0.000	3.845133	3.845133
C1914	.0596721	6.17e-14	9.7e+11	0.000	.0596721	.0596721
C1918	-.7986335	6.18e-14	-1.3e+13	0.000	-.7986335	-.7986335
C1930	-.0454798	6.17e-14	-7.4e+11	0.000	-.0454798	-.0454798
C1934	1.039921	6.18e-14	1.7e+13	0.000	1.039921	1.039921
C1938	1.754556	6.18e-14	2.8e+13	0.000	1.754556	1.754556
C1946	-.1867073	6.17e-14	-3.0e+12	0.000	-.1867073	-.1867073
C1950	-.2299742	6.18e-14	-3.7e+12	0.000	-.2299742	-.2299742
C1966	1.016737	6.18e-14	1.6e+13	0.000	1.016737	1.016737
C1974	2.954877	.032437	91.10	0.000	2.891103	3.018652
C1978	1.621527	6.18e-14	2.6e+13	0.000	1.621527	1.621527
C1982	3.368765	6.18e-14	5.5e+13	0.000	3.368765	3.368765
C2002	-.1223154	6.18e-14	-2.0e+12	0.000	-.1223154	-.1223154
C2010	-.0399469	6.17e-14	-6.5e+11	0.000	-.0399469	-.0399469
C2022	-.1600175	6.17e-14	-2.6e+12	0.000	-.1600175	-.1600175
C2026	.6623413	6.17e-14	1.1e+13	0.000	.6623413	.6623413
C2050	1.446021	6.18e-14	2.3e+13	0.000	1.446021	1.446021
C2070	-.1494813	6.17e-14	-2.4e+12	0.000	-.1494813	-.1494813
C2074	.1915526	6.17e-14	3.1e+12	0.000	.1915526	.1915526
C2094	-.0986222	6.17e-14	-1.6e+12	0.000	-.0986222	-.0986222
C2106	-.2348005	6.18e-14	-3.8e+12	0.000	-.2348005	-.2348005
C2114	.6150931	6.18e-14	1.0e+13	0.000	.6150931	.6150931
C2130	-.5316398	6.17e-14	-8.6e+12	0.000	-.5316398	-.5316398
C2134	1.460057	6.17e-14	2.4e+13	0.000	1.460057	1.460057
C2150	.6697987	6.18e-14	1.1e+13	0.000	.6697987	.6697987
C2166	.8109934	6.17e-14	1.3e+13	0.000	.8109934	.8109934
C2178	.8552358	6.17e-14	1.4e+13	0.000	.8552358	.8552358
C2182	-.5664175	6.17e-14	-9.2e+12	0.000	-.5664175	-.5664175
C2202	.6251874	6.17e-14	1.0e+13	0.000	.6251874	.6251874
C2214	-.2818802	6.17e-14	-4.6e+12	0.000	-.2818802	-.2818802
C2218	.6645222	6.18e-14	1.1e+13	0.000	.6645222	.6645222
C2222	1.139492	6.17e-14	1.8e+13	0.000	1.139492	1.139492
C2238	-.1071614	6.18e-14	-1.7e+12	0.000	-.1071614	-.1071614
C2242	.7755613	6.17e-14	1.3e+13	0.000	.7755613	.7755613
C2250	.2470617	6.17e-14	4.0e+12	0.000	.2470617	.2470617

C2252	-.209282	6.17e-14	-3.4e+12	0.000	-.209282	-.209282
C2254	-.337052	6.17e-14	-5.5e+12	0.000	-.337052	-.337052
C2266	.748512	6.17e-14	1.2e+13	0.000	.748512	.748512
C2290	.5353	6.17e-14	8.7e+12	0.000	.5353	.5353
C2306	1.151438	6.17e-14	1.9e+13	0.000	1.151438	1.151438
C2342	1.701109	6.17e-14	2.8e+13	0.000	1.701109	1.701109
C2346	-.587829	6.17e-14	-9.5e+12	0.000	-.587829	-.587829
C2354	.6739185	6.18e-14	1.1e+13	0.000	.6739185	.6739185
C2358	.1378566	6.18e-14	2.2e+12	0.000	.1378566	.1378566
C2390	-.6440474	6.18e-14	-1.0e+13	0.000	-.6440474	-.6440474
C2402	-.1922228	6.18e-14	-3.1e+12	0.000	-.1922228	-.1922228
C2414	-.3875071	6.18e-14	-6.3e+12	0.000	-.3875071	-.3875071
C2422	-.2307249	6.17e-14	-3.7e+12	0.000	-.2307249	-.2307249
C2426	-.4623901	6.18e-14	-7.5e+12	0.000	-.4623901	-.4623901
C2430	-.0936842	6.17e-14	-1.5e+12	0.000	-.0936842	-.0936842
C2434	2.03376	6.17e-14	3.3e+13	0.000	2.03376	2.03376
C2442	-.9730903	6.18e-14	-1.6e+13	0.000	-.9730903	-.9730903
C2450	-.6132597	6.17e-14	-9.9e+12	0.000	-.6132597	-.6132597
C2454	.3030802	6.18e-14	4.9e+12	0.000	.3030802	.3030802
C2458	.9453624	6.17e-14	1.5e+13	0.000	.9453624	.9453624
C2466	1.68806	6.18e-14	2.7e+13	0.000	1.68806	1.68806
C2478	.103313	6.18e-14	1.7e+12	0.000	.103313	.103313
C2486	1.713874	6.18e-14	2.8e+13	0.000	1.713874	1.713874
C2502	-1.379411	6.18e-14	-2.2e+13	0.000	-1.379411	-1.379411
C2506	.8324794	6.17e-14	1.3e+13	0.000	.8324794	.8324794
C2518	.403929	6.17e-14	6.5e+12	0.000	.403929	.403929
C2522	-.4599147	6.17e-14	-7.4e+12	0.000	-.4599147	-.4599147
C2526	-.4182354	6.17e-14	-6.8e+12	0.000	-.4182354	-.4182354
C2542	1.587784	6.17e-14	2.6e+13	0.000	1.587784	1.587784
C2550	-.0655507	6.18e-14	-1.1e+12	0.000	-.0655507	-.0655507
C2554	2.245517	6.17e-14	3.6e+13	0.000	2.245517	2.245517
C2562	-.1341346	6.17e-14	-2.2e+12	0.000	-.1341346	-.1341346
C2586	.8639744	6.18e-14	1.4e+13	0.000	.8639744	.8639744
C2594	.0553808	6.17e-14	9.0e+11	0.000	.0553808	.0553808
C2598	-1.2611	6.17e-14	-2.0e+13	0.000	-1.2611	-1.2611
C2614	-.7061057	6.17e-14	-1.1e+13	0.000	-.7061057	-.7061057
C2630	-.5682459	6.17e-14	-9.2e+12	0.000	-.5682459	-.5682459
C2638	.3243366	6.17e-14	5.3e+12	0.000	.3243366	.3243366
C2642	3.693299	6.17e-14	6.0e+13	0.000	3.693299	3.693299
C2658	.7071794	6.17e-14	1.1e+13	0.000	.7071794	.7071794
C2662	1.140712	6.18e-14	1.8e+13	0.000	1.140712	1.140712
C2682	-.1221776	.0327518	-3.73	0.000	-.1865714	-.0577838
C2690	2.660786	6.17e-14	4.3e+13	0.000	2.660786	2.660786
C2698	.2690469	6.18e-14	4.4e+12	0.000	.2690469	.2690469
C2706	-.2716576	.0159745	-17.01	0.000	-.3030652	-.24025
C2710	-.1256699	6.18e-14	-2.0e+12	0.000	-.1256699	-.1256699
C2714	1.346931	6.17e-14	2.2e+13	0.000	1.346931	1.346931
C2718	-.0341195	6.17e-14	-5.5e+11	0.000	-.0341195	-.0341195
C2726	2.215346	6.18e-14	3.6e+13	0.000	2.215346	2.215346
C2734	-.3509634	6.17e-14	-5.7e+12	0.000	-.3509634	-.3509634
C2750	.0054346	6.18e-14	8.8e+10	0.000	.0054346	.0054346
C2762	.1531347	6.17e-14	2.5e+12	0.000	.1531347	.1531347
C2774	.1549291	6.17e-14	2.5e+12	0.000	.1549291	.1549291
C2778	-.1430452	6.17e-14	-2.3e+12	0.000	-.1430452	-.1430452
C2786	-.2568664	6.18e-14	-4.2e+12	0.000	-.2568664	-.2568664
C2790	.1795377	6.17e-14	2.9e+12	0.000	.1795377	.1795377
C2798	.101511	6.17e-14	1.6e+12	0.000	.101511	.101511
C2802	.7583881	6.18e-14	1.2e+13	0.000	.7583881	.7583881
C2810	-.401213	6.17e-14	-6.5e+12	0.000	-.401213	-.401213
C2814	2.716208	6.17e-14	4.4e+13	0.000	2.716208	2.716208
C2842	.4644528	.0342267	13.57	0.000	.3971593	.5317464
C2866	.6564623	6.18e-14	1.1e+13	0.000	.6564623	.6564623
C2870	.5978897	6.18e-14	9.7e+12	0.000	.5978897	.5978897
C2874	-.061622	6.17e-14	-1.0e+12	0.000	-.061622	-.061622
C2894	1.67576	.034638	48.38	0.000	1.607658	1.743862
C2902	-.490569	6.18e-14	-7.9e+12	0.000	-.490569	-.490569
C2910	.1125968	6.18e-14	1.8e+12	0.000	.1125968	.1125968
C2918	1.144021	6.17e-14	1.9e+13	0.000	1.144021	1.144021
C2920	.2881227	6.17e-14	4.7e+12	0.000	.2881227	.2881227
C2934	.3688894	6.18e-14	6.0e+12	0.000	.3688894	.3688894
C2942	-.2968603	6.17e-14	-4.8e+12	0.000	-.2968603	-.2968603
C2946	1.137826	6.17e-14	1.8e+13	0.000	1.137826	1.137826

C2954	1.265171	6.17e-14	2.0e+13	0.000	1.265171	1.265171
C2962	1.172467	6.17e-14	1.9e+13	0.000	1.172467	1.172467
C2970	.3190878	6.18e-14	5.2e+12	0.000	.3190878	.3190878
C2974	.0559722	6.18e-14	9.1e+11	0.000	.0559722	.0559722
C2982	2.598184	6.17e-14	4.2e+13	0.000	2.598184	2.598184
C2994	-.2959296	6.17e-14	-4.8e+12	0.000	-.2959296	-.2959296
C3002	-.4078566	6.18e-14	-6.6e+12	0.000	-.4078566	-.4078566
C3014	-.296168	6.17e-14	-4.8e+12	0.000	-.296168	-.296168
C3030	-.8880511	6.17e-14	-1.4e+13	0.000	-.8880511	-.8880511
C3034	-.2826127	6.17e-14	-4.6e+12	0.000	-.2826127	-.2826127
C3046	1.34874	6.18e-14	2.2e+13	0.000	1.34874	1.34874
C3062	-.2008147	6.17e-14	-3.3e+12	0.000	-.2008147	-.2008147
C3070	.943109	6.17e-14	1.5e+13	0.000	.943109	.943109
C3078	1.617888	6.18e-14	2.6e+13	0.000	1.617888	1.617888
C3086	-.2351406	6.17e-14	-3.8e+12	0.000	-.2351406	-.2351406
C3098	.367639	6.17e-14	6.0e+12	0.000	.367639	.367639
C3102	-.5504133	6.18e-14	-8.9e+12	0.000	-.5504133	-.5504133
C3108	4.44199	.0357877	124.12	0.000	4.371628	4.512353
C3114	2.215894	6.17e-14	3.6e+13	0.000	2.215894	2.215894
C3118	.7037274	6.17e-14	1.1e+13	0.000	.7037274	.7037274
C3134	.4343482	6.18e-14	7.0e+12	0.000	.4343482	.4343482
C3142	.4053025	6.17e-14	6.6e+12	0.000	.4053025	.4053025
C3146	-.3484647	6.18e-14	-5.6e+12	0.000	-.3484647	-.3484647
C3154	1.706437	6.18e-14	2.8e+13	0.000	1.706437	1.706437
C3170	1.111402	6.17e-14	1.8e+13	0.000	1.111402	1.111402
C3174	-.5608451	6.18e-14	-9.1e+12	0.000	-.5608451	-.5608451
C3186	-.2240533	6.18e-14	-3.6e+12	0.000	-.2240533	-.2240533
C3190	-.1734513	6.18e-14	-2.8e+12	0.000	-.1734513	-.1734513
C3242	-.5525425	6.17e-14	-8.9e+12	0.000	-.5525425	-.5525425
C3258	1.229436	6.18e-14	2.0e+13	0.000	1.229436	1.229436
C3278	.2309505	6.17e-14	3.7e+12	0.000	.2309505	.2309505
C3282	2.23147	6.17e-14	3.6e+13	0.000	2.23147	2.23147
C3290	.111692	6.18e-14	1.8e+12	0.000	.111692	.111692
C3310	3.579406	6.17e-14	5.8e+13	0.000	3.579406	3.579406
C3314	-.4059116	6.18e-14	-6.6e+12	0.000	-.4059116	-.4059116
C3322	-.5876801	6.17e-14	-9.5e+12	0.000	-.5876801	-.5876801
C3326	.1441644	6.18e-14	2.3e+12	0.000	.1441644	.1441644
C3334	2.538876	6.18e-14	4.1e+13	0.000	2.538876	2.538876
C3346	3.321519	6.18e-14	5.4e+13	0.000	3.321519	3.321519
C3354	-.147497	6.17e-14	-2.4e+12	0.000	-.147497	-.147497
C3366	.9630099	6.18e-14	1.6e+13	0.000	.9630099	.9630099
C3370	.9945019	6.18e-14	1.6e+13	0.000	.9945019	.9945019
C3374	.1685052	6.17e-14	2.7e+12	0.000	.1685052	.1685052
C3378	-.4532549	6.18e-14	-7.3e+12	0.000	-.4532549	-.4532549
C3386	.9330346	6.17e-14	1.5e+13	0.000	.9330346	.9330346
C3406	-.1050763	6.17e-14	-1.7e+12	0.000	-.1050763	-.1050763
C3410	-.4028277	6.17e-14	-6.5e+12	0.000	-.4028277	-.4028277
C3458	-.2988824	6.18e-14	-4.8e+12	0.000	-.2988824	-.2988824
C3462	-.3159533	6.17e-14	-5.1e+12	0.000	-.3159533	-.3159533
C3474	-.036093	6.17e-14	-5.8e+11	0.000	-.036093	-.036093
C3482	.7859763	6.18e-14	1.3e+13	0.000	.7859763	.7859763
C3490	.0766478	6.17e-14	1.2e+12	0.000	.0766478	.0766478
C3494	.6811773	6.17e-14	1.1e+13	0.000	.6811773	.6811773
C3498	2.536577	6.17e-14	4.1e+13	0.000	2.536577	2.536577
C3510	-.3706971	6.17e-14	-6.0e+12	0.000	-.3706971	-.3706971
C3530	1.728181	6.17e-14	2.8e+13	0.000	1.728181	1.728181
C3538	2.137006	6.17e-14	3.5e+13	0.000	2.137006	2.137006
C3562	4.868548	.0333826	145.84	0.000	4.802914	4.934182
C3566	-.0423889	6.18e-14	-6.9e+11	0.000	-.0423889	-.0423889
C3584	1.429555	6.17e-14	2.3e+13	0.000	1.429555	1.429555
C3598	.6735449	6.18e-14	1.1e+13	0.000	.6735449	.6735449
C3610	.3928396	6.17e-14	6.4e+12	0.000	.3928396	.3928396
C3614	-.4427413	6.18e-14	-7.2e+12	0.000	-.4427413	-.4427413
C3622	-.0221598	6.18e-14	-3.6e+11	0.000	-.0221598	-.0221598
C3626	1.236127	6.18e-14	2.0e+13	0.000	1.236127	1.236127
C3642	2.174153	6.17e-14	3.5e+13	0.000	2.174153	2.174153
C3650	.4428002	6.17e-14	7.2e+12	0.000	.4428002	.4428002
C3654	1.941855	6.18e-14	3.1e+13	0.000	1.941855	1.941855
C3674	2.769068	6.17e-14	4.5e+13	0.000	2.769068	2.769068
C3678	.3403491	6.17e-14	5.5e+12	0.000	.3403491	.3403491
C3698	-.2515662	6.17e-14	-4.1e+12	0.000	-.2515662	-.2515662
C3710	1.579963	6.18e-14	2.6e+13	0.000	1.579963	1.579963

C3734	1.122434	6.17e-14	1.8e+13	0.000	1.122434	1.122434
C3746	.1555096	6.17e-14	2.5e+12	0.000	.1555096	.1555096
C3762	-.4845573	6.18e-14	-7.8e+12	0.000	-.4845573	-.4845573
C3786	.9035532	6.17e-14	1.5e+13	0.000	.9035532	.9035532
C3790	.9964977	6.18e-14	1.6e+13	0.000	.9964977	.9964977
C3798	3.728411	6.18e-14	6.0e+13	0.000	3.728411	3.728411
C3806	3.330819	6.17e-14	5.4e+13	0.000	3.330819	3.330819
C3822	-.5954487	6.17e-14	-9.6e+12	0.000	-.5954487	-.5954487
C3830	2.812232	.0305743	91.98	0.000	2.752119	2.872344
C3834	-.0375463	6.18e-14	-6.1e+11	0.000	-.0375463	-.0375463
C3854	-.6774673	6.18e-14	-1.1e+13	0.000	-.6774673	-.6774673
C3866	.158748	6.17e-14	2.6e+12	0.000	.158748	.158748
C3886	1.390333	6.18e-14	2.3e+13	0.000	1.390333	1.390333
C3890	2.777757	6.17e-14	4.5e+13	0.000	2.777757	2.777757
C3894	.6728136	6.17e-14	1.1e+13	0.000	.6728136	.6728136
C3914	-.1018156	6.17e-14	-1.6e+12	0.000	-.1018156	-.1018156
C3930	2.360136	6.17e-14	3.8e+13	0.000	2.360136	2.360136
C3934	1.048371	6.17e-14	1.7e+13	0.000	1.048371	1.048371
C3938	-.1184046	6.18e-14	-1.9e+12	0.000	-.1184046	-.1184046
C3946	-.3982574	6.18e-14	-6.4e+12	0.000	-.3982574	-.3982574
C3954	.1527769	6.17e-14	2.5e+12	0.000	.1527769	.1527769
C3958	2.075254	6.18e-14	3.4e+13	0.000	2.075254	2.075254
C3966	-.0226929	6.18e-14	-3.7e+11	0.000	-.0226929	-.0226929
C3974	.9560029	6.17e-14	1.5e+13	0.000	.9560029	.9560029
C3982	.0030591	6.17e-14	5.0e+10	0.000	.0030591	.0030591
C3990	1.17241	6.17e-14	1.9e+13	0.000	1.17241	1.17241
C4006	2.226439	6.18e-14	3.6e+13	0.000	2.226439	2.226439
C4014	2.972534	6.17e-14	4.8e+13	0.000	2.972534	2.972534
C4022	.8541874	6.17e-14	1.4e+13	0.000	.8541874	.8541874
C4034	.539012	6.18e-14	8.7e+12	0.000	.539012	.539012
C4038	2.053639	6.17e-14	3.3e+13	0.000	2.053639	2.053639
C4042	.8207277	6.17e-14	1.3e+13	0.000	.8207277	.8207277
C4058	-.0639403	6.17e-14	-1.0e+12	0.000	-.0639403	-.0639403
C4066	-.4913024	6.18e-14	-8.0e+12	0.000	-.4913024	-.4913024
C4090	2.646987	6.17e-14	4.3e+13	0.000	2.646987	2.646987
C4098	.2878865	6.17e-14	4.7e+12	0.000	.2878865	.2878865
C4106	.4170444	6.17e-14	6.8e+12	0.000	.4170444	.4170444
C4110	-.2515625	6.17e-14	-4.1e+12	0.000	-.2515625	-.2515625
C4114	-.1708672	6.18e-14	-2.8e+12	0.000	-.1708672	-.1708672
C4118	2.998615	6.17e-14	4.9e+13	0.000	2.998615	2.998615
C4142	.8929814	6.17e-14	1.4e+13	0.000	.8929814	.8929814
C4150	1.007926	6.18e-14	1.6e+13	0.000	1.007926	1.007926
C4154	.8289856	6.17e-14	1.3e+13	0.000	.8289856	.8289856
C4162	2.249466	6.17e-14	3.6e+13	0.000	2.249466	2.249466
C4166	-.3294677	6.18e-14	-5.3e+12	0.000	-.3294677	-.3294677
C4170	2.568048	.0274265	93.63	0.000	2.514124	2.621972
C4174	3.024288	6.17e-14	4.9e+13	0.000	3.024288	3.024288
C4186	3.459137	.0357139	96.86	0.000	3.388919	3.529354
C4190	-1.10342	6.17e-14	-1.8e+13	0.000	-1.10342	-1.10342
C4194	2.70143	6.18e-14	4.4e+13	0.000	2.70143	2.70143
C4198	2.374243	6.17e-14	3.8e+13	0.000	2.374243	2.374243
C4202	.5103144	6.17e-14	8.3e+12	0.000	.5103144	.5103144
C4210	.4308187	6.18e-14	7.0e+12	0.000	.4308187	.4308187
C4214	-.03966	6.17e-14	-6.4e+11	0.000	-.03966	-.03966
C4220	1.070452	6.17e-14	1.7e+13	0.000	1.070452	1.070452
C4222	1.095988	6.18e-14	1.8e+13	0.000	1.095988	1.095988
C4234	.8618578	6.17e-14	1.4e+13	0.000	.8618578	.8618578
C4254	1.36082	6.18e-14	2.2e+13	0.000	1.36082	1.36082
C4266	3.289771	6.17e-14	5.3e+13	0.000	3.289771	3.289771
C4268	-.2943014	6.17e-14	-4.8e+12	0.000	-.2943014	-.2943014
C4270	-.8562848	6.17e-14	-1.4e+13	0.000	-.8562848	-.8562848
C4310	-.0716208	6.18e-14	-1.2e+12	0.000	-.0716208	-.0716208
C4330	-.3888022	6.18e-14	-6.3e+12	0.000	-.3888022	-.3888022
C4334	1.030413	6.18e-14	1.7e+13	0.000	1.030413	1.030413
C4342	-.5925132	6.18e-14	-9.6e+12	0.000	-.5925132	-.5925132
C4358	.2820979	6.18e-14	4.6e+12	0.000	.2820979	.2820979
C4362	.7367612	6.17e-14	1.2e+13	0.000	.7367612	.7367612
C4378	.7093288	6.17e-14	1.1e+13	0.000	.7093288	.7093288
C4390	.7005456	6.18e-14	1.1e+13	0.000	.7005456	.7005456
C4406	1.22213	6.17e-14	2.0e+13	0.000	1.22213	1.22213
C4410	.7320022	6.17e-14	1.2e+13	0.000	.7320022	.7320022
C4414	1.406298	6.17e-14	2.3e+13	0.000	1.406298	1.406298

C4418	1.065954	6.18e-14	1.7e+13	0.000	1.065954	1.065954
C4422	-.2497039	6.17e-14	-4.0e+12	0.000	-.2497039	-.2497039
C4430	.0327231	6.17e-14	5.3e+11	0.000	.0327231	.0327231
C4442	-.3078718	6.17e-14	-5.0e+12	0.000	-.3078718	-.3078718
C4470	1.239013	6.17e-14	2.0e+13	0.000	1.239013	1.239013
C4494	-.5465253	6.17e-14	-8.9e+12	0.000	-.5465253	-.5465253
C4506	1.545671	6.17e-14	2.5e+13	0.000	1.545671	1.545671
C4522	.948541	6.18e-14	1.5e+13	0.000	.948541	.948541
C4530	2.910721	6.17e-14	4.7e+13	0.000	2.910721	2.910721
C4546	.05563	6.18e-14	9.0e+11	0.000	.05563	.05563
C4550	-.0929365	6.18e-14	-1.5e+12	0.000	-.0929365	-.0929365
C4554	-1.217269	6.18e-14	-2.0e+13	0.000	-1.217269	-1.217269
C4578	1.519233	6.17e-14	2.5e+13	0.000	1.519233	1.519233
C4582	.5257081	6.17e-14	8.5e+12	0.000	.5257081	.5257081
C4594	1.255058	.0304628	41.20	0.000	1.195165	1.314951
C4606	1.679204	.0291043	57.70	0.000	1.621982	1.736427
C4614	1.856927	6.18e-14	3.0e+13	0.000	1.856927	1.856927
C4622	.3649834	6.18e-14	5.9e+12	0.000	.3649834	.3649834
C4634	.3809917	6.17e-14	6.2e+12	0.000	.3809917	.3809917
C4652	1.94048	6.18e-14	3.1e+13	0.000	1.94048	1.94048
C4654	.6597761	6.17e-14	1.1e+13	0.000	.6597761	.6597761
C4666	-.1881165	6.18e-14	-3.0e+12	0.000	-.1881165	-.1881165
C4670	.6961036	6.18e-14	1.1e+13	0.000	.6961036	.6961036
C4702	-.4752122	6.18e-14	-7.7e+12	0.000	-.4752122	-.4752122
C4722	-.0724419	6.17e-14	-1.2e+12	0.000	-.0724419	-.0724419
C4726	2.398837	.0308302	77.81	0.000	2.338222	2.459453
C4730	.8359821	6.17e-14	1.4e+13	0.000	.8359821	.8359821
C4738	.5153805	6.17e-14	8.3e+12	0.000	.5153805	.5153805
C4746	-.8429081	6.18e-14	-1.4e+13	0.000	-.8429081	-.8429081
C4758	.0408601	6.17e-14	6.6e+11	0.000	.0408601	.0408601
C4790	3.789251	.0350224	108.20	0.000	3.720393	3.858109
C4794	.2973999	6.17e-14	4.8e+12	0.000	.2973999	.2973999
C4806	-.4493644	6.17e-14	-7.3e+12	0.000	-.4493644	-.4493644
C4814	.0682955	6.17e-14	1.1e+12	0.000	.0682955	.0682955
C4826	-.4118979	6.18e-14	-6.7e+12	0.000	-.4118979	-.4118979
C4830	-.2405027	6.17e-14	-3.9e+12	0.000	-.2405027	-.2405027
C4854	-.0103447	6.18e-14	-1.7e+11	0.000	-.0103447	-.0103447
C4862	1.503372	6.18e-14	2.4e+13	0.000	1.503372	1.503372
C4866	-.0957628	6.17e-14	-1.6e+12	0.000	-.0957628	-.0957628
C4870	-.2066021	6.17e-14	-3.3e+12	0.000	-.2066021	-.2066021
C4890	.5468322	6.18e-14	8.9e+12	0.000	.5468322	.5468322
C4902	-.1446499	6.18e-14	-2.3e+12	0.000	-.1446499	-.1446499
C4918	1.364948	6.17e-14	2.2e+13	0.000	1.364948	1.364948
C4934	1.73682	6.18e-14	2.8e+13	0.000	1.73682	1.73682
C4942	.4693614	6.18e-14	7.6e+12	0.000	.4693614	.4693614
C4962	.9904048	6.17e-14	1.6e+13	0.000	.9904048	.9904048
C4966	1.248511	6.17e-14	2.0e+13	0.000	1.248511	1.248511
C4970	-.3554547	6.17e-14	-5.8e+12	0.000	-.3554547	-.3554547
C4974	-.0102475	6.17e-14	-1.7e+11	0.000	-.0102475	-.0102475
_cons	11.75803	6.17e-14	1.9e+14	0.000	11.75803	11.75803

254 outreg2 using output/ols_annual_avg_emplvl.doc, append keep(log_federal_funding) add
 > text(MSA FE, Yes, Year FE, No, FFRDC count FE, No)
   output/ols_annual_avg_emplvl.doc
   dir : seeout

255 reg log_annual_avg_emplvl log_federal_funding i.year i.msa_factor, robust cluster(ms
 > a_factor)

Linear regression		Number of obs	=	7,372
		F(18, 387)	=	.
		Prob > F	=	.
		R-squared	=	0.9977
		Root MSE	=	.0552

(Std. Err. adjusted for **388** clusters in msa_factor)

log_annual_avg_em~l	Coef.	Robust Std. Err.	t	P>|t|	[95% Conf. Interval]	
log_federal_funding	.0010983	.0007381	1.49	0.138	-.0003529	.0025494
year						
2002	-.0022418	.001118	-2.01	0.046	-.0044399	-.0000436
2003	.0014302	.0019822	0.72	0.471	-.002467	.0053274
2004	.0163262	.0025102	6.50	0.000	.0113909	.0212615
2005	.0361204	.0034315	10.53	0.000	.0293738	.042867
2006	.0547362	.0042128	12.99	0.000	.0464534	.0630189
2007	.0659806	.0046262	14.26	0.000	.056885	.0750763
2008	.062517	.0047015	13.30	0.000	.0532733	.0717608
2009	.0180869	.0050421	3.59	0.000	.0081735	.0280002
2010	.0122134	.005194	2.35	0.019	.0020013	.0224254
2011	.0213313	.005422	3.93	0.000	.010671	.0319917
2012	.0346846	.0056214	6.17	0.000	.0236323	.0457368
2013	.0460662	.0060162	7.66	0.000	.0342377	.0578946
2014	.0613569	.0063807	9.62	0.000	.0488117	.0739021
2015	.0770309	.0066914	11.51	0.000	.0638748	.0901869
2016	.0892964	.0069785	12.80	0.000	.075576	.1030169
2017	.0989767	.0074804	13.23	0.000	.0842693	.1136841
2018	.1114366	.0079776	13.97	0.000	.0957517	.1271214
2019	.1212622	.0083684	14.49	0.000	.104809	.1377154
msa_factor						
C1038	-.1858595	5.88e-14	-3.2e+12	0.000	-.1858595	-.1858595
C1042	1.598843	5.88e-14	2.7e+13	0.000	1.598843	1.598843
C1050	-.0527424	5.88e-14	-9.0e+11	0.000	-.0527424	-.0527424
C1054	-.4176549	5.88e-14	-7.1e+12	0.000	-.4176549	-.4176549
C1058	1.900301	5.87e-14	3.2e+13	0.000	1.900301	1.900301
C1074	1.718482	.0164989	104.16	0.000	1.686043	1.75092
C1078	-.0404502	5.88e-14	-6.9e+11	0.000	-.0404502	-.0404502
C1090	1.646502	5.88e-14	2.8e+13	0.000	1.646502	1.646502
C1102	-.0851516	5.88e-14	-1.4e+12	0.000	-.0851516	-.0851516
C1110	.5392121	5.88e-14	9.2e+12	0.000	.5392121	.5392121
C1118	-.414238	.0133805	-30.96	0.000	-.4405456	-.3879303
C1126	.9534633	5.87e-14	1.6e+13	0.000	.9534633	.9534633
C1146	1.12477	5.87e-14	1.9e+13	0.000	1.12477	1.12477
C1150	-.3214098	5.88e-14	-5.5e+12	0.000	-.3214098	-.3214098
C1154	.5913284	5.87e-14	1.0e+13	0.000	.5913284	.5913284
C1164	-.5547216	5.87e-14	-9.4e+12	0.000	-.5547216	-.5547216
C1170	.9913567	5.88e-14	1.7e+13	0.000	.9913567	.9913567
C1202	.2177449	5.88e-14	3.7e+12	0.000	.2177449	.2177449
C1206	3.587937	5.87e-14	6.1e+13	0.000	3.587937	3.587937
C1210	.7523179	5.87e-14	1.3e+13	0.000	.7523179	.7523179
C1222	-.2493473	5.87e-14	-4.2e+12	0.000	-.2493473	-.2493473
C1226	1.192321	5.87e-14	2.0e+13	0.000	1.192321	1.192321
C1242	2.523324	5.88e-14	4.3e+13	0.000	2.523324	2.523324
C1254	1.491161	5.88e-14	2.5e+13	0.000	1.491161	1.491161
C1258	2.968444	.0052358	566.95	0.000	2.95815	2.978738
C1262	.0878989	5.88e-14	1.5e+12	0.000	.0878989	.0878989
C1270	.3717389	5.87e-14	6.3e+12	0.000	.3717389	.3717389
C1294	1.729443	5.87e-14	2.9e+13	0.000	1.729443	1.729443
C1298	-.1201835	5.87e-14	-2.0e+12	0.000	-.1201835	-.1201835
C1302	-.5694083	5.88e-14	-9.7e+12	0.000	-.5694083	-.5694083
C1314	.902232	5.87e-14	1.5e+13	0.000	.902232	.902232
C1322	-.3851193	5.88e-14	-6.6e+12	0.000	-.3851193	-.3851193
C1338	.2352391	5.87e-14	4.0e+12	0.000	.2352391	.2352391
C1346	.0207459	5.87e-14	3.5e+11	0.000	.0207459	.0207459
C1374	.206685	5.87e-14	3.5e+12	0.000	.206685	.206685
C1378	.4919571	5.88e-14	8.4e+12	0.000	.4919571	.4919571
C1382	2.016216	5.88e-14	3.4e+13	0.000	2.016216	2.016216
C1390	-.0133653	5.87e-14	-2.3e+11	0.000	-.0133653	-.0133653
C1398	.0515284	5.87e-14	8.8e+11	0.000	.0515284	.0515284
C1401	.3413415	5.87e-14	5.8e+12	0.000	.3413415	.3413415
C1402	.0339085	5.88e-14	5.8e+11	0.000	.0339085	.0339085
C1410	-.4822284	5.88e-14	-8.2e+12	0.000	-.4822284	-.4822284
C1426	1.43531	5.88e-14	2.4e+13	0.000	1.43531	1.43531
C1446	3.618323	.0156872	230.65	0.000	3.58748	3.649166

C1450	.9241397	.0145363	63.57	0.000	.8955597	.9527197
C1454	.0313583	5.87e-14	5.3e+11	0.000	.0313583	.0313583
C1474	.255118	5.88e-14	4.3e+12	0.000	.255118	.255118
C1486	1.869919	5.88e-14	3.2e+13	0.000	1.869919	1.869919
C1518	.6813686	5.87e-14	1.2e+13	0.000	.6813686	.6813686
C1526	-.4417857	5.88e-14	-7.5e+12	0.000	-.4417857	-.4417857
C1538	2.113909	5.87e-14	3.6e+13	0.000	2.113909	2.113909
C1550	-.0812934	5.87e-14	-1.4e+12	0.000	-.0812934	-.0812934
C1554	.5847571	5.87e-14	1.0e+13	0.000	.5847571	.5847571
C1568	-.4571407	5.87e-14	-7.8e+12	0.000	-.4571407	-.4571407
C1594	.9555489	5.88e-14	1.6e+13	0.000	.9555489	.9555489
C1598	1.20959	5.88e-14	2.1e+13	0.000	1.20959	1.20959
C1602	-.3766399	5.87e-14	-6.4e+12	0.000	-.3766399	-.3766399
C1606	-.2150362	5.88e-14	-3.7e+12	0.000	-.2150362	-.2150362
C1618	-.7678165	5.87e-14	-1.3e+13	0.000	-.7678165	-.7678165
C1622	-.5191554	5.88e-14	-8.8e+12	0.000	-.5191554	-.5191554
C1630	.7563112	5.87e-14	1.3e+13	0.000	.7563112	.7563112
C1654	-.1478437	5.88e-14	-2.5e+12	0.000	-.1478437	-.1478437
C1658	.4253509	5.87e-14	7.2e+12	0.000	.4253509	.4253509
C1662	.5789356	5.87e-14	9.9e+12	0.000	.5789356	.5789356
C1670	1.494764	5.88e-14	2.5e+13	0.000	1.494764	1.494764
C1674	2.751424	5.87e-14	4.7e+13	0.000	2.751424	2.751424
C1682	.4286915	.0140323	30.55	0.000	.4011025	.4562805
C1686	1.286637	5.87e-14	2.2e+13	0.000	1.286637	1.286637
C1694	-.3999036	5.88e-14	-6.8e+12	0.000	-.3999036	-.3999036
C1698	4.185462	.0158625	263.86	0.000	4.154275	4.21665
C1702	.1664572	5.87e-14	2.8e+12	0.000	.1664572	.1664572
C1714	2.744598	5.87e-14	4.7e+13	0.000	2.744598	2.744598
C1730	.2225617	5.88e-14	3.8e+12	0.000	.2225617	.2225617
C1742	-.4571936	5.87e-14	-7.8e+12	0.000	-.4571936	-.4571936
C1746	2.76591	5.88e-14	4.7e+13	0.000	2.76591	2.76591
C1766	-.1836833	5.88e-14	-3.1e+12	0.000	-.1836833	-.1836833
C1778	.4038435	5.88e-14	6.9e+12	0.000	.4038435	.4038435
C1782	1.379696	5.88e-14	2.3e+13	0.000	1.379696	1.379696
C1786	.2799164	5.88e-14	4.8e+12	0.000	.2799164	.2799164
C1790	1.677458	5.88e-14	2.9e+13	0.000	1.677458	1.677458
C1798	.5928419	5.87e-14	1.0e+13	0.000	.5928419	.5928419
C1802	-.3543558	5.87e-14	-6.0e+12	0.000	-.3543558	-.3543558
C1814	2.684481	5.87e-14	4.6e+13	0.000	2.684481	2.684481
C1858	1.021177	5.87e-14	1.7e+13	0.000	1.021177	1.021177
C1870	-.5943215	5.87e-14	-1.0e+13	0.000	-.5943215	-.5943215
C1888	.4394683	5.87e-14	7.5e+12	0.000	.4394683	.4394683
C1906	-.5495389	5.87e-14	-9.4e+12	0.000	-.5495389	-.5495389
C1910	3.845133	5.87e-14	6.5e+13	0.000	3.845133	3.845133
C1914	.0596721	5.87e-14	1.0e+12	0.000	.0596721	.0596721
C1918	-.7986335	5.88e-14	-1.4e+13	0.000	-.7986335	-.7986335
C1930	-.0454798	5.87e-14	-7.7e+11	0.000	-.0454798	-.0454798
C1934	1.039921	5.88e-14	1.8e+13	0.000	1.039921	1.039921
C1938	1.754556	5.88e-14	3.0e+13	0.000	1.754556	1.754556
C1946	-.1867073	5.87e-14	-3.2e+12	0.000	-.1867073	-.1867073
C1950	-.2299742	5.88e-14	-3.9e+12	0.000	-.2299742	-.2299742
C1966	1.016737	5.88e-14	1.7e+13	0.000	1.016737	1.016737
C1974	2.962568	.0149782	197.79	0.000	2.933119	2.992017
C1978	1.621527	5.88e-14	2.8e+13	0.000	1.621527	1.621527
C1982	3.368765	5.87e-14	5.7e+13	0.000	3.368765	3.368765
C2002	-.1223154	5.87e-14	-2.1e+12	0.000	-.1223154	-.1223154
C2010	-.0399469	5.87e-14	-6.8e+11	0.000	-.0399469	-.0399469
C2022	-.1600175	5.87e-14	-2.7e+12	0.000	-.1600175	-.1600175
C2026	.6623413	5.87e-14	1.1e+13	0.000	.6623413	.6623413
C2050	1.446021	5.88e-14	2.5e+13	0.000	1.446021	1.446021
C2070	-.1494813	5.87e-14	-2.5e+12	0.000	-.1494813	-.1494813
C2074	.1915526	5.87e-14	3.3e+12	0.000	.1915526	.1915526
C2094	-.0986222	5.88e-14	-1.7e+12	0.000	-.0986222	-.0986222
C2106	-.2348005	5.87e-14	-4.0e+12	0.000	-.2348005	-.2348005
C2114	.6150931	5.88e-14	1.0e+13	0.000	.6150931	.6150931
C2130	-.5316398	5.87e-14	-9.0e+12	0.000	-.5316398	-.5316398
C2134	1.460057	5.87e-14	2.5e+13	0.000	1.460057	1.460057
C2150	.6697987	5.88e-14	1.1e+13	0.000	.6697987	.6697987
C2166	.8109934	5.87e-14	1.4e+13	0.000	.8109934	.8109934
C2178	.8552358	5.87e-14	1.5e+13	0.000	.8552358	.8552358
C2182	-.5664175	5.88e-14	-9.6e+12	0.000	-.5664175	-.5664175
C2202	.6251874	5.87e-14	1.1e+13	0.000	.6251874	.6251874

C2214	-.2818802	5.87e-14	-4.8e+12	0.000	-.2818802	-.2818802
C2218	.6645222	5.88e-14	1.1e+13	0.000	.6645222	.6645222
C2222	1.139492	5.87e-14	1.9e+13	0.000	1.139492	1.139492
C2238	-.1071614	5.88e-14	-1.8e+12	0.000	-.1071614	-.1071614
C2242	.7755613	5.87e-14	1.3e+13	0.000	.7755613	.7755613
C2250	.2470617	5.87e-14	4.2e+12	0.000	.2470617	.2470617
C2252	-.209282	5.87e-14	-3.6e+12	0.000	-.209282	-.209282
C2254	-.337052	5.88e-14	-5.7e+12	0.000	-.337052	-.337052
C2266	.748512	5.87e-14	1.3e+13	0.000	.748512	.748512
C2290	.5353	5.87e-14	9.1e+12	0.000	.5353	.5353
C2306	1.151438	5.88e-14	2.0e+13	0.000	1.151438	1.151438
C2342	1.701109	5.87e-14	2.9e+13	0.000	1.701109	1.701109
C2346	-.587829	5.88e-14	-1.0e+13	0.000	-.587829	-.587829
C2354	.6739185	5.87e-14	1.1e+13	0.000	.6739185	.6739185
C2358	.1378566	5.88e-14	2.3e+12	0.000	.1378566	.1378566
C2390	-.6440474	5.87e-14	-1.1e+13	0.000	-.6440474	-.6440474
C2402	-.1922228	5.87e-14	-3.3e+12	0.000	-.1922228	-.1922228
C2414	-.3875071	5.87e-14	-6.6e+12	0.000	-.3875071	-.3875071
C2422	-.2307249	5.88e-14	-3.9e+12	0.000	-.2307249	-.2307249
C2426	-.4623901	5.88e-14	-7.9e+12	0.000	-.4623901	-.4623901
C2430	-.0936842	5.87e-14	-1.6e+12	0.000	-.0936842	-.0936842
C2434	2.03376	5.88e-14	3.5e+13	0.000	2.03376	2.03376
C2442	-.9730903	5.87e-14	-1.7e+13	0.000	-.9730903	-.9730903
C2450	-.6132597	5.88e-14	-1.0e+13	0.000	-.6132597	-.6132597
C2454	.3030802	5.88e-14	5.2e+12	0.000	.3030802	.3030802
C2458	.9453624	5.88e-14	1.6e+13	0.000	.9453624	.9453624
C2466	1.68806	5.88e-14	2.9e+13	0.000	1.68806	1.68806
C2478	.103313	5.88e-14	1.8e+12	0.000	.103313	.103313
C2486	1.713874	5.88e-14	2.9e+13	0.000	1.713874	1.713874
C2502	-1.379411	5.87e-14	-2.3e+13	0.000	-1.379411	-1.379411
C2506	.8324794	5.87e-14	1.4e+13	0.000	.8324794	.8324794
C2518	.403929	5.87e-14	6.9e+12	0.000	.403929	.403929
C2522	-.4599147	5.87e-14	-7.8e+12	0.000	-.4599147	-.4599147
C2526	-.4182354	5.87e-14	-7.1e+12	0.000	-.4182354	-.4182354
C2542	1.587784	5.87e-14	2.7e+13	0.000	1.587784	1.587784
C2550	-.0655507	5.88e-14	-1.1e+12	0.000	-.0655507	-.0655507
C2554	2.245517	5.88e-14	3.8e+13	0.000	2.245517	2.245517
C2562	-.1341346	5.88e-14	-2.3e+12	0.000	-.1341346	-.1341346
C2586	.8639744	5.88e-14	1.5e+13	0.000	.8639744	.8639744
C2594	.0553808	5.87e-14	9.4e+11	0.000	.0553808	.0553808
C2598	-1.2611	5.87e-14	-2.1e+13	0.000	-1.2611	-1.2611
C2614	-.7061057	5.87e-14	-1.2e+13	0.000	-.7061057	-.7061057
C2630	-.5682459	5.87e-14	-9.7e+12	0.000	-.5682459	-.5682459
C2638	.3243366	5.87e-14	5.5e+12	0.000	.3243366	.3243366
C2642	3.693299	5.88e-14	6.3e+13	0.000	3.693299	3.693299
C2658	.7071794	5.88e-14	1.2e+13	0.000	.7071794	.7071794
C2662	1.140712	5.88e-14	1.9e+13	0.000	1.140712	1.140712
C2682	-.1144127	.0151236	-7.57	0.000	-.1441475	-.0846779
C2690	2.660786	5.88e-14	4.5e+13	0.000	2.660786	2.660786
C2698	.2690469	5.88e-14	4.6e+12	0.000	.2690469	.2690469
C2706	-.2678704	.0073764	-36.31	0.000	-.2823733	-.2533675
C2710	-.1256699	5.87e-14	-2.1e+12	0.000	-.1256699	-.1256699
C2714	1.346931	5.87e-14	2.3e+13	0.000	1.346931	1.346931
C2718	-.0341195	5.88e-14	-5.8e+11	0.000	-.0341195	-.0341195
C2726	2.215346	5.88e-14	3.8e+13	0.000	2.215346	2.215346
C2734	-.3509634	5.87e-14	-6.0e+12	0.000	-.3509634	-.3509634
C2750	.0054346	5.88e-14	9.2e+10	0.000	.0054346	.0054346
C2762	.1531347	5.87e-14	2.6e+12	0.000	.1531347	.1531347
C2774	.1549291	5.88e-14	2.6e+12	0.000	.1549291	.1549291
C2778	-.1430452	5.87e-14	-2.4e+12	0.000	-.1430452	-.1430452
C2786	-.2568664	5.88e-14	-4.4e+12	0.000	-.2568664	-.2568664
C2790	.1795377	5.88e-14	3.1e+12	0.000	.1795377	.1795377
C2798	.101511	5.87e-14	1.7e+12	0.000	.101511	.101511
C2802	.7583881	5.88e-14	1.3e+13	0.000	.7583881	.7583881
C2810	-.401213	5.87e-14	-6.8e+12	0.000	-.401213	-.401213
C2814	2.716208	5.87e-14	4.6e+13	0.000	2.716208	2.716208
C2842	.4725674	.0158047	29.90	0.000	.4414936	.5036411
C2866	.6564623	5.88e-14	1.1e+13	0.000	.6564623	.6564623
C2870	.5978897	5.88e-14	1.0e+13	0.000	.5978897	.5978897
C2874	-.061622	5.87e-14	-1.0e+12	0.000	-.061622	-.061622
C2894	1.683972	.0159946	105.28	0.000	1.652525	1.715419
C2902	-.490569	5.88e-14	-8.3e+12	0.000	-.490569	-.490569

C2910	.1125968	5.88e-14	1.9e+12	0.000	.1125968	.1125968
C2918	1.144021	5.87e-14	1.9e+13	0.000	1.144021	1.144021
C2920	.2881227	5.87e-14	4.9e+12	0.000	.2881227	.2881227
C2934	.3688894	5.88e-14	6.3e+12	0.000	.3688894	.3688894
C2942	-.2968603	5.87e-14	-5.1e+12	0.000	-.2968603	-.2968603
C2946	1.137826	5.87e-14	1.9e+13	0.000	1.137826	1.137826
C2954	1.265171	5.88e-14	2.2e+13	0.000	1.265171	1.265171
C2962	1.172467	5.87e-14	2.0e+13	0.000	1.172467	1.172467
C2970	.3190878	5.87e-14	5.4e+12	0.000	.3190878	.3190878
C2974	.0559722	5.88e-14	9.5e+11	0.000	.0559722	.0559722
C2982	2.598184	5.87e-14	4.4e+13	0.000	2.598184	2.598184
C2994	-.2959296	5.88e-14	-5.0e+12	0.000	-.2959296	-.2959296
C3002	-.4078566	5.87e-14	-6.9e+12	0.000	-.4078566	-.4078566
C3014	-.296168	5.88e-14	-5.0e+12	0.000	-.296168	-.296168
C3030	-.8880511	5.87e-14	-1.5e+13	0.000	-.8880511	-.8880511
C3034	-.2826127	5.88e-14	-4.8e+12	0.000	-.2826127	-.2826127
C3046	1.34874	5.88e-14	2.3e+13	0.000	1.34874	1.34874
C3062	-.2008147	5.87e-14	-3.4e+12	0.000	-.2008147	-.2008147
C3070	.943109	5.87e-14	1.6e+13	0.000	.943109	.943109
C3078	1.617888	5.88e-14	2.8e+13	0.000	1.617888	1.617888
C3086	-.2351406	5.87e-14	-4.0e+12	0.000	-.2351406	-.2351406
C3098	.367639	5.87e-14	6.3e+12	0.000	.367639	.367639
C3102	-.5504133	5.88e-14	-9.4e+12	0.000	-.5504133	-.5504133
C3108	4.450475	.0165255	269.31	0.000	4.417984	4.482966
C3114	2.215894	5.88e-14	3.8e+13	0.000	2.215894	2.215894
C3118	.7037274	5.87e-14	1.2e+13	0.000	.7037274	.7037274
C3134	.4343482	5.88e-14	7.4e+12	0.000	.4343482	.4343482
C3142	.4053025	5.87e-14	6.9e+12	0.000	.4053025	.4053025
C3146	-.3484647	5.88e-14	-5.9e+12	0.000	-.3484647	-.3484647
C3154	1.706437	5.88e-14	2.9e+13	0.000	1.706437	1.706437
C3170	1.111402	5.87e-14	1.9e+13	0.000	1.111402	1.111402
C3174	-.5608451	5.87e-14	-9.5e+12	0.000	-.5608451	-.5608451
C3186	-.2240533	5.87e-14	-3.8e+12	0.000	-.2240533	-.2240533
C3190	-.1734513	5.88e-14	-3.0e+12	0.000	-.1734513	-.1734513
C3242	-.5525425	5.87e-14	-9.4e+12	0.000	-.5525425	-.5525425
C3258	1.229436	5.88e-14	2.1e+13	0.000	1.229436	1.229436
C3278	.2309505	5.88e-14	3.9e+12	0.000	.2309505	.2309505
C3282	2.23147	5.87e-14	3.8e+13	0.000	2.23147	2.23147
C3290	.111692	5.88e-14	1.9e+12	0.000	.111692	.111692
C3310	3.579406	5.87e-14	6.1e+13	0.000	3.579406	3.579406
C3314	-.4059116	5.87e-14	-6.9e+12	0.000	-.4059116	-.4059116
C3322	-.5876801	5.87e-14	-1.0e+13	0.000	-.5876801	-.5876801
C3326	.1441644	5.88e-14	2.5e+12	0.000	.1441644	.1441644
C3334	2.538876	5.88e-14	4.3e+13	0.000	2.538876	2.538876
C3346	3.321519	5.87e-14	5.7e+13	0.000	3.321519	3.321519
C3354	-.147497	5.87e-14	-2.5e+12	0.000	-.147497	-.147497
C3366	.9630099	5.88e-14	1.6e+13	0.000	.9630099	.9630099
C3370	.9945019	5.88e-14	1.7e+13	0.000	.9945019	.9945019
C3374	.1685052	5.87e-14	2.9e+12	0.000	.1685052	.1685052
C3378	-.4532549	5.88e-14	-7.7e+12	0.000	-.4532549	-.4532549
C3386	.9330346	5.87e-14	1.6e+13	0.000	.9330346	.9330346
C3406	-.1050763	5.87e-14	-1.8e+12	0.000	-.1050763	-.1050763
C3410	-.4028277	5.87e-14	-6.9e+12	0.000	-.4028277	-.4028277
C3458	-.2988824	5.87e-14	-5.1e+12	0.000	-.2988824	-.2988824
C3462	-.3159533	5.87e-14	-5.4e+12	0.000	-.3159533	-.3159533
C3474	-.036093	5.87e-14	-6.1e+11	0.000	-.036093	-.036093
C3482	.7859763	5.88e-14	1.3e+13	0.000	.7859763	.7859763
C3490	.0766478	5.87e-14	1.3e+12	0.000	.0766478	.0766478
C3494	.6811773	5.87e-14	1.2e+13	0.000	.6811773	.6811773
C3498	2.536577	5.88e-14	4.3e+13	0.000	2.536577	2.536577
C3510	-.3706971	5.87e-14	-6.3e+12	0.000	-.3706971	-.3706971
C3530	1.728181	5.88e-14	2.9e+13	0.000	1.728181	1.728181
C3538	2.137006	5.87e-14	3.6e+13	0.000	2.137006	2.137006
C3562	4.876463	.0154149	316.35	0.000	4.846155	4.90677
C3566	-.0423889	5.87e-14	-7.2e+11	0.000	-.0423889	-.0423889
C3584	1.429555	5.87e-14	2.4e+13	0.000	1.429555	1.429555
C3598	.6735449	5.87e-14	1.1e+13	0.000	.6735449	.6735449
C3610	.3928396	5.88e-14	6.7e+12	0.000	.3928396	.3928396
C3614	-.4427413	5.88e-14	-7.5e+12	0.000	-.4427413	-.4427413
C3622	-.0221598	5.87e-14	-3.8e+11	0.000	-.0221598	-.0221598
C3626	1.236127	5.88e-14	2.1e+13	0.000	1.236127	1.236127
C3642	2.174153	5.87e-14	3.7e+13	0.000	2.174153	2.174153

C3650	.4428002	5.87e-14	7.5e+12	0.000	.4428002	.4428002
C3654	1.941855	5.88e-14	3.3e+13	0.000	1.941855	1.941855
C3674	2.769068	5.87e-14	4.7e+13	0.000	2.769068	2.769068
C3678	.3403491	5.87e-14	5.8e+12	0.000	.3403491	.3403491
C3698	-.2515662	5.87e-14	-4.3e+12	0.000	-.2515662	-.2515662
C3710	1.579963	5.88e-14	2.7e+13	0.000	1.579963	1.579963
C3734	1.122434	5.88e-14	1.9e+13	0.000	1.122434	1.122434
C3746	.1555096	5.88e-14	2.6e+12	0.000	.1555096	.1555096
C3762	-.4845573	5.88e-14	-8.2e+12	0.000	-.4845573	-.4845573
C3786	.9035532	5.87e-14	1.5e+13	0.000	.9035532	.9035532
C3790	.9964977	5.88e-14	1.7e+13	0.000	.9964977	.9964977
C3798	3.728411	5.88e-14	6.3e+13	0.000	3.728411	3.728411
C3806	3.330819	5.87e-14	5.7e+13	0.000	3.330819	3.330819
C3822	-.5954487	5.87e-14	-1.0e+13	0.000	-.5954487	-.5954487
C3830	2.81948	.0141181	199.71	0.000	2.791723	2.847238
C3834	-.0375463	5.88e-14	-6.4e+11	0.000	-.0375463	-.0375463
C3854	-.6774673	5.87e-14	-1.2e+13	0.000	-.6774673	-.6774673
C3866	.158748	5.88e-14	2.7e+12	0.000	.158748	.158748
C3886	1.390333	5.88e-14	2.4e+13	0.000	1.390333	1.390333
C3890	2.777757	5.87e-14	4.7e+13	0.000	2.777757	2.777757
C3894	.6728136	5.88e-14	1.1e+13	0.000	.6728136	.6728136
C3914	-.1018156	5.88e-14	-1.7e+12	0.000	-.1018156	-.1018156
C3930	2.360136	5.88e-14	4.0e+13	0.000	2.360136	2.360136
C3934	1.048371	5.87e-14	1.8e+13	0.000	1.048371	1.048371
C3938	-.1184046	5.87e-14	-2.0e+12	0.000	-.1184046	-.1184046
C3946	-.3982574	5.87e-14	-6.8e+12	0.000	-.3982574	-.3982574
C3954	.1527769	5.88e-14	2.6e+12	0.000	.1527769	.1527769
C3958	2.075254	5.87e-14	3.5e+13	0.000	2.075254	2.075254
C3966	-.0226929	5.87e-14	-3.9e+11	0.000	-.0226929	-.0226929
C3974	.9560029	5.87e-14	1.6e+13	0.000	.9560029	.9560029
C3982	.0030591	5.87e-14	5.2e+10	0.000	.0030591	.0030591
C3990	1.17241	5.88e-14	2.0e+13	0.000	1.17241	1.17241
C4006	2.226439	5.88e-14	3.8e+13	0.000	2.226439	2.226439
C4014	2.972534	5.87e-14	5.1e+13	0.000	2.972534	2.972534
C4022	.8541874	5.88e-14	1.5e+13	0.000	.8541874	.8541874
C4034	.539012	5.88e-14	9.2e+12	0.000	.539012	.539012
C4038	2.053639	5.87e-14	3.5e+13	0.000	2.053639	2.053639
C4042	.8207277	5.88e-14	1.4e+13	0.000	.8207277	.8207277
C4058	-.0639403	5.87e-14	-1.1e+12	0.000	-.0639403	-.0639403
C4066	-.4913024	5.87e-14	-8.4e+12	0.000	-.4913024	-.4913024
C4090	2.646987	5.88e-14	4.5e+13	0.000	2.646987	2.646987
C4098	.2878865	5.88e-14	4.9e+12	0.000	.2878865	.2878865
C4106	.4170444	5.87e-14	7.1e+12	0.000	.4170444	.4170444
C4110	-.2515625	5.88e-14	-4.3e+12	0.000	-.2515625	-.2515625
C4114	-.1708672	5.87e-14	-2.9e+12	0.000	-.1708672	-.1708672
C4118	2.998615	5.88e-14	5.1e+13	0.000	2.998615	2.998615
C4142	.8929814	5.88e-14	1.5e+13	0.000	.8929814	.8929814
C4150	1.007926	5.88e-14	1.7e+13	0.000	1.007926	1.007926
C4154	.8289856	5.87e-14	1.4e+13	0.000	.8289856	.8289856
C4162	2.249466	5.88e-14	3.8e+13	0.000	2.249466	2.249466
C4166	-.3294677	5.87e-14	-5.6e+12	0.000	-.3294677	-.3294677
C4170	2.57455	.0126646	203.29	0.000	2.54965	2.59945
C4174	3.024288	5.87e-14	5.1e+13	0.000	3.024288	3.024288
C4186	3.467604	.0164914	210.27	0.000	3.43518	3.500028
C4190	-1.10342	5.88e-14	-1.9e+13	0.000	-1.10342	-1.10342
C4194	2.70143	5.88e-14	4.6e+13	0.000	2.70143	2.70143
C4198	2.374243	5.88e-14	4.0e+13	0.000	2.374243	2.374243
C4202	.5103144	5.87e-14	8.7e+12	0.000	.5103144	.5103144
C4210	.4308187	5.88e-14	7.3e+12	0.000	.4308187	.4308187
C4214	-.03966	5.87e-14	-6.8e+11	0.000	-.03966	-.03966
C4220	1.070452	5.87e-14	1.8e+13	0.000	1.070452	1.070452
C4222	1.095988	5.88e-14	1.9e+13	0.000	1.095988	1.095988
C4234	.8618578	5.88e-14	1.5e+13	0.000	.8618578	.8618578
C4254	1.36082	5.88e-14	2.3e+13	0.000	1.36082	1.36082
C4266	3.289771	5.87e-14	5.6e+13	0.000	3.289771	3.289771
C4268	-.2943014	5.88e-14	-5.0e+12	0.000	-.2943014	-.2943014
C4270	-.8562848	5.87e-14	-1.5e+13	0.000	-.8562848	-.8562848
C4310	-.0716208	5.88e-14	-1.2e+12	0.000	-.0716208	-.0716208
C4330	-.3888022	5.87e-14	-6.6e+12	0.000	-.3888022	-.3888022
C4334	1.030413	5.88e-14	1.8e+13	0.000	1.030413	1.030413
C4342	-.5925132	5.87e-14	-1.0e+13	0.000	-.5925132	-.5925132
C4358	.2820979	5.87e-14	4.8e+12	0.000	.2820979	.2820979

C4362	.7367612	5.88e-14	1.3e+13	0.000	.7367612	.7367612
C4378	.7093288	5.88e-14	1.2e+13	0.000	.7093288	.7093288
C4390	.7005456	5.88e-14	1.2e+13	0.000	.7005456	.7005456
C4406	1.22213	5.87e-14	2.1e+13	0.000	1.22213	1.22213
C4410	.7320022	5.87e-14	1.2e+13	0.000	.7320022	.7320022
C4414	1.406298	5.87e-14	2.4e+13	0.000	1.406298	1.406298
C4418	1.065954	5.87e-14	1.8e+13	0.000	1.065954	1.065954
C4422	-.2497039	5.87e-14	-4.3e+12	0.000	-.2497039	-.2497039
C4430	.0327231	5.87e-14	5.6e+11	0.000	.0327231	.0327231
C4442	-.3078718	5.87e-14	-5.2e+12	0.000	-.3078718	-.3078718
C4470	1.239013	5.88e-14	2.1e+13	0.000	1.239013	1.239013
C4494	-.5465253	5.87e-14	-9.3e+12	0.000	-.5465253	-.5465253
C4506	1.545671	5.88e-14	2.6e+13	0.000	1.545671	1.545671
C4522	.948541	5.88e-14	1.6e+13	0.000	.948541	.948541
C4530	2.910721	5.87e-14	5.0e+13	0.000	2.910721	2.910721
C4546	.05563	5.87e-14	9.5e+11	0.000	.05563	.05563
C4550	-.0929365	5.87e-14	-1.6e+12	0.000	-.0929365	-.0929365
C4554	-1.217269	5.87e-14	-2.1e+13	0.000	-1.217269	-1.217269
C4578	1.519233	5.87e-14	2.6e+13	0.000	1.519233	1.519233
C4582	.5257081	5.88e-14	8.9e+12	0.000	.5257081	.5257081
C4594	1.26228	.0140667	89.74	0.000	1.234624	1.289937
C4606	1.686104	.0134393	125.46	0.000	1.659681	1.712528
C4614	1.856927	5.87e-14	3.2e+13	0.000	1.856927	1.856927
C4622	.3649834	5.88e-14	6.2e+12	0.000	.3649834	.3649834
C4634	.3809917	5.87e-14	6.5e+12	0.000	.3809917	.3809917
C4652	1.94048	5.88e-14	3.3e+13	0.000	1.94048	1.94048
C4654	.6597761	5.88e-14	1.1e+13	0.000	.6597761	.6597761
C4666	-.1881165	5.87e-14	-3.2e+12	0.000	-.1881165	-.1881165
C4670	.6961036	5.88e-14	1.2e+13	0.000	.6961036	.6961036
C4702	-.4752122	5.88e-14	-8.1e+12	0.000	-.4752122	-.4752122
C4722	-.0724419	5.87e-14	-1.2e+12	0.000	-.0724419	-.0724419
C4726	2.406147	.0142363	169.02	0.000	2.378156	2.434137
C4730	.8359821	5.87e-14	1.4e+13	0.000	.8359821	.8359821
C4738	.5153805	5.88e-14	8.8e+12	0.000	.5153805	.5153805
C4746	-.8429081	5.87e-14	-1.4e+13	0.000	-.8429081	-.8429081
C4758	.0408601	5.88e-14	7.0e+11	0.000	.0408601	.0408601
C4790	3.797554	.0161721	234.82	0.000	3.765758	3.82935
C4794	.2973999	5.87e-14	5.1e+12	0.000	.2973999	.2973999
C4806	-.4493644	5.87e-14	-7.6e+12	0.000	-.4493644	-.4493644
C4814	.0682955	5.87e-14	1.2e+12	0.000	.0682955	.0682955
C4826	-.4118979	5.87e-14	-7.0e+12	0.000	-.4118979	-.4118979
C4830	-.2405027	5.87e-14	-4.1e+12	0.000	-.2405027	-.2405027
C4854	-.0103447	5.87e-14	-1.8e+11	0.000	-.0103447	-.0103447
C4862	1.503372	5.87e-14	2.6e+13	0.000	1.503372	1.503372
C4866	-.0957628	5.87e-14	-1.6e+12	0.000	-.0957628	-.0957628
C4870	-.2066021	5.87e-14	-3.5e+12	0.000	-.2066021	-.2066021
C4890	.5468322	5.88e-14	9.3e+12	0.000	.5468322	.5468322
C4902	-.1446499	5.88e-14	-2.5e+12	0.000	-.1446499	-.1446499
C4918	1.364948	5.87e-14	2.3e+13	0.000	1.364948	1.364948
C4934	1.73682	5.87e-14	3.0e+13	0.000	1.73682	1.73682
C4942	.4693614	5.88e-14	8.0e+12	0.000	.4693614	.4693614
C4962	.9904048	5.87e-14	1.7e+13	0.000	.9904048	.9904048
C4966	1.248511	5.87e-14	2.1e+13	0.000	1.248511	1.248511
C4970	-.3554547	5.87e-14	-6.1e+12	0.000	-.3554547	-.3554547
C4974	-.0102475	5.87e-14	-1.7e+11	0.000	-.0102475	-.0102475
_cons	11.70926	.0046357	2525.88	0.000	11.70014	11.71837

```
256 outreg2 using output/ols_annual_avg_emplvl.doc, append keep(log_federal_funding) add
  > text(MSA FE, Yes, Year FE, Yes, FFRDC count FE, No)
  output/ols_annual_avg_emplvl.doc
  dir : seeout
```

```
257 reg log_annual_avg_emplvl log_federal_funding i.year i.msa_factor i.ffrdc_count, rob
> ust cluster(msa_factor)
note: 2.ffrdc_count omitted because of collinearity
note: 3.ffrdc_count omitted because of collinearity
note: 5.ffrdc_count omitted because of collinearity
note: 13.ffrdc_count omitted because of collinearity
```

Linear regression

				Number of obs	=	7,372
				$F(19, 387)$	=	.
				Prob > F	=	.
				R-squared	=	0.9977
				Root MSE	=	.05521

(Std. Err. adjusted for **388** clusters in msa_factor)

log_annual_avg_em~l	Coef.	Robust Std. Err.	t	P>|t|	[95% Conf. Interval]	
log_federal_funding	-.0120902	.0210739	-0.57	0.566	-.0535239	.0293435
year						
2002	-.0021958	.001117	-1.97	0.050	-.004392	3.71e-07
2003	.0014917	.0019843	0.75	0.453	-.0024097	.0053932
2004	.0163883	.0025103	6.53	0.000	.0114528	.0213238
2005	.0362004	.0034371	10.53	0.000	.0294427	.0429582
2006	.0547527	.0042213	12.97	0.000	.0464532	.0630521
2007	.0660243	.0046417	14.22	0.000	.0568982	.0751503
2008	.0625957	.0047237	13.25	0.000	.0533083	.0718831
2009	.0181328	.005073	3.57	0.000	.0081588	.0281068
2010	.0122966	.0052318	2.35	0.019	.0020102	.0225831
2011	.0213703	.0054566	3.92	0.000	.010642	.0320986
2012	.0347409	.0056627	6.14	0.000	.0236075	.0458744
2013	.0460748	.0060494	7.62	0.000	.034181	.0579687
2014	.061397	.0064207	9.56	0.000	.0487733	.0740208
2015	.077134	.0067464	11.43	0.000	.0638699	.0903981
2016	.0893858	.007029	12.72	0.000	.0755659	.1032057
2017	.0990516	.0075264	13.16	0.000	.0842538	.1138494
2018	.111495	.0080192	13.90	0.000	.0957283	.1272616
2019	.1213751	.0084213	14.41	0.000	.1048179	.1379324
msa_factor						
C1038	-.1858595	5.87e-14	-3.2e+12	0.000	-.1858595	-.1858595
C1042	1.598843	5.87e-14	2.7e+13	0.000	1.598843	1.598843
C1050	-.0527424	5.87e-14	-9.0e+11	0.000	-.0527424	-.0527424
C1054	-.4176549	5.87e-14	-7.1e+12	0.000	-.4176549	-.4176549
C1058	1.900301	5.87e-14	3.2e+13	0.000	1.900301	1.900301
C1074	1.771106	.0866959	20.43	0.000	1.600652	1.94156
C1078	-.0404502	5.87e-14	-6.9e+11	0.000	-.0404502	-.0404502
C1090	1.646502	5.87e-14	2.8e+13	0.000	1.646502	1.646502
C1102	-.0851516	5.87e-14	-1.5e+12	0.000	-.0851516	-.0851516
C1110	.5392121	5.87e-14	9.2e+12	0.000	.5392121	.5392121
C1118	-.4173353	.0040088	-104.10	0.000	-.4252172	-.4094535
C1126	.9534633	5.87e-14	1.6e+13	0.000	.9534633	.9534633
C1146	1.12477	5.87e-14	1.9e+13	0.000	1.12477	1.12477
C1150	-.3214098	5.87e-14	-5.5e+12	0.000	-.3214098	-.3214098
C1154	.5913284	5.87e-14	1.0e+13	0.000	.5913284	.5913284
C1164	-.5547216	5.87e-14	-9.5e+12	0.000	-.5547216	-.5547216
C1170	.9913567	5.87e-14	1.7e+13	0.000	.9913567	.9913567
C1202	.2177449	5.87e-14	3.7e+12	0.000	.2177449	.2177449
C1206	3.587937	5.87e-14	6.1e+13	0.000	3.587937	3.587937
C1210	.7523179	5.87e-14	1.3e+13	0.000	.7523179	.7523179
C1222	-.2493473	5.87e-14	-4.2e+12	0.000	-.2493473	-.2493473
C1226	1.192321	5.87e-14	2.0e+13	0.000	1.192321	1.192321
C1242	2.523324	5.87e-14	4.3e+13	0.000	2.523324	2.523324
C1254	1.491161	5.87e-14	2.5e+13	0.000	1.491161	1.491161
C1258	2.972773	.0079448	374.18	0.000	2.957153	2.988394
C1262	.0878989	5.87e-14	1.5e+12	0.000	.0878989	.0878989
C1270	.3717389	5.87e-14	6.3e+12	0.000	.3717389	.3717389
C1294	1.729443	5.87e-14	2.9e+13	0.000	1.729443	1.729443
C1298	-.1201835	5.87e-14	-2.0e+12	0.000	-.1201835	-.1201835
C1302	-.5694083	5.87e-14	-9.7e+12	0.000	-.5694083	-.5694083
C1314	.902232	5.87e-14	1.5e+13	0.000	.902232	.902232

C1322	-.3851193	5.87e-14	-6.6e+12	0.000	-.3851193	-.3851193
C1338	.2352391	5.87e-14	4.0e+12	0.000	.2352391	.2352391
C1346	.0207459	5.87e-14	3.5e+11	0.000	.0207459	.0207459
C1374	.206685	5.87e-14	3.5e+12	0.000	.206685	.206685
C1378	.4919571	5.87e-14	8.4e+12	0.000	.4919571	.4919571
C1382	2.016216	5.87e-14	3.4e+13	0.000	2.016216	2.016216
C1390	-.0133653	5.87e-14	-2.3e+11	0.000	-.0133653	-.0133653
C1398	.0515284	5.87e-14	8.8e+11	0.000	.0515284	.0515284
C1401	.3413415	5.87e-14	5.8e+12	0.000	.3413415	.3413415
C1402	.0339085	5.87e-14	5.8e+11	0.000	.0339085	.0339085
C1410	-.4822284	5.87e-14	-8.2e+12	0.000	-.4822284	-.4822284
C1426	1.43531	5.87e-14	2.4e+13	0.000	1.43531	1.43531
C1446	3.656443	.0635411	57.54	0.000	3.531514	3.781372
C1450	.9416947	.0307664	30.61	0.000	.8812045	1.002185
C1454	.0313583	5.87e-14	5.3e+11	0.000	.0313583	.0313583
C1474	.255118	5.87e-14	4.3e+12	0.000	.255118	.255118
C1486	1.869919	5.87e-14	3.2e+13	0.000	1.869919	1.869919
C1518	.6813686	5.87e-14	1.2e+13	0.000	.6813686	.6813686
C1526	-.4417857	5.87e-14	-7.5e+12	0.000	-.4417857	-.4417857
C1538	2.113909	5.87e-14	3.6e+13	0.000	2.113909	2.113909
C1550	-.0812934	5.87e-14	-1.4e+12	0.000	-.0812934	-.0812934
C1554	.5847571	5.87e-14	1.0e+13	0.000	.5847571	.5847571
C1568	-.4571407	5.87e-14	-7.8e+12	0.000	-.4571407	-.4571407
C1594	.9555489	5.87e-14	1.6e+13	0.000	.9555489	.9555489
C1598	1.20959	5.87e-14	2.1e+13	0.000	1.20959	1.20959
C1602	-.3766399	5.87e-14	-6.4e+12	0.000	-.3766399	-.3766399
C1606	-.2150362	5.87e-14	-3.7e+12	0.000	-.2150362	-.2150362
C1618	-.7678165	5.87e-14	-1.3e+13	0.000	-.7678165	-.7678165
C1622	-.5191554	5.87e-14	-8.8e+12	0.000	-.5191554	-.5191554
C1630	.7563112	5.87e-14	1.3e+13	0.000	.7563112	.7563112
C1654	-.1478437	5.87e-14	-2.5e+12	0.000	-.1478437	-.1478437
C1658	.4253509	5.87e-14	7.2e+12	0.000	.4253509	.4253509
C1662	.5789356	5.87e-14	9.9e+12	0.000	.5789356	.5789356
C1670	1.494764	5.87e-14	2.5e+13	0.000	1.494764	1.494764
C1674	2.751424	5.87e-14	4.7e+13	0.000	2.751424	2.751424
C1682	.4372397	.0165214	26.47	0.000	.4047569	.4697226
C1686	1.286637	5.87e-14	2.2e+13	0.000	1.286637	1.286637
C1694	-.3999036	5.87e-14	-6.8e+12	0.000	-.3999036	-.3999036
C1698	4.46891	.4529213	9.87	0.000	3.578416	5.359404
C1702	.1664572	5.87e-14	2.8e+12	0.000	.1664572	.1664572
C1714	2.744598	5.87e-14	4.7e+13	0.000	2.744598	2.744598
C1730	.2225617	5.87e-14	3.8e+12	0.000	.2225617	.2225617
C1742	-.4571936	5.87e-14	-7.8e+12	0.000	-.4571936	-.4571936
C1746	2.76591	5.87e-14	4.7e+13	0.000	2.76591	2.76591
C1766	-.1836833	5.87e-14	-3.1e+12	0.000	-.1836833	-.1836833
C1778	.4038435	5.87e-14	6.9e+12	0.000	.4038435	.4038435
C1782	1.379696	5.87e-14	2.4e+13	0.000	1.379696	1.379696
C1786	.2799164	5.87e-14	4.8e+12	0.000	.2799164	.2799164
C1790	1.677458	5.87e-14	2.9e+13	0.000	1.677458	1.677458
C1798	.5928419	5.87e-14	1.0e+13	0.000	.5928419	.5928419
C1802	-.3543558	5.87e-14	-6.0e+12	0.000	-.3543558	-.3543558
C1814	2.684481	5.87e-14	4.6e+13	0.000	2.684481	2.684481
C1858	1.021177	5.87e-14	1.7e+13	0.000	1.021177	1.021177
C1870	-.5943215	5.87e-14	-1.0e+13	0.000	-.5943215	-.5943215
C1888	.4394683	5.87e-14	7.5e+12	0.000	.4394683	.4394683
C1906	-.5495389	5.87e-14	-9.4e+12	0.000	-.5495389	-.5495389
C1910	3.845133	5.87e-14	6.6e+13	0.000	3.845133	3.845133
C1914	.0596721	5.87e-14	1.0e+12	0.000	.0596721	.0596721
C1918	-.7986335	5.87e-14	-1.4e+13	0.000	-.7986335	-.7986335
C1930	-.0454798	5.87e-14	-7.8e+11	0.000	-.0454798	-.0454798
C1934	1.039921	5.87e-14	1.8e+13	0.000	1.039921	1.039921
C1938	1.754556	5.87e-14	3.0e+13	0.000	1.754556	1.754556
C1946	-.1867073	5.87e-14	-3.2e+12	0.000	-.1867073	-.1867073
C1950	-.2299742	5.87e-14	-3.9e+12	0.000	-.2299742	-.2299742
C1966	1.016737	5.87e-14	1.7e+13	0.000	1.016737	1.016737
C1974	2.988019	.0433354	68.95	0.000	2.902817	3.073221
C1978	1.621527	5.87e-14	2.8e+13	0.000	1.621527	1.621527
C1982	3.368765	5.87e-14	5.7e+13	0.000	3.368765	3.368765
C2002	-.1223154	5.87e-14	-2.1e+12	0.000	-.1223154	-.1223154
C2010	-.0399469	5.87e-14	-6.8e+11	0.000	-.0399469	-.0399469
C2022	-.1600175	5.87e-14	-2.7e+12	0.000	-.1600175	-.1600175
C2026	.6623413	5.87e-14	1.1e+13	0.000	.6623413	.6623413

C2050	1.446021	5.87e-14	2.5e+13	0.000	1.446021	1.446021
C2070	-.1494813	5.87e-14	-2.5e+12	0.000	-.1494813	-.1494813
C2074	.1915526	5.87e-14	3.3e+12	0.000	.1915526	.1915526
C2094	-.0986222	5.87e-14	-1.7e+12	0.000	-.0986222	-.0986222
C2106	-.2348005	5.87e-14	-4.0e+12	0.000	-.2348005	-.2348005
C2114	.6150931	5.87e-14	1.0e+13	0.000	.6150931	.6150931
C2130	-.5316398	5.87e-14	-9.1e+12	0.000	-.5316398	-.5316398
C2134	1.460057	5.87e-14	2.5e+13	0.000	1.460057	1.460057
C2150	.6697987	5.87e-14	1.1e+13	0.000	.6697987	.6697987
C2166	.8109934	5.87e-14	1.4e+13	0.000	.8109934	.8109934
C2178	.8552358	5.87e-14	1.5e+13	0.000	.8552358	.8552358
C2182	-.5664175	5.87e-14	-9.7e+12	0.000	-.5664175	-.5664175
C2202	.6251874	5.87e-14	1.1e+13	0.000	.6251874	.6251874
C2214	-.2818802	5.87e-14	-4.8e+12	0.000	-.2818802	-.2818802
C2218	.6645222	5.87e-14	1.1e+13	0.000	.6645222	.6645222
C2222	1.139492	5.87e-14	1.9e+13	0.000	1.139492	1.139492
C2238	-.1071614	5.87e-14	-1.8e+12	0.000	-.1071614	-.1071614
C2242	.7755613	5.87e-14	1.3e+13	0.000	.7755613	.7755613
C2250	.2470617	5.87e-14	4.2e+12	0.000	.2470617	.2470617
C2252	-.209282	5.87e-14	-3.6e+12	0.000	-.209282	-.209282
C2254	-.337052	5.87e-14	-5.7e+12	0.000	-.337052	-.337052
C2266	.748512	5.87e-14	1.3e+13	0.000	.748512	.748512
C2290	.5353	5.87e-14	9.1e+12	0.000	.5353	.5353
C2306	1.151438	5.87e-14	2.0e+13	0.000	1.151438	1.151438
C2342	1.701109	5.87e-14	2.9e+13	0.000	1.701109	1.701109
C2346	-.587829	5.87e-14	-1.0e+13	0.000	-.587829	-.587829
C2354	.6739185	5.87e-14	1.1e+13	0.000	.6739185	.6739185
C2358	.1378566	5.87e-14	2.3e+12	0.000	.1378566	.1378566
C2390	-.6440474	5.87e-14	-1.1e+13	0.000	-.6440474	-.6440474
C2402	-.1922228	5.87e-14	-3.3e+12	0.000	-.1922228	-.1922228
C2414	-.3875071	5.87e-14	-6.6e+12	0.000	-.3875071	-.3875071
C2422	-.2307249	5.87e-14	-3.9e+12	0.000	-.2307249	-.2307249
C2426	-.4623901	5.87e-14	-7.9e+12	0.000	-.4623901	-.4623901
C2430	-.0936842	5.87e-14	-1.6e+12	0.000	-.0936842	-.0936842
C2434	2.03376	5.87e-14	3.5e+13	0.000	2.03376	2.03376
C2442	-.9730903	5.87e-14	-1.7e+13	0.000	-.9730903	-.9730903
C2450	-.6132597	5.87e-14	-1.0e+13	0.000	-.6132597	-.6132597
C2454	.3030802	5.87e-14	5.2e+12	0.000	.3030802	.3030802
C2458	.9453624	5.87e-14	1.6e+13	0.000	.9453624	.9453624
C2466	1.68806	5.87e-14	2.9e+13	0.000	1.68806	1.68806
C2478	.103313	5.87e-14	1.8e+12	0.000	.103313	.103313
C2486	1.713874	5.87e-14	2.9e+13	0.000	1.713874	1.713874
C2502	-1.379411	5.87e-14	-2.4e+13	0.000	-1.379411	-1.379411
C2506	.8324794	5.87e-14	1.4e+13	0.000	.8324794	.8324794
C2518	.403929	5.87e-14	6.9e+12	0.000	.403929	.403929
C2522	-.4599147	5.87e-14	-7.8e+12	0.000	-.4599147	-.4599147
C2526	-.4182354	5.87e-14	-7.1e+12	0.000	-.4182354	-.4182354
C2542	1.587784	5.87e-14	2.7e+13	0.000	1.587784	1.587784
C2550	-.0655507	5.87e-14	-1.1e+12	0.000	-.0655507	-.0655507
C2554	2.245517	5.87e-14	3.8e+13	0.000	2.245517	2.245517
C2562	-.1341346	5.87e-14	-2.3e+12	0.000	-.1341346	-.1341346
C2586	.8639744	5.87e-14	1.5e+13	0.000	.8639744	.8639744
C2594	.0553808	5.87e-14	9.4e+11	0.000	.0553808	.0553808
C2598	-1.2611	5.87e-14	-2.1e+13	0.000	-1.2611	-1.2611
C2614	-.7061057	5.87e-14	-1.2e+13	0.000	-.7061057	-.7061057
C2630	-.5682459	5.87e-14	-9.7e+12	0.000	-.5682459	-.5682459
C2638	.3243366	5.87e-14	5.5e+12	0.000	.3243366	.3243366
C2642	3.693299	5.87e-14	6.3e+13	0.000	3.693299	3.693299
C2658	.7071794	5.87e-14	1.2e+13	0.000	.7071794	.7071794
C2662	1.140712	5.87e-14	1.9e+13	0.000	1.140712	1.140712
C2682	-.086363	.0474767	-1.82	0.070	-.1797075	.0069816
C2690	2.660786	5.87e-14	4.5e+13	0.000	2.660786	2.660786
C2698	.2690469	5.87e-14	4.6e+12	0.000	.2690469	.2690469
C2706	-.2762785	.0121041	-22.83	0.000	-.3000766	-.2524805
C2710	-.1256699	5.87e-14	-2.1e+12	0.000	-.1256699	-.1256699
C2714	1.346931	5.87e-14	2.3e+13	0.000	1.346931	1.346931
C2718	-.0341195	5.87e-14	-5.8e+11	0.000	-.0341195	-.0341195
C2726	2.215346	5.87e-14	3.8e+13	0.000	2.215346	2.215346
C2734	-.3509634	5.87e-14	-6.0e+12	0.000	-.3509634	-.3509634
C2750	.0054346	5.87e-14	9.3e+10	0.000	.0054346	.0054346
C2762	.1531347	5.87e-14	2.6e+12	0.000	.1531347	.1531347
C2774	.1549291	5.87e-14	2.6e+12	0.000	.1549291	.1549291

C2778	-.1430452	5.87e-14	-2.4e+12	0.000	-.1430452	-.1430452
C2786	-.2568664	5.87e-14	-4.4e+12	0.000	-.2568664	-.2568664
C2790	.1795377	5.87e-14	3.1e+12	0.000	.1795377	.1795377
C2798	.101511	5.87e-14	1.7e+12	0.000	.101511	.101511
C2802	.7583881	5.87e-14	1.3e+13	0.000	.7583881	.7583881
C2810	-.401213	5.87e-14	-6.8e+12	0.000	-.401213	-.401213
C2814	2.716208	5.87e-14	4.6e+13	0.000	2.716208	2.716208
C2842	.5127866	.0668907	7.67	0.000	.3812719	.6443013
C2866	.6564623	5.87e-14	1.1e+13	0.000	.6564623	.6564623
C2870	.5978897	5.87e-14	1.0e+13	0.000	.5978897	.5978897
C2874	-.061622	5.87e-14	-1.0e+12	0.000	-.061622	-.061622
C2894	1.727585	.0723072	23.89	0.000	1.585421	1.869749
C2902	-.490569	5.87e-14	-8.4e+12	0.000	-.490569	-.490569
C2910	.1125968	5.87e-14	1.9e+12	0.000	.1125968	.1125968
C2918	1.144021	5.87e-14	1.9e+13	0.000	1.144021	1.144021
C2920	.2881227	5.87e-14	4.9e+12	0.000	.2881227	.2881227
C2934	.3688894	5.87e-14	6.3e+12	0.000	.3688894	.3688894
C2942	-.2968603	5.87e-14	-5.1e+12	0.000	-.2968603	-.2968603
C2946	1.137826	5.87e-14	1.9e+13	0.000	1.137826	1.137826
C2954	1.265171	5.87e-14	2.2e+13	0.000	1.265171	1.265171
C2962	1.172467	5.87e-14	2.0e+13	0.000	1.172467	1.172467
C2970	.3190878	5.87e-14	5.4e+12	0.000	.3190878	.3190878
C2974	.0559722	5.87e-14	9.5e+11	0.000	.0559722	.0559722
C2982	2.598184	5.87e-14	4.4e+13	0.000	2.598184	2.598184
C2994	-.2959296	5.87e-14	-5.0e+12	0.000	-.2959296	-.2959296
C3002	-.4078566	5.87e-14	-7.0e+12	0.000	-.4078566	-.4078566
C3014	-.296168	5.87e-14	-5.0e+12	0.000	-.296168	-.296168
C3030	-.8880511	5.87e-14	-1.5e+13	0.000	-.8880511	-.8880511
C3034	-.2826127	5.87e-14	-4.8e+12	0.000	-.2826127	-.2826127
C3046	1.34874	5.87e-14	2.3e+13	0.000	1.34874	1.34874
C3062	-.2008147	5.87e-14	-3.4e+12	0.000	-.2008147	-.2008147
C3070	.943109	5.87e-14	1.6e+13	0.000	.943109	.943109
C3078	1.617888	5.87e-14	2.8e+13	0.000	1.617888	1.617888
C3086	-.2351406	5.87e-14	-4.0e+12	0.000	-.2351406	-.2351406
C3098	.367639	5.87e-14	6.3e+12	0.000	.367639	.367639
C3102	-.5504133	5.87e-14	-9.4e+12	0.000	-.5504133	-.5504133
C3108	4.745768	.4718494	10.06	0.000	3.818059	5.673477
C3114	2.215894	5.87e-14	3.8e+13	0.000	2.215894	2.215894
C3118	.7037274	5.87e-14	1.2e+13	0.000	.7037274	.7037274
C3134	.4343482	5.87e-14	7.4e+12	0.000	.4343482	.4343482
C3142	.4053025	5.87e-14	6.9e+12	0.000	.4053025	.4053025
C3146	-.3484647	5.87e-14	-5.9e+12	0.000	-.3484647	-.3484647
C3154	1.706437	5.87e-14	2.9e+13	0.000	1.706437	1.706437
C3170	1.111402	5.87e-14	1.9e+13	0.000	1.111402	1.111402
C3174	-.5608451	5.87e-14	-9.6e+12	0.000	-.5608451	-.5608451
C3186	-.2240533	5.87e-14	-3.8e+12	0.000	-.2240533	-.2240533
C3190	-.1734513	5.87e-14	-3.0e+12	0.000	-.1734513	-.1734513
C3242	-.5525425	5.87e-14	-9.4e+12	0.000	-.5525425	-.5525425
C3258	1.229436	5.87e-14	2.1e+13	0.000	1.229436	1.229436
C3278	.2309505	5.87e-14	3.9e+12	0.000	.2309505	.2309505
C3282	2.23147	5.87e-14	3.8e+13	0.000	2.23147	2.23147
C3290	.111692	5.87e-14	1.9e+12	0.000	.111692	.111692
C3310	3.579406	5.87e-14	6.1e+13	0.000	3.579406	3.579406
C3314	-.4059116	5.87e-14	-6.9e+12	0.000	-.4059116	-.4059116
C3322	-.5876801	5.87e-14	-1.0e+13	0.000	-.5876801	-.5876801
C3326	.1441644	5.87e-14	2.5e+12	0.000	.1441644	.1441644
C3334	2.538876	5.87e-14	4.3e+13	0.000	2.538876	2.538876
C3346	3.321519	5.87e-14	5.7e+13	0.000	3.321519	3.321519
C3354	-.147497	5.87e-14	-2.5e+12	0.000	-.147497	-.147497
C3366	.9630099	5.87e-14	1.6e+13	0.000	.9630099	.9630099
C3370	.9945019	5.87e-14	1.7e+13	0.000	.9945019	.9945019
C3374	.1685052	5.87e-14	2.9e+12	0.000	.1685052	.1685052
C3378	-.4532549	5.87e-14	-7.7e+12	0.000	-.4532549	-.4532549
C3386	.9330346	5.87e-14	1.6e+13	0.000	.9330346	.9330346
C3406	-.1050763	5.87e-14	-1.8e+12	0.000	-.1050763	-.1050763
C3410	-.4028277	5.87e-14	-6.9e+12	0.000	-.4028277	-.4028277
C3458	-.2988824	5.87e-14	-5.1e+12	0.000	-.2988824	-.2988824
C3462	-.3159533	5.87e-14	-5.4e+12	0.000	-.3159533	-.3159533
C3474	-.036093	5.87e-14	-6.2e+11	0.000	-.036093	-.036093
C3482	.7859763	5.87e-14	1.3e+13	0.000	.7859763	.7859763
C3490	.0766478	5.87e-14	1.3e+12	0.000	.0766478	.0766478
C3494	.6811773	5.87e-14	1.2e+13	0.000	.6811773	.6811773

C3498	2.536577	5.87e-14	4.3e+13	0.000	2.536577	2.536577
C3510	-.3706971	5.87e-14	-6.3e+12	0.000	-.3706971	-.3706971
C3530	1.728181	5.87e-14	2.9e+13	0.000	1.728181	1.728181
C3538	2.137006	5.87e-14	3.6e+13	0.000	2.137006	2.137006
C3562	4.909717	.0557772	88.02	0.000	4.800053	5.019381
C3566	-.0423889	5.87e-14	-7.2e+11	0.000	-.0423889	-.0423889
C3584	1.429555	5.87e-14	2.4e+13	0.000	1.429555	1.429555
C3598	.6735449	5.87e-14	1.1e+13	0.000	.6735449	.6735449
C3610	.3928396	5.87e-14	6.7e+12	0.000	.3928396	.3928396
C3614	-.4427413	5.87e-14	-7.5e+12	0.000	-.4427413	-.4427413
C3622	-.0221598	5.87e-14	-3.8e+11	0.000	-.0221598	-.0221598
C3626	1.236127	5.87e-14	2.1e+13	0.000	1.236127	1.236127
C3642	2.174153	5.87e-14	3.7e+13	0.000	2.174153	2.174153
C3650	.4428002	5.87e-14	7.5e+12	0.000	.4428002	.4428002
C3654	1.941855	5.87e-14	3.3e+13	0.000	1.941855	1.941855
C3674	2.769068	5.87e-14	4.7e+13	0.000	2.769068	2.769068
C3678	.3403491	5.87e-14	5.8e+12	0.000	.3403491	.3403491
C3698	-.2515662	5.87e-14	-4.3e+12	0.000	-.2515662	-.2515662
C3710	1.579963	5.87e-14	2.7e+13	0.000	1.579963	1.579963
C3734	1.122434	5.87e-14	1.9e+13	0.000	1.122434	1.122434
C3746	.1555096	5.87e-14	2.7e+12	0.000	.1555096	.1555096
C3762	-.4845573	5.87e-14	-8.3e+12	0.000	-.4845573	-.4845573
C3786	.9035532	5.87e-14	1.5e+13	0.000	.9035532	.9035532
C3790	.9964977	5.87e-14	1.7e+13	0.000	.9964977	.9964977
C3798	3.728411	5.87e-14	6.4e+13	0.000	3.728411	3.728411
C3806	3.330819	5.87e-14	5.7e+13	0.000	3.330819	3.330819
C3822	-.5954487	5.87e-14	-1.0e+13	0.000	-.5954487	-.5954487
C3830	2.829563	.0189318	149.46	0.000	2.792341	2.866785
C3834	-.0375463	5.87e-14	-6.4e+11	0.000	-.0375463	-.0375463
C3854	-.6774673	5.87e-14	-1.2e+13	0.000	-.6774673	-.6774673
C3866	.158748	5.87e-14	2.7e+12	0.000	.158748	.158748
C3886	1.390333	5.87e-14	2.4e+13	0.000	1.390333	1.390333
C3890	2.777757	5.87e-14	4.7e+13	0.000	2.777757	2.777757
C3894	.6728136	5.87e-14	1.1e+13	0.000	.6728136	.6728136
C3914	-.1018156	5.87e-14	-1.7e+12	0.000	-.1018156	-.1018156
C3930	2.360136	5.87e-14	4.0e+13	0.000	2.360136	2.360136
C3934	1.048371	5.87e-14	1.8e+13	0.000	1.048371	1.048371
C3938	-.1184046	5.87e-14	-2.0e+12	0.000	-.1184046	-.1184046
C3946	-.3982574	5.87e-14	-6.8e+12	0.000	-.3982574	-.3982574
C3954	.1527769	5.87e-14	2.6e+12	0.000	.1527769	.1527769
C3958	2.075254	5.87e-14	3.5e+13	0.000	2.075254	2.075254
C3966	-.0226929	5.87e-14	-3.9e+11	0.000	-.0226929	-.0226929
C3974	.9560029	5.87e-14	1.6e+13	0.000	.9560029	.9560029
C3982	.0030591	5.87e-14	5.2e+10	0.000	.0030591	.0030591
C3990	1.17241	5.87e-14	2.0e+13	0.000	1.17241	1.17241
C4006	2.226439	5.87e-14	3.8e+13	0.000	2.226439	2.226439
C4014	2.972534	5.87e-14	5.1e+13	0.000	2.972534	2.972534
C4022	.8541874	5.87e-14	1.5e+13	0.000	.8541874	.8541874
C4034	.539012	5.87e-14	9.2e+12	0.000	.539012	.539012
C4038	2.053639	5.87e-14	3.5e+13	0.000	2.053639	2.053639
C4042	.8207277	5.87e-14	1.4e+13	0.000	.8207277	.8207277
C4058	-.0639403	5.87e-14	-1.1e+12	0.000	-.0639403	-.0639403
C4066	-.4913024	5.87e-14	-8.4e+12	0.000	-.4913024	-.4913024
C4090	2.646987	5.87e-14	4.5e+13	0.000	2.646987	2.646987
C4098	.2878865	5.87e-14	4.9e+12	0.000	.2878865	.2878865
C4106	.4170444	5.87e-14	7.1e+12	0.000	.4170444	.4170444
C4110	-.2515625	5.87e-14	-4.3e+12	0.000	-.2515625	-.2515625
C4114	-.1708672	5.87e-14	-2.9e+12	0.000	-.1708672	-.1708672
C4118	2.998615	5.87e-14	5.1e+13	0.000	2.998615	2.998615
C4142	.8929814	5.87e-14	1.5e+13	0.000	.8929814	.8929814
C4150	1.007926	5.87e-14	1.7e+13	0.000	1.007926	1.007926
C4154	.8289856	5.87e-14	1.4e+13	0.000	.8289856	.8289856
C4162	2.249466	5.87e-14	3.8e+13	0.000	2.249466	2.249466
C4166	-.3294677	5.87e-14	-5.6e+12	0.000	-.3294677	-.3294677
C4170	2.55866	.0230687	110.91	0.000	2.513304	2.604015
C4174	3.024288	5.87e-14	5.2e+13	0.000	3.024288	3.024288
C4186	3.762289	.4708771	7.99	0.000	2.836491	4.688086
C4190	-1.10342	5.87e-14	-1.9e+13	0.000	-1.10342	-1.10342
C4194	2.70143	5.87e-14	4.6e+13	0.000	2.70143	2.70143
C4198	2.374243	5.87e-14	4.0e+13	0.000	2.374243	2.374243
C4202	.5103144	5.87e-14	8.7e+12	0.000	.5103144	.5103144
C4210	.4308187	5.87e-14	7.3e+12	0.000	.4308187	.4308187

C4214	-.03966	5.87e-14	-6.8e+11	0.000	-.03966	-.03966
C4220	1.070452	5.87e-14	1.8e+13	0.000	1.070452	1.070452
C4222	1.095988	5.87e-14	1.9e+13	0.000	1.095988	1.095988
C4234	.8618578	5.87e-14	1.5e+13	0.000	.8618578	.8618578
C4254	1.36082	5.87e-14	2.3e+13	0.000	1.36082	1.36082
C4266	3.289771	5.87e-14	5.6e+13	0.000	3.289771	3.289771
C4268	-.2943014	5.87e-14	-5.0e+12	0.000	-.2943014	-.2943014
C4270	-.8562848	5.87e-14	-1.5e+13	0.000	-.8562848	-.8562848
C4310	-.0716208	5.87e-14	-1.2e+12	0.000	-.0716208	-.0716208
C4330	-.3888022	5.87e-14	-6.6e+12	0.000	-.3888022	-.3888022
C4334	1.030413	5.87e-14	1.8e+13	0.000	1.030413	1.030413
C4342	-.5925132	5.87e-14	-1.0e+13	0.000	-.5925132	-.5925132
C4358	.2820979	5.87e-14	4.8e+12	0.000	.2820979	.2820979
C4362	.7367612	5.87e-14	1.3e+13	0.000	.7367612	.7367612
C4378	.7093288	5.87e-14	1.2e+13	0.000	.7093288	.7093288
C4390	.7005456	5.87e-14	1.2e+13	0.000	.7005456	.7005456
C4406	1.22213	5.87e-14	2.1e+13	0.000	1.22213	1.22213
C4410	.7320022	5.87e-14	1.2e+13	0.000	.7320022	.7320022
C4414	1.406298	5.87e-14	2.4e+13	0.000	1.406298	1.406298
C4418	1.065954	5.87e-14	1.8e+13	0.000	1.065954	1.065954
C4422	-.2497039	5.87e-14	-4.3e+12	0.000	-.2497039	-.2497039
C4430	.0327231	5.87e-14	5.6e+11	0.000	.0327231	.0327231
C4442	-.3078718	5.87e-14	-5.2e+12	0.000	-.3078718	-.3078718
C4470	1.239013	5.87e-14	2.1e+13	0.000	1.239013	1.239013
C4494	-.5465253	5.87e-14	-9.3e+12	0.000	-.5465253	-.5465253
C4506	1.545671	5.87e-14	2.6e+13	0.000	1.545671	1.545671
C4522	.948541	5.87e-14	1.6e+13	0.000	.948541	.948541
C4530	2.910721	5.87e-14	5.0e+13	0.000	2.910721	2.910721
C4546	.05563	5.87e-14	9.5e+11	0.000	.05563	.05563
C4550	-.0929365	5.87e-14	-1.6e+12	0.000	-.0929365	-.0929365
C4554	-1.217269	5.87e-14	-2.1e+13	0.000	-1.217269	-1.217269
C4578	1.519233	5.87e-14	2.6e+13	0.000	1.519233	1.519233
C4582	.5257081	5.87e-14	9.0e+12	0.000	.5257081	.5257081
C4594	1.271443	.0174855	72.71	0.000	1.237064	1.305821
C4606	1.684057	.0032901	511.86	0.000	1.677589	1.690526
C4614	1.856927	5.87e-14	3.2e+13	0.000	1.856927	1.856927
C4622	.3649834	5.87e-14	6.2e+12	0.000	.3649834	.3649834
C4634	.3809917	5.87e-14	6.5e+12	0.000	.3809917	.3809917
C4652	1.94048	5.87e-14	3.3e+13	0.000	1.94048	1.94048
C4654	.6597761	5.87e-14	1.1e+13	0.000	.6597761	.6597761
C4666	-.1881165	5.87e-14	-3.2e+12	0.000	-.1881165	-.1881165
C4670	.6961036	5.87e-14	1.2e+13	0.000	.6961036	.6961036
C4702	-.4752122	5.87e-14	-8.1e+12	0.000	-.4752122	-.4752122
C4722	-.0724419	5.87e-14	-1.2e+12	0.000	-.0724419	-.0724419
C4726	2.41834	.0222645	108.62	0.000	2.374566	2.462115
C4730	.8359821	5.87e-14	1.4e+13	0.000	.8359821	.8359821
C4738	.5153805	5.87e-14	8.8e+12	0.000	.5153805	.5153805
C4746	-.8429081	5.87e-14	-1.4e+13	0.000	-.8429081	-.8429081
C4758	.0408601	5.87e-14	7.0e+11	0.000	.0408601	.0408601
C4790	4.104733	.471004	8.71	0.000	3.178686	5.03078
C4794	.2973999	5.87e-14	5.1e+12	0.000	.2973999	.2973999
C4806	-.4493644	5.87e-14	-7.7e+12	0.000	-.4493644	-.4493644
C4814	.0682955	5.87e-14	1.2e+12	0.000	.0682955	.0682955
C4826	-.4118979	5.87e-14	-7.0e+12	0.000	-.4118979	-.4118979
C4830	-.2405027	5.87e-14	-4.1e+12	0.000	-.2405027	-.2405027
C4854	-.0103447	5.87e-14	-1.8e+11	0.000	-.0103447	-.0103447
C4862	1.503372	5.87e-14	2.6e+13	0.000	1.503372	1.503372
C4866	-.0957628	5.87e-14	-1.6e+12	0.000	-.0957628	-.0957628
C4870	-.2066021	5.87e-14	-3.5e+12	0.000	-.2066021	-.2066021
C4890	.5468322	5.87e-14	9.3e+12	0.000	.5468322	.5468322
C4902	-.1446499	5.87e-14	-2.5e+12	0.000	-.1446499	-.1446499
C4918	1.364948	5.87e-14	2.3e+13	0.000	1.364948	1.364948
C4934	1.73682	5.87e-14	3.0e+13	0.000	1.73682	1.73682
C4942	.4693614	5.87e-14	8.0e+12	0.000	.4693614	.4693614
C4962	.9904048	5.87e-14	1.7e+13	0.000	.9904048	.9904048
C4966	1.248511	5.87e-14	2.1e+13	0.000	1.248511	1.248511
C4970	-.3554547	5.87e-14	-6.1e+12	0.000	-.3554547	-.3554547
C4974	-.0102475	5.87e-14	-1.7e+11	0.000	-.0102475	-.0102475
ffrdc_count						
1	.2421941	.3844685	0.63	0.529	-.5137143	.9981026
2	0	(omitted)				

3	0	(omitted)				
5	0	(omitted)				
8	-.050224	.0257456	-1.95	0.052	-.1008428	.0003948
9	-.0430036	.0231192	-1.86	0.064	-.0884584	.0024513
10	-.0372601	.0118493	-3.14	0.002	-.0605571	-.0139631
11	.0018612	.0041443	0.45	0.654	-.0062869	.0100092
12	.0047793	.0033052	1.45	0.149	-.0017191	.0112777
13	0	(omitted)				
_cons	11.7092	.0046634	2510.87	0.000	11.70003	11.71837

258 outreg2 using output/ols_annual_avg_emplvl.doc, append keep(log_federal_funding) add
  > text(MSA FE, Yes, Year FE, Yes, FFRDC count FE, Yes)
  output/ols_annual_avg_emplvl.doc
  dir : seeout

259
  end of do-file

260 do code/3-instrument-processing-and-iv.do

261 cd C:\Users\ecsxn\Documents\repo\rd_spillovers_1433
  C:\Users\ecsxn\Documents\repo\rd_spillovers_1433

262
263 //defense instrument----------------
264
265 //import defense total budget data
266 import delimited data/raw/API_MS.MIL.XPND.CD_DS2_en_csv_v2_2254956.csv, rowrange(5:)
  > clear
  (66 vars, 265 obs)

267 keep if v1 == "United States" | v1 == "Country Name"
  (263 observations deleted)

268 xpose, clear

269 ren v1 year

270 ren v2 total_military_spending

271 drop if year == . | total_military_spending == .
  (6 observations deleted)

272 save data/intermediate/total_us_military_spending, replace
  file data/intermediate/total_us_military_spending.dta saved

273
274
275
276
277
278 //obtain DoD FFRDC funding
279 use data/intermediate/ffrdcrd_all, clear

280 keep if question == "Federal agency"
  (26,841 observations deleted)

281 keep if row == "Department of Defense" //homeland security too maybe?
  (686 observations deleted)

```
282 keep year ZIP data inst_city

283
284 //crosswalk to county
285 merge m:1 ZIP using data/intermediate/zip_to_county_unique, keepusing(COUNTY)

        Result                          # of obs.

        not matched                        28,341
            from master                        44  (_merge==1)
            from using                     28,297  (_merge==2)

        matched                                67  (_merge==3)


286 drop if _merge == 2
  (28,297 observations deleted)

287
288 //handcode counties where there is no unique county for that zip
289 replace COUNTY = "25017" if inst_city == "Lexington"
  (4 real changes made)

290 replace COUNTY = "51013" if inst_city == "Arlington"
  (0 real changes made)

291 replace COUNTY = "51510" if inst_city == "Alexandria"
  (12 real changes made)

292 replace COUNTY = "51003" if inst_city == "Charlottesville"
  (4 real changes made)

293 replace COUNTY = "17043" if inst_city == "Argonne"
  (4 real changes made)

294 replace COUNTY = "48453" if inst_city == "Austin"
  (0 real changes made)

295 replace COUNTY = "16019" if inst_city == "Idaho Falls"
  (4 real changes made)

296 replace COUNTY = "35028" if inst_city == "Los Alamos"
  (4 real changes made)

297 replace COUNTY = "06037" if inst_city == "Santa Monica"
  (8 real changes made)

298 replace COUNTY = "06001" if inst_city == "Livermore"
  (4 real changes made)

299 drop if ZIP == "99999"
  (0 observations deleted)

300
301 drop _merge

302
303 //crosswalk to MSA
304 merge m:1 COUNTY using data/intermediate/county-to-msa

        Result                          # of obs.

        not matched                         3,225
            from master                         0  (_merge==1)
            from using                      3,225  (_merge==2)

        matched                               111  (_merge==3)
```

```
305 drop if _merge == 2
   (3,225 observations deleted)

306 keep if msatype == "Metro"
   (8 observations deleted)

307
308
309
310 collapse (sum) data, by(year msacode msatitle)

311
312
313 //adjust for inflation
314 merge m:1 year using data/intermediate/inflation_adjustment
```

Result	# of obs.	
not matched	41	
from master	0	(_merge==1)
from using	41	(_merge==2)
matched	67	(_merge==3)

```
315 keep if _merge == 3
   (41 observations deleted)

316 replace data = data / dollarvalue
   (50 real changes made)

317 drop _merge dollarvalue

318
319 //export
320 preserve

321 ren data defense_funding_thousands

322 save data/intermediate/defense_funding_thousands, replace
   file data/intermediate/defense_funding_thousands.dta saved

323 restore

324
325 //merge in total defense budget data (current USD)
326 merge m:1 year using data/intermediate/total_us_military_spending
   (note: variable year was int, now float to accommodate using data's values)
```

Result	# of obs.	
not matched	56	
from master	0	(_merge==1)
from using	56	(_merge==2)
matched	67	(_merge==3)

```
327 keep if _merge == 3
   (56 observations deleted)
```

```
328 drop _merge

329
330 //calculate budget ratios
331 gen budget_ratio = data * 1000 / total_military_spending

332
333 //calculate average across 2016-2019
334 drop total_military_spending data

335 reshape wide budget_ratio, i(msacode msatitle) j(year)
  (note: j = 2016 2017 2018 2019)

  Data                                   long   ->   wide
  ─────────────────────────────────────────────────────────────────────────
  Number of obs.                           67   ->       19
  Number of variables                       4   ->        6
  j variable (4 values)                  year   ->   (dropped)
  xij variables:
                               budget_ratio   ->   budget_ratio2016 budget_ratio2017 ... b
  > udget_ratio2019
  ─────────────────────────────────────────────────────────────────────────

336 recode budget_ratio201* (. = 0)
  (budget_ratio2016: 4 changes made)
  (budget_ratio2017: 2 changes made)
  (budget_ratio2018: 1 changes made)
  (budget_ratio2019: 2 changes made)

337 egen avg_budget_ratio = rowmean(budget_ratio201*)

338
339 //note: only 19 MSAs reported nonzero defense funding anytime in 2016-2019
340 drop budget_ratio201*

341 save data/intermediate/defense_budget_ratios, replace
  file data/intermediate/defense_budget_ratios.dta saved

342
343
344
345
346
347
348 //defense instrument cont'd --------------------------------
349 use data/intermediate/merged_MetroMSAs_allind_post01, clear

350
351 encode msacode, gen(msa_factor)

352
353 replace avg_annual_pay = avg_annual_pay/1000
  (7,372 real changes made)

354 label variable avg_annual_pay "Average annual pay of employed workers (thousands 201
  > 9$)"

355 replace annual_avg_emplvl = annual_avg_emplvl / 1000
  (7,372 real changes made)
```

```
356 label variable annual_avg_emplvl "Annual average of total employment (thousands)"

357 replace federal_funding = federal_funding / 1000
  (379 real changes made)

358 label variable federal_funding "Total federal FFRDC funding received (millions 2019$
  > )"

359
360 merge m:1 msacode msatitle using data/intermediate/defense_budget_ratios

        Result                          # of obs.
        ─────────────────────────────────────────
        not matched                         7,011
            from master                     7,011  (_merge==1)
            from using                          0  (_merge==2)

        matched                               361  (_merge==3)
        ─────────────────────────────────────────

361 recode avg_budget_ratio (. = 0)
  (avg_budget_ratio: 7011 changes made)

362 drop _merge

363
364 merge m:1 year using data/intermediate/total_us_military_spending
  (note: variable year was int, now float to accommodate using data's values)

        Result                          # of obs.
        ─────────────────────────────────────────
        not matched                            41
            from master                         0  (_merge==1)
            from using                         41  (_merge==2)

        matched                             7,372  (_merge==3)
        ─────────────────────────────────────────

365 keep if _merge == 3
  (41 observations deleted)

366 drop _merge

367
368 gen defense_funding_instrument = avg_budget_ratio * total_military_spending

369
370 //summary stats
371 preserve

372 collapse (sum) federal_funding (mean) total_military_spending, by(year)

373 replace total_military_spending = total_military_spending/1000000000
  (19 real changes made)

374 label variable federal_funding "FFRDC Funding"

375 label variable total_military_spending "Military Spending"

376 graph twoway (line total_military_spending year, yaxis(1) ytitle("Total US Military
  > Spending (Billions Current $)", axis(1))) (line federal_funding year, yaxis(2) ytitl
  > e("Total federal FFRDC funding (millions 2019$)", axis(2))), title("Comovement of US
  >  Military Spending" "and federal FFRDC funding")
```

377 graph export "output/defense_instrument_comovement.png", as(png) replace
   (file output/defense_instrument_comovement.png written in PNG format)

378 restore

379
380
381 //take logs
382 gen log_avg_annual_pay = asinh(avg_annual_pay * 1000)

383 gen log_annual_avg_emplvl = asinh(annual_avg_emplvl * 1000)

384 gen log_federal_funding = asinh(federal_funding * 1000000)

385
386
387 //regressions for paper
388 reg log_federal_funding i.msa_factor, robust cluster(msa_factor)

```
  Linear regression                              Number of obs    =      7,372
                                                 F(0, 387)        =          .
                                                 Prob > F         =          .
                                                 R-squared        =     0.9794
                                                 Root MSE         =      .6608

                          (Std. Err. adjusted for 388 clusters in msa_factor)
```

log_federa~g	Coef.	Robust Std. Err.	t	P>|t|	[95% Conf. Interval]	
msa_factor						
C1038	4.47e-14	4.59e-14	0.97	0.330	-4.55e-14	1.35e-13
C1042	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C1050	4.48e-14	4.59e-14	0.98	0.330	-4.54e-14	1.35e-13
C1054	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C1058	4.48e-14	4.59e-14	0.98	0.330	-4.54e-14	1.35e-13
C1074	22.35426	4.60e-14	4.9e+14	0.000	22.35426	22.35426
C1078	4.49e-14	4.59e-14	0.98	0.328	-4.53e-14	1.35e-13
C1090	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C1102	4.46e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C1110	4.45e-14	4.59e-14	0.97	0.333	-4.57e-14	1.35e-13
C1118	18.1292	4.59e-14	3.9e+14	0.000	18.1292	18.1292
C1126	4.50e-14	4.59e-14	0.98	0.328	-4.53e-14	1.35e-13
C1146	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C1150	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C1154	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C1164	4.46e-14	4.59e-14	0.97	0.332	-4.57e-14	1.35e-13
C1170	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C1202	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C1206	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C1210	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C1222	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C1226	4.46e-14	4.59e-14	0.97	0.332	-4.56e-14	1.35e-13
C1242	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C1254	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C1258	7.09397	4.59e-14	1.5e+14	0.000	7.09397	7.09397
C1262	4.46e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C1270	4.47e-14	4.59e-14	0.97	0.330	-4.55e-14	1.35e-13
C1294	4.46e-14	4.59e-14	0.97	0.332	-4.56e-14	1.35e-13
C1298	4.49e-14	4.59e-14	0.98	0.328	-4.53e-14	1.35e-13
C1302	4.49e-14	4.59e-14	0.98	0.328	-4.53e-14	1.35e-13
C1314	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C1322	4.50e-14	4.59e-14	0.98	0.328	-4.53e-14	1.35e-13
C1338	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C1346	4.48e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C1374	4.48e-14	4.59e-14	0.97	0.330	-4.55e-14	1.35e-13
C1378	4.46e-14	4.59e-14	0.97	0.332	-4.57e-14	1.35e-13
C1382	4.47e-14	4.59e-14	0.97	0.330	-4.55e-14	1.35e-13
C1390	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C1398	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C1401	4.47e-14	4.59e-14	0.97	0.330	-4.55e-14	1.35e-13
C1402	4.48e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13

C1410	4.47e-14	4.59e-14	0.97	0.330	-4.55e-14	1.35e-13
C1426	4.48e-14	4.59e-14	0.97	0.330	-4.55e-14	1.35e-13
C1446	21.25448	4.60e-14	4.6e+14	0.000	21.25448	21.25448
C1450	19.69514	4.67e-14	4.2e+14	0.000	19.69514	19.69514
C1454	4.45e-14	4.59e-14	0.97	0.334	-4.58e-14	1.35e-13
C1474	4.47e-14	4.59e-14	0.97	0.331	-4.55e-14	1.35e-13
C1486	4.48e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C1518	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C1526	4.49e-14	4.59e-14	0.98	0.328	-4.53e-14	1.35e-13
C1538	4.47e-14	4.59e-14	0.97	0.330	-4.55e-14	1.35e-13
C1550	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C1554	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C1568	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C1594	4.49e-14	4.59e-14	0.98	0.328	-4.53e-14	1.35e-13
C1598	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C1602	4.45e-14	4.59e-14	0.97	0.333	-4.57e-14	1.35e-13
C1606	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C1618	4.48e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C1622	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C1630	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C1654	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C1658	4.48e-14	4.59e-14	0.98	0.330	-4.54e-14	1.35e-13
C1662	4.47e-14	4.59e-14	0.97	0.330	-4.55e-14	1.35e-13
C1670	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C1674	4.46e-14	4.59e-14	0.97	0.332	-4.57e-14	1.35e-13
C1682	19.01221	4.59e-14	4.1e+14	0.000	19.01221	19.01221
C1686	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C1694	4.46e-14	4.59e-14	0.97	0.332	-4.56e-14	1.35e-13
C1698	21.49204	4.60e-14	4.7e+14	0.000	21.49204	21.49204
C1702	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C1714	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C1730	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C1742	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C1746	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C1766	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C1778	4.47e-14	4.59e-14	0.97	0.330	-4.55e-14	1.35e-13
C1782	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C1786	4.48e-14	4.59e-14	0.97	0.330	-4.55e-14	1.35e-13
C1790	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C1798	4.46e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C1802	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C1814	4.46e-14	4.59e-14	0.97	0.332	-4.56e-14	1.35e-13
C1858	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C1870	4.47e-14	4.59e-14	0.97	0.330	-4.55e-14	1.35e-13
C1888	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C1906	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C1910	4.46e-14	4.59e-14	0.97	0.332	-4.56e-14	1.35e-13
C1914	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C1918	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C1930	4.48e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C1934	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C1938	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C1946	4.47e-14	4.59e-14	0.97	0.330	-4.55e-14	1.35e-13
C1950	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C1966	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C1974	20.29388	4.63e-14	4.4e+14	0.000	20.29388	20.29388
C1978	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C1982	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C2002	4.48e-14	4.59e-14	0.97	0.330	-4.55e-14	1.35e-13
C2010	4.47e-14	4.59e-14	0.97	0.330	-4.55e-14	1.35e-13
C2022	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C2026	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C2050	4.48e-14	4.59e-14	0.98	0.330	-4.54e-14	1.35e-13
C2070	4.47e-14	4.59e-14	0.97	0.330	-4.55e-14	1.35e-13
C2074	4.46e-14	4.59e-14	0.97	0.332	-4.56e-14	1.35e-13
C2094	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C2106	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C2114	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C2130	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C2134	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C2150	4.48e-14	4.59e-14	0.97	0.330	-4.55e-14	1.35e-13
C2166	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13

C2178	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C2182	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C2202	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C2214	4.47e-14	4.59e-14	0.97	0.331	-4.55e-14	1.35e-13
C2218	4.49e-14	4.59e-14	0.98	0.328	-4.53e-14	1.35e-13
C2222	4.46e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C2238	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C2242	4.46e-14	4.59e-14	0.97	0.332	-4.57e-14	1.35e-13
C2250	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C2252	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C2254	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C2266	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C2290	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C2306	4.47e-14	4.59e-14	0.97	0.330	-4.55e-14	1.35e-13
C2342	4.48e-14	4.59e-14	0.97	0.330	-4.55e-14	1.35e-13
C2346	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C2354	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C2358	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C2390	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C2402	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C2414	4.49e-14	4.59e-14	0.98	0.329	-4.53e-14	1.35e-13
C2422	4.46e-14	4.59e-14	0.97	0.332	-4.57e-14	1.35e-13
C2426	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C2430	4.48e-14	4.59e-14	0.97	0.330	-4.55e-14	1.35e-13
C2434	4.48e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C2442	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C2450	4.50e-14	4.59e-14	0.98	0.328	-4.53e-14	1.35e-13
C2454	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C2458	4.47e-14	4.59e-14	0.97	0.331	-4.55e-14	1.35e-13
C2466	4.46e-14	4.59e-14	0.97	0.332	-4.57e-14	1.35e-13
C2478	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C2486	4.46e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C2502	4.45e-14	4.59e-14	0.97	0.333	-4.57e-14	1.35e-13
C2506	4.46e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C2518	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C2522	4.48e-14	4.59e-14	0.97	0.330	-4.55e-14	1.35e-13
C2526	4.47e-14	4.59e-14	0.97	0.331	-4.55e-14	1.35e-13
C2542	4.47e-14	4.59e-14	0.97	0.330	-4.55e-14	1.35e-13
C2550	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C2554	4.50e-14	4.59e-14	0.98	0.327	-4.52e-14	1.35e-13
C2562	4.46e-14	4.59e-14	0.97	0.332	-4.56e-14	1.35e-13
C2586	4.46e-14	4.59e-14	0.97	0.332	-4.57e-14	1.35e-13
C2594	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C2598	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C2614	4.46e-14	4.59e-14	0.97	0.332	-4.56e-14	1.35e-13
C2630	4.48e-14	4.59e-14	0.97	0.330	-4.55e-14	1.35e-13
C2638	4.48e-14	4.59e-14	0.98	0.330	-4.54e-14	1.35e-13
C2642	4.47e-14	4.59e-14	0.97	0.331	-4.55e-14	1.35e-13
C2658	4.48e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C2662	4.50e-14	4.59e-14	0.98	0.328	-4.53e-14	1.35e-13
C2682	20.49089	4.60e-14	4.5e+14	0.000	20.49089	20.49089
C2690	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C2698	4.45e-14	4.59e-14	0.97	0.332	-4.57e-14	1.35e-13
C2706	9.994283	4.59e-14	2.2e+14	0.000	9.994283	9.994283
C2710	4.50e-14	4.59e-14	0.98	0.328	-4.53e-14	1.35e-13
C2714	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C2718	4.47e-14	4.59e-14	0.97	0.331	-4.55e-14	1.35e-13
C2726	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C2734	4.49e-14	4.59e-14	0.98	0.328	-4.53e-14	1.35e-13
C2750	4.47e-14	4.59e-14	0.97	0.331	-4.55e-14	1.35e-13
C2762	4.47e-14	4.59e-14	0.97	0.330	-4.55e-14	1.35e-13
C2774	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C2778	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C2786	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C2790	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C2798	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C2802	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C2810	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C2814	4.47e-14	4.59e-14	0.97	0.331	-4.55e-14	1.35e-13
C2842	21.41362	4.67e-14	4.6e+14	0.000	21.41362	21.41362
C2866	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C2870	4.50e-14	4.59e-14	0.98	0.328	-4.53e-14	1.35e-13

C2874	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C2894	21.67092	4.62e-14	4.7e+14	0.000	21.67092	21.67092
C2902	4.47e-14	4.59e-14	0.97	0.330	-4.55e-14	1.35e-13
C2910	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C2918	4.47e-14	4.59e-14	0.97	0.330	-4.55e-14	1.35e-13
C2920	4.48e-14	4.59e-14	0.97	0.330	-4.55e-14	1.35e-13
C2934	4.47e-14	4.59e-14	0.97	0.330	-4.55e-14	1.35e-13
C2942	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C2946	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C2954	4.46e-14	4.59e-14	0.97	0.332	-4.57e-14	1.35e-13
C2962	4.49e-14	4.59e-14	0.98	0.328	-4.53e-14	1.35e-13
C2970	4.46e-14	4.59e-14	0.97	0.332	-4.57e-14	1.35e-13
C2974	4.48e-14	4.59e-14	0.97	0.330	-4.55e-14	1.35e-13
C2982	4.47e-14	4.59e-14	0.97	0.331	-4.55e-14	1.35e-13
C2994	4.48e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C3002	4.49e-14	4.59e-14	0.98	0.328	-4.53e-14	1.35e-13
C3014	4.46e-14	4.59e-14	0.97	0.332	-4.57e-14	1.35e-13
C3030	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C3034	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C3046	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C3062	4.48e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C3070	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C3078	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C3086	4.47e-14	4.59e-14	0.97	0.330	-4.55e-14	1.35e-13
C3098	4.46e-14	4.59e-14	0.97	0.332	-4.57e-14	1.35e-13
C3102	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C3108	22.39022	4.62e-14	4.8e+14	0.000	22.39022	22.39022
C3114	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C3118	4.47e-14	4.59e-14	0.97	0.330	-4.55e-14	1.35e-13
C3134	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C3142	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C3146	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C3154	4.47e-14	4.59e-14	0.97	0.330	-4.55e-14	1.35e-13
C3170	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C3174	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C3186	4.46e-14	4.59e-14	0.97	0.332	-4.57e-14	1.35e-13
C3190	4.45e-14	4.59e-14	0.97	0.333	-4.57e-14	1.35e-13
C3242	4.47e-14	4.59e-14	0.97	0.330	-4.55e-14	1.35e-13
C3258	4.46e-14	4.59e-14	0.97	0.332	-4.56e-14	1.35e-13
C3278	4.48e-14	4.59e-14	0.98	0.330	-4.54e-14	1.35e-13
C3282	4.46e-14	4.59e-14	0.97	0.332	-4.56e-14	1.35e-13
C3290	4.46e-14	4.59e-14	0.97	0.332	-4.57e-14	1.35e-13
C3310	4.48e-14	4.59e-14	0.97	0.330	-4.55e-14	1.35e-13
C3314	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C3322	4.48e-14	4.59e-14	0.98	0.330	-4.54e-14	1.35e-13
C3326	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C3334	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C3346	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C3354	4.47e-14	4.59e-14	0.97	0.331	-4.55e-14	1.35e-13
C3366	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C3370	4.47e-14	4.59e-14	0.97	0.331	-4.55e-14	1.35e-13
C3374	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C3378	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C3386	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C3406	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C3410	4.46e-14	4.59e-14	0.97	0.332	-4.57e-14	1.35e-13
C3458	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C3462	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C3474	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C3482	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C3490	4.46e-14	4.59e-14	0.97	0.332	-4.56e-14	1.35e-13
C3494	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C3498	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C3510	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C3530	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C3538	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C3562	20.88553	4.59e-14	4.5e+14	0.000	20.88553	20.88553
C3566	4.47e-14	4.59e-14	0.97	0.330	-4.55e-14	1.35e-13
C3584	4.46e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C3598	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C3610	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C3614	4.48e-14	4.59e-14	0.98	0.330	-4.54e-14	1.35e-13

C3622	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C3626	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C3642	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C3650	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C3654	4.48e-14	4.59e-14	0.97	0.330	-4.55e-14	1.35e-13
C3674	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C3678	4.48e-14	4.59e-14	0.98	0.330	-4.54e-14	1.35e-13
C3698	4.46e-14	4.59e-14	0.97	0.332	-4.57e-14	1.35e-13
C3710	4.47e-14	4.59e-14	0.97	0.330	-4.55e-14	1.35e-13
C3734	4.48e-14	4.59e-14	0.98	0.330	-4.54e-14	1.35e-13
C3746	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C3762	4.46e-14	4.59e-14	0.97	0.332	-4.57e-14	1.35e-13
C3786	4.46e-14	4.59e-14	0.97	0.332	-4.56e-14	1.35e-13
C3790	4.45e-14	4.59e-14	0.97	0.333	-4.57e-14	1.35e-13
C3798	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C3806	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C3822	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C3830	19.12853	4.60e-14	4.2e+14	0.000	19.12853	19.12853
C3834	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C3854	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C3866	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C3886	4.48e-14	4.59e-14	0.97	0.330	-4.55e-14	1.35e-13
C3890	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C3894	4.46e-14	4.59e-14	0.97	0.332	-4.57e-14	1.35e-13
C3914	4.45e-14	4.59e-14	0.97	0.332	-4.57e-14	1.35e-13
C3930	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C3934	4.45e-14	4.59e-14	0.97	0.333	-4.57e-14	1.35e-13
C3938	4.48e-14	4.59e-14	0.98	0.330	-4.54e-14	1.35e-13
C3946	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C3954	4.49e-14	4.59e-14	0.98	0.328	-4.53e-14	1.35e-13
C3958	4.50e-14	4.59e-14	0.98	0.328	-4.53e-14	1.35e-13
C3966	4.47e-14	4.59e-14	0.97	0.331	-4.55e-14	1.35e-13
C3974	4.47e-14	4.59e-14	0.97	0.331	-4.55e-14	1.35e-13
C3982	4.46e-14	4.59e-14	0.97	0.332	-4.57e-14	1.35e-13
C3990	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C4006	4.46e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C4014	4.46e-14	4.59e-14	0.97	0.332	-4.57e-14	1.35e-13
C4022	4.50e-14	4.59e-14	0.98	0.328	-4.53e-14	1.35e-13
C4034	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C4038	4.47e-14	4.59e-14	0.97	0.331	-4.55e-14	1.35e-13
C4042	4.45e-14	4.59e-14	0.97	0.333	-4.57e-14	1.35e-13
C4058	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C4066	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C4090	4.45e-14	4.59e-14	0.97	0.333	-4.57e-14	1.35e-13
C4098	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C4106	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C4110	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C4114	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C4118	4.46e-14	4.59e-14	0.97	0.332	-4.57e-14	1.35e-13
C4142	4.48e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C4150	4.46e-14	4.59e-14	0.97	0.332	-4.56e-14	1.35e-13
C4154	4.47e-14	4.59e-14	0.97	0.331	-4.55e-14	1.35e-13
C4162	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C4166	4.45e-14	4.59e-14	0.97	0.333	-4.58e-14	1.35e-13
C4170	17.15917	4.59e-14	3.7e+14	0.000	17.15917	17.15917
C4174	4.45e-14	4.59e-14	0.97	0.333	-4.58e-14	1.35e-13
C4186	22.34408	4.61e-14	4.8e+14	0.000	22.34408	22.34408
C4190	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C4194	4.48e-14	4.59e-14	0.98	0.330	-4.54e-14	1.35e-13
C4198	4.46e-14	4.59e-14	0.97	0.332	-4.57e-14	1.35e-13
C4202	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C4210	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C4214	4.46e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C4220	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C4222	4.48e-14	4.59e-14	0.97	0.330	-4.55e-14	1.35e-13
C4234	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C4254	4.46e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C4266	4.49e-14	4.59e-14	0.98	0.328	-4.53e-14	1.35e-13
C4268	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C4270	4.50e-14	4.59e-14	0.98	0.327	-4.52e-14	1.35e-13
C4310	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C4330	4.50e-14	4.59e-14	0.98	0.328	-4.53e-14	1.35e-13

C4334	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C4342	4.50e-14	4.59e-14	0.98	0.328	-4.53e-14	1.35e-13
C4358	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C4362	4.47e-14	4.59e-14	0.97	0.331	-4.55e-14	1.35e-13
C4378	4.46e-14	4.59e-14	0.97	0.332	-4.57e-14	1.35e-13
C4390	4.50e-14	4.59e-14	0.98	0.327	-4.52e-14	1.35e-13
C4406	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C4410	4.49e-14	4.59e-14	0.98	0.329	-4.53e-14	1.35e-13
C4414	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C4418	4.50e-14	4.59e-14	0.98	0.328	-4.53e-14	1.35e-13
C4422	4.47e-14	4.59e-14	0.97	0.330	-4.55e-14	1.35e-13
C4430	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C4442	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C4470	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C4494	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C4506	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C4522	4.46e-14	4.59e-14	0.97	0.332	-4.57e-14	1.35e-13
C4530	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C4546	4.44e-14	4.59e-14	0.97	0.334	-4.58e-14	1.35e-13
C4550	4.50e-14	4.59e-14	0.98	0.328	-4.53e-14	1.35e-13
C4554	4.46e-14	4.59e-14	0.97	0.332	-4.57e-14	1.35e-13
C4578	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C4582	4.44e-14	4.59e-14	0.97	0.334	-4.59e-14	1.35e-13
C4594	19.0588	4.60e-14	4.1e+14	0.000	19.0588	19.0588
C4606	18.20885	4.59e-14	4.0e+14	0.000	18.20885	18.20885
C4614	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C4622	4.48e-14	4.59e-14	0.97	0.330	-4.55e-14	1.35e-13
C4634	4.48e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C4652	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C4654	4.46e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C4666	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C4670	4.45e-14	4.59e-14	0.97	0.333	-4.57e-14	1.35e-13
C4702	4.46e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C4722	4.50e-14	4.59e-14	0.98	0.328	-4.53e-14	1.35e-13
C4726	19.28864	4.59e-14	4.2e+14	0.000	19.28864	19.28864
C4730	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C4738	4.46e-14	4.59e-14	0.97	0.332	-4.57e-14	1.35e-13
C4746	4.46e-14	4.59e-14	0.97	0.332	-4.56e-14	1.35e-13
C4758	4.48e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C4790	21.91143	4.61e-14	4.8e+14	0.000	21.91143	21.91143
C4794	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C4806	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C4814	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C4826	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C4830	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C4854	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C4862	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C4866	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C4870	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C4890	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C4902	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C4918	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C4934	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C4942	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C4962	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C4966	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C4970	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C4974	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
_cons	-4.46e-14	4.59e-14	-0.97	0.332	-1.35e-13	4.56e-14

389 predict resid_log_federal_funding, residuals

390 reg defense_funding_instrument i.msa_factor, robust cluster(msa_factor)

Linear regression

Number of obs	=	7,372
F(313, 387)	=	.
Prob > F	=	.
R-squared	=	0.9622
Root MSE	=	1.9e+07

(Std. Err. adjusted for 388 clusters in msa_factor)

defense_fu~t	Coef.	Robust Std. Err.	t	P>|t|	[95% Conf. Interval]	
msa_factor						
C1038	-3.99e-07	4.10e-07	-0.97	0.331	-1.20e-06	4.07e-07
C1042	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C1050	-3.97e-07	4.10e-07	-0.97	0.333	-1.20e-06	4.09e-07
C1054	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C1058	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C1074	7.99e+08	4.33e-07	1.8e+15	0.000	7.99e+08	7.99e+08
C1078	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C1090	-3.98e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C1102	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C1110	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C1118	4662.512	4.10e-07	1.1e+10	0.000	4662.512	4662.512
C1126	-4.00e-07	4.10e-07	-0.97	0.330	-1.21e-06	4.07e-07
C1146	-3.98e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C1150	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C1154	-3.98e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C1164	-4.01e-07	4.10e-07	-0.98	0.329	-1.21e-06	4.05e-07
C1170	-4.01e-07	4.10e-07	-0.98	0.329	-1.21e-06	4.05e-07
C1202	-3.98e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C1206	-4.01e-07	4.10e-07	-0.98	0.329	-1.21e-06	4.06e-07
C1210	-3.99e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C1222	-3.99e-07	4.10e-07	-0.97	0.331	-1.20e-06	4.07e-07
C1226	-4.01e-07	4.10e-07	-0.98	0.329	-1.21e-06	4.05e-07
C1242	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C1254	-4.01e-07	4.10e-07	-0.98	0.329	-1.21e-06	4.05e-07
C1258	-3.99e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C1262	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C1270	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C1294	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C1298	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C1302	-3.99e-07	4.10e-07	-0.97	0.331	-1.20e-06	4.07e-07
C1314	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C1322	-3.98e-07	4.10e-07	-0.97	0.333	-1.20e-06	4.09e-07
C1338	-3.98e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C1346	-3.98e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C1374	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C1378	-4.00e-07	4.10e-07	-0.97	0.330	-1.21e-06	4.06e-07
C1382	-3.98e-07	4.10e-07	-0.97	0.333	-1.20e-06	4.09e-07
C1390	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C1398	-3.98e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C1401	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C1402	-3.98e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C1410	-4.00e-07	4.10e-07	-0.97	0.330	-1.21e-06	4.06e-07
C1426	-3.98e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C1446	8.33e+08	4.13e-07	2.0e+15	0.000	8.33e+08	8.33e+08
C1450	5901519	4.10e-07	1.4e+13	0.000	5901519	5901519
C1454	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C1474	-4.00e-07	4.10e-07	-0.97	0.330	-1.21e-06	4.07e-07
C1486	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C1518	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C1526	-3.98e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C1538	-4.00e-07	4.10e-07	-0.97	0.330	-1.21e-06	4.07e-07
C1550	-3.99e-07	4.10e-07	-0.97	0.331	-1.20e-06	4.07e-07
C1554	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C1568	-4.00e-07	4.10e-07	-0.97	0.330	-1.21e-06	4.07e-07
C1594	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C1598	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07

C1602	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C1606	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C1618	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C1622	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C1630	-4.00e-07	4.10e-07	-0.98	0.329	-1.21e-06	4.06e-07
C1654	-4.00e-07	4.10e-07	-0.97	0.330	-1.21e-06	4.06e-07
C1658	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C1662	-3.99e-07	4.10e-07	-0.97	0.331	-1.20e-06	4.07e-07
C1670	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C1674	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C1682	988994.4	4.10e-07	2.4e+12	0.000	988994.4	988994.4
C1686	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C1694	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C1698	1.85e+07	4.10e-07	4.5e+13	0.000	1.85e+07	1.85e+07
C1702	-3.98e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C1714	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C1730	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C1742	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C1746	-3.98e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C1766	-4.00e-07	4.10e-07	-0.97	0.330	-1.21e-06	4.07e-07
C1778	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C1782	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C1786	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C1790	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C1798	-4.01e-07	4.10e-07	-0.98	0.329	-1.21e-06	4.05e-07
C1802	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C1814	-3.99e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C1858	-4.01e-07	4.10e-07	-0.98	0.329	-1.21e-06	4.06e-07
C1870	-4.01e-07	4.10e-07	-0.98	0.329	-1.21e-06	4.05e-07
C1888	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C1906	-3.98e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C1910	-4.00e-07	4.10e-07	-0.97	0.330	-1.21e-06	4.07e-07
C1914	-3.99e-07	4.10e-07	-0.97	0.331	-1.20e-06	4.07e-07
C1918	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C1930	-4.00e-07	4.10e-07	-0.97	0.330	-1.21e-06	4.07e-07
C1934	-4.00e-07	4.10e-07	-0.98	0.329	-1.21e-06	4.06e-07
C1938	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C1946	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C1950	-4.00e-07	4.10e-07	-0.97	0.330	-1.21e-06	4.07e-07
C1966	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C1974	6495448	4.10e-07	1.6e+13	0.000	6495448	6495448
C1978	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C1982	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C2002	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C2010	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C2022	-4.00e-07	4.10e-07	-0.97	0.330	-1.21e-06	4.07e-07
C2026	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C2050	-3.99e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C2070	-3.99e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C2074	-4.01e-07	4.10e-07	-0.98	0.328	-1.21e-06	4.05e-07
C2094	-3.98e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C2106	-3.99e-07	4.10e-07	-0.97	0.331	-1.20e-06	4.07e-07
C2114	-4.01e-07	4.10e-07	-0.98	0.328	-1.21e-06	4.05e-07
C2130	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C2134	-3.98e-07	4.10e-07	-0.97	0.333	-1.20e-06	4.08e-07
C2150	-4.01e-07	4.10e-07	-0.98	0.328	-1.21e-06	4.05e-07
C2166	-3.99e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.07e-07
C2178	-3.98e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C2182	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C2202	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C2214	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C2218	-3.98e-07	4.10e-07	-0.97	0.333	-1.20e-06	4.08e-07
C2222	-4.00e-07	4.10e-07	-0.98	0.329	-1.21e-06	4.06e-07
C2238	-4.01e-07	4.10e-07	-0.98	0.329	-1.21e-06	4.06e-07
C2242	-4.00e-07	4.10e-07	-0.97	0.330	-1.21e-06	4.06e-07
C2250	-4.01e-07	4.10e-07	-0.98	0.329	-1.21e-06	4.05e-07
C2252	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C2254	-4.00e-07	4.10e-07	-0.97	0.330	-1.21e-06	4.07e-07
C2266	-3.99e-07	4.10e-07	-0.97	0.331	-1.20e-06	4.07e-07
C2290	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C2306	-3.98e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C2342	-3.99e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07

C2346	-4.00e-07	4.10e-07	-0.97	0.330	-1.21e-06	4.07e-07
C2354	-3.99e-07	4.10e-07	-0.97	0.331	-1.20e-06	4.07e-07
C2358	-3.99e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C2390	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C2402	-3.99e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C2414	-3.97e-07	4.10e-07	-0.97	0.333	-1.20e-06	4.09e-07
C2422	-4.01e-07	4.10e-07	-0.98	0.329	-1.21e-06	4.05e-07
C2426	-3.97e-07	4.10e-07	-0.97	0.334	-1.20e-06	4.09e-07
C2430	-4.00e-07	4.10e-07	-0.98	0.329	-1.21e-06	4.06e-07
C2434	-3.98e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C2442	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C2450	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C2454	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C2458	-3.99e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C2466	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C2478	-3.99e-07	4.10e-07	-0.97	0.331	-1.20e-06	4.07e-07
C2486	-4.01e-07	4.10e-07	-0.98	0.329	-1.21e-06	4.05e-07
C2502	-3.98e-07	4.10e-07	-0.97	0.333	-1.20e-06	4.08e-07
C2506	-3.98e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C2518	-3.96e-07	4.10e-07	-0.97	0.334	-1.20e-06	4.10e-07
C2522	-3.99e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C2526	-4.01e-07	4.10e-07	-0.98	0.329	-1.21e-06	4.05e-07
C2542	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C2550	-3.98e-07	4.10e-07	-0.97	0.333	-1.20e-06	4.08e-07
C2554	-3.97e-07	4.10e-07	-0.97	0.333	-1.20e-06	4.09e-07
C2562	-4.02e-07	4.10e-07	-0.98	0.328	-1.21e-06	4.04e-07
C2586	-3.99e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C2594	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C2598	-3.98e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C2614	-4.01e-07	4.10e-07	-0.98	0.329	-1.21e-06	4.05e-07
C2630	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C2638	-3.98e-07	4.10e-07	-0.97	0.333	-1.20e-06	4.08e-07
C2642	-4.00e-07	4.10e-07	-0.98	0.329	-1.21e-06	4.06e-07
C2658	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C2662	-3.98e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C2682	3.80e+07	4.10e-07	9.3e+13	0.000	3.80e+07	3.80e+07
C2690	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C2698	-4.01e-07	4.10e-07	-0.98	0.329	-1.21e-06	4.05e-07
C2706	-4.01e-07	4.10e-07	-0.98	0.329	-1.21e-06	4.06e-07
C2710	-3.99e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C2714	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C2718	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C2726	-3.98e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C2734	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C2750	-3.99e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C2762	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C2774	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C2778	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C2786	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C2790	-4.01e-07	4.10e-07	-0.98	0.329	-1.21e-06	4.05e-07
C2798	-3.98e-07	4.10e-07	-0.97	0.333	-1.20e-06	4.09e-07
C2802	-3.98e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C2810	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C2814	-3.99e-07	4.10e-07	-0.97	0.331	-1.20e-06	4.07e-07
C2842	7.55e+07	4.10e-07	1.8e+14	0.000	7.55e+07	7.55e+07
C2866	-3.98e-07	4.10e-07	-0.97	0.333	-1.20e-06	4.08e-07
C2870	-3.97e-07	4.10e-07	-0.97	0.333	-1.20e-06	4.09e-07
C2874	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C2894	2.96e+07	4.10e-07	7.2e+13	0.000	2.96e+07	2.96e+07
C2902	-3.98e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C2910	-4.00e-07	4.10e-07	-0.98	0.329	-1.21e-06	4.06e-07
C2918	-3.99e-07	4.10e-07	-0.97	0.331	-1.20e-06	4.07e-07
C2920	-3.98e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C2934	-3.99e-07	4.10e-07	-0.97	0.331	-1.20e-06	4.07e-07
C2942	-3.98e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C2946	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C2954	-4.01e-07	4.10e-07	-0.98	0.329	-1.21e-06	4.05e-07
C2962	-3.98e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C2970	-4.02e-07	4.10e-07	-0.98	0.327	-1.21e-06	4.04e-07
C2974	-3.99e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C2982	-3.98e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C2994	-3.99e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07

C3002	-4.00e-07	4.10e-07	-0.97	0.330	-1.21e-06	4.07e-07
C3014	-4.01e-07	4.10e-07	-0.98	0.328	-1.21e-06	4.05e-07
C3030	-3.98e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C3034	-3.98e-07	4.10e-07	-0.97	0.333	-1.20e-06	4.08e-07
C3046	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C3062	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C3070	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C3078	-3.98e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C3086	-3.98e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C3098	-4.01e-07	4.10e-07	-0.98	0.329	-1.21e-06	4.05e-07
C3102	-3.97e-07	4.10e-07	-0.97	0.334	-1.20e-06	4.10e-07
C3108	9.59e+08	4.58e-07	2.1e+15	0.000	9.59e+08	9.59e+08
C3114	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C3118	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C3134	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C3142	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C3146	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C3154	-4.01e-07	4.10e-07	-0.98	0.328	-1.21e-06	4.05e-07
C3170	-3.97e-07	4.10e-07	-0.97	0.333	-1.20e-06	4.09e-07
C3174	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C3186	-3.99e-07	4.10e-07	-0.97	0.331	-1.20e-06	4.07e-07
C3190	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C3242	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C3258	-4.01e-07	4.10e-07	-0.98	0.328	-1.21e-06	4.05e-07
C3278	-3.99e-07	4.10e-07	-0.97	0.331	-1.20e-06	4.07e-07
C3282	-3.99e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.07e-07
C3290	-3.99e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C3310	-3.98e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C3314	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C3322	-3.98e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C3326	-4.00e-07	4.10e-07	-0.97	0.330	-1.21e-06	4.06e-07
C3334	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C3346	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C3354	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C3366	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C3370	-3.99e-07	4.10e-07	-0.97	0.331	-1.20e-06	4.07e-07
C3374	-4.00e-07	4.10e-07	-0.97	0.330	-1.21e-06	4.07e-07
C3378	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C3386	-4.00e-07	4.10e-07	-0.97	0.330	-1.21e-06	4.07e-07
C3406	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C3410	-4.01e-07	4.10e-07	-0.98	0.329	-1.21e-06	4.06e-07
C3458	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C3462	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C3474	-3.99e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C3482	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C3490	-3.99e-07	4.10e-07	-0.97	0.331	-1.20e-06	4.07e-07
C3494	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C3498	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C3510	-4.00e-07	4.10e-07	-0.97	0.330	-1.21e-06	4.06e-07
C3530	-3.99e-07	4.10e-07	-0.97	0.331	-1.20e-06	4.07e-07
C3538	-4.01e-07	4.10e-07	-0.98	0.329	-1.21e-06	4.06e-07
C3562	307419.8	4.10e-07	7.5e+11	0.000	307419.8	307419.8
C3566	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C3584	-3.98e-07	4.10e-07	-0.97	0.333	-1.20e-06	4.08e-07
C3598	-4.00e-07	4.10e-07	-0.97	0.330	-1.21e-06	4.07e-07
C3610	-4.01e-07	4.10e-07	-0.98	0.329	-1.21e-06	4.05e-07
C3614	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C3622	-3.98e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C3626	-3.98e-07	4.10e-07	-0.97	0.333	-1.20e-06	4.08e-07
C3642	-3.99e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C3650	-4.01e-07	4.10e-07	-0.98	0.329	-1.21e-06	4.06e-07
C3654	-3.99e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C3674	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C3678	-3.98e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C3698	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C3710	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C3734	-3.97e-07	4.10e-07	-0.97	0.333	-1.20e-06	4.09e-07
C3746	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C3762	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C3786	-4.01e-07	4.10e-07	-0.98	0.328	-1.21e-06	4.05e-07
C3790	-4.01e-07	4.10e-07	-0.98	0.328	-1.21e-06	4.05e-07
C3798	-4.00e-07	4.10e-07	-0.98	0.329	-1.21e-06	4.06e-07

C3806	-3.99e-07	4.10e-07	-0.97	0.331	-1.20e-06	4.07e-07
C3822	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C3830	7.58e+07	4.10e-07	1.8e+14	0.000	7.58e+07	7.58e+07
C3834	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C3854	-4.00e-07	4.10e-07	-0.98	0.329	-1.21e-06	4.06e-07
C3866	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C3886	-4.00e-07	4.10e-07	-0.97	0.330	-1.21e-06	4.06e-07
C3890	-4.00e-07	4.10e-07	-0.98	0.329	-1.21e-06	4.06e-07
C3894	-4.00e-07	4.10e-07	-0.97	0.330	-1.21e-06	4.07e-07
C3914	-4.01e-07	4.10e-07	-0.98	0.329	-1.21e-06	4.06e-07
C3930	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C3934	-4.00e-07	4.10e-07	-0.98	0.329	-1.21e-06	4.06e-07
C3938	-3.99e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C3946	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C3954	-4.00e-07	4.10e-07	-0.97	0.330	-1.21e-06	4.06e-07
C3958	-3.98e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C3966	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C3974	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C3982	-3.98e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C3990	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C4006	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C4014	-4.01e-07	4.10e-07	-0.98	0.328	-1.21e-06	4.05e-07
C4022	-3.97e-07	4.10e-07	-0.97	0.334	-1.20e-06	4.09e-07
C4034	-4.02e-07	4.10e-07	-0.98	0.328	-1.21e-06	4.04e-07
C4038	-4.01e-07	4.10e-07	-0.98	0.328	-1.21e-06	4.05e-07
C4042	-4.01e-07	4.10e-07	-0.98	0.329	-1.21e-06	4.06e-07
C4058	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C4066	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C4090	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C4098	-4.02e-07	4.10e-07	-0.98	0.328	-1.21e-06	4.04e-07
C4106	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C4110	-4.01e-07	4.10e-07	-0.98	0.329	-1.21e-06	4.06e-07
C4114	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C4118	-4.01e-07	4.10e-07	-0.98	0.329	-1.21e-06	4.05e-07
C4142	-3.95e-07	4.10e-07	-0.96	0.336	-1.20e-06	4.11e-07
C4150	-4.00e-07	4.10e-07	-0.97	0.330	-1.21e-06	4.06e-07
C4154	-3.99e-07	4.10e-07	-0.97	0.331	-1.20e-06	4.07e-07
C4162	-3.98e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C4166	-4.01e-07	4.10e-07	-0.98	0.328	-1.21e-06	4.05e-07
C4170	227.0006	4.10e-07	5.5e+08	0.000	227.0006	227.0006
C4174	-4.01e-07	4.10e-07	-0.98	0.329	-1.21e-06	4.06e-07
C4186	1.95e+08	4.19e-07	4.7e+14	0.000	1.95e+08	1.95e+08
C4190	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C4194	-4.00e-07	4.10e-07	-0.97	0.330	-1.21e-06	4.07e-07
C4198	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C4202	-4.01e-07	4.10e-07	-0.98	0.329	-1.21e-06	4.05e-07
C4210	-3.98e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C4214	-3.98e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C4220	-4.02e-07	4.10e-07	-0.98	0.328	-1.21e-06	4.05e-07
C4222	-4.02e-07	4.10e-07	-0.98	0.328	-1.21e-06	4.05e-07
C4234	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C4254	-4.02e-07	4.10e-07	-0.98	0.328	-1.21e-06	4.04e-07
C4266	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C4268	-3.99e-07	4.10e-07	-0.97	0.331	-1.20e-06	4.07e-07
C4270	-3.97e-07	4.10e-07	-0.97	0.333	-1.20e-06	4.09e-07
C4310	-3.99e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C4330	-4.00e-07	4.10e-07	-0.97	0.330	-1.21e-06	4.07e-07
C4334	-4.05e-07	4.10e-07	-0.99	0.324	-1.21e-06	4.02e-07
C4342	-4.01e-07	4.10e-07	-0.98	0.329	-1.21e-06	4.05e-07
C4358	-3.95e-07	4.10e-07	-0.96	0.335	-1.20e-06	4.11e-07
C4362	-4.00e-07	4.10e-07	-0.97	0.330	-1.21e-06	4.07e-07
C4378	-3.97e-07	4.10e-07	-0.97	0.333	-1.20e-06	4.09e-07
C4390	-3.97e-07	4.10e-07	-0.97	0.333	-1.20e-06	4.09e-07
C4406	-3.97e-07	4.10e-07	-0.97	0.333	-1.20e-06	4.09e-07
C4410	-3.97e-07	4.10e-07	-0.97	0.333	-1.20e-06	4.09e-07
C4414	-4.01e-07	4.10e-07	-0.98	0.329	-1.21e-06	4.06e-07
C4418	-3.98e-07	4.10e-07	-0.97	0.333	-1.20e-06	4.09e-07
C4422	-4.02e-07	4.10e-07	-0.98	0.328	-1.21e-06	4.04e-07
C4430	-4.02e-07	4.10e-07	-0.98	0.327	-1.21e-06	4.04e-07
C4442	-3.98e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C4470	-3.97e-07	4.10e-07	-0.97	0.333	-1.20e-06	4.09e-07
C4494	-3.94e-07	4.10e-07	-0.96	0.337	-1.20e-06	4.12e-07

C4506	-4.00e-07	4.10e-07	-0.97	0.330	-1.21e-06	4.06e-07
C4522	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C4530	-3.99e-07	4.10e-07	-0.97	0.331	-1.20e-06	4.07e-07
C4546	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C4550	-4.02e-07	4.10e-07	-0.98	0.327	-1.21e-06	4.04e-07
C4554	-3.99e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.07e-07
C4578	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C4582	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C4594	192774.6	4.10e-07	4.7e+11	0.000	192774.6	192774.6
C4606	14185.14	4.10e-07	3.5e+10	0.000	14185.14	14185.14
C4614	-3.95e-07	4.10e-07	-0.96	0.336	-1.20e-06	4.11e-07
C4622	-3.94e-07	4.10e-07	-0.96	0.338	-1.20e-06	4.13e-07
C4634	-4.02e-07	4.10e-07	-0.98	0.327	-1.21e-06	4.04e-07
C4652	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C4654	-4.00e-07	4.10e-07	-0.97	0.330	-1.21e-06	4.07e-07
C4666	-3.97e-07	4.10e-07	-0.97	0.333	-1.20e-06	4.09e-07
C4670	-4.04e-07	4.10e-07	-0.99	0.325	-1.21e-06	4.02e-07
C4702	-3.97e-07	4.10e-07	-0.97	0.334	-1.20e-06	4.09e-07
C4722	-3.88e-07	4.10e-07	-0.94	0.345	-1.19e-06	4.19e-07
C4726	35348.64	4.10e-07	8.6e+10	0.000	35348.64	35348.64
C4730	-4.03e-07	4.10e-07	-0.98	0.327	-1.21e-06	4.03e-07
C4738	-4.01e-07	4.10e-07	-0.98	0.329	-1.21e-06	4.05e-07
C4746	-3.92e-07	4.10e-07	-0.96	0.339	-1.20e-06	4.14e-07
C4758	-3.97e-07	4.10e-07	-0.97	0.333	-1.20e-06	4.09e-07
C4790	1.08e+09	4.72e-07	2.3e+15	0.000	1.08e+09	1.08e+09
C4794	-3.95e-07	4.10e-07	-0.96	0.336	-1.20e-06	4.11e-07
C4806	-3.95e-07	4.10e-07	-0.96	0.336	-1.20e-06	4.11e-07
C4814	-3.95e-07	4.10e-07	-0.96	0.336	-1.20e-06	4.11e-07
C4826	-3.95e-07	4.10e-07	-0.96	0.336	-1.20e-06	4.11e-07
C4830	-3.95e-07	4.10e-07	-0.96	0.336	-1.20e-06	4.11e-07
C4854	-3.95e-07	4.10e-07	-0.96	0.336	-1.20e-06	4.11e-07
C4862	-3.95e-07	4.10e-07	-0.96	0.336	-1.20e-06	4.11e-07
C4866	-3.95e-07	4.10e-07	-0.96	0.336	-1.20e-06	4.11e-07
C4870	-3.95e-07	4.10e-07	-0.96	0.336	-1.20e-06	4.11e-07
C4890	-3.95e-07	4.10e-07	-0.96	0.336	-1.20e-06	4.11e-07
C4902	-3.95e-07	4.10e-07	-0.96	0.336	-1.20e-06	4.11e-07
C4918	-3.95e-07	4.10e-07	-0.96	0.336	-1.20e-06	4.11e-07
C4934	-3.95e-07	4.10e-07	-0.96	0.336	-1.20e-06	4.11e-07
C4942	-3.95e-07	4.10e-07	-0.96	0.336	-1.20e-06	4.11e-07
C4962	-3.95e-07	4.10e-07	-0.96	0.336	-1.20e-06	4.11e-07
C4966	-3.95e-07	4.10e-07	-0.96	0.336	-1.20e-06	4.11e-07
C4970	-3.95e-07	4.10e-07	-0.96	0.336	-1.20e-06	4.11e-07
C4974	-3.95e-07	4.10e-07	-0.96	0.336	-1.20e-06	4.11e-07
_cons	3.99e-07	4.10e-07	0.97	0.332	-4.08e-07	1.20e-06

391 predict resid_defense_funding_instrument, residuals

392
393 reg resid_log_federal_funding resid_defense_funding_instrument, robust cluster(msa_f
 > actor)

Linear regression

Number of obs	=	7,372
F(1, 387)	=	9.87
Prob > F	=	0.0018
R-squared	=	0.0015
Root MSE	=	.64277

(Std. Err. adjusted for **388** clusters in
 > msa_factor)

resid_log_federal_funding > f. Interval]	Coef.	Robust Std. Err.	t	P>|t|	[95% Con
resid_defense_funding_instrument > 2.19e-09	1.35e-09	4.28e-10	3.14	0.002	5.03e-10
_cons > 3.19e-10	2.76e-11	1.48e-10	0.19	0.852	-2.64e-10

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394 outreg2 using output/defense_first_stage.doc, replace ctitle("With MSA FE") addstat(
  > "F stat", e(F))
  output/defense_first_stage.doc
  dir : seeout

395
396 ivregress 2sls log_avg_annual_pay i.msa_factor (log_federal_funding = defense_fundin
  > g_instrument i.msa_factor), robust cluster(msa_factor)
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note: 347.msa_factor dropped because of collinearity
note: 348.msa_factor dropped because of collinearity
note: 349.msa_factor dropped because of collinearity
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note: 350.msa_factor dropped because of collinearity
note: 351.msa_factor dropped because of collinearity
note: 352.msa_factor dropped because of collinearity
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note: 381.msa_factor dropped because of collinearity
note: 382.msa_factor dropped because of collinearity
note: 383.msa_factor dropped because of collinearity
note: 384.msa_factor dropped because of collinearity
note: 385.msa_factor dropped because of collinearity
note: 386.msa_factor dropped because of collinearity
note: 387.msa_factor dropped because of collinearity
note: 388.msa_factor dropped because of collinearity
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Instrumental variables (2SLS) regression

Number of obs =	7,372
Wald chi2(388) =	9.83
Prob > chi2 =	1.0000
R-squared =	0.7644
Root MSE =	.08492

(Std. Err. adjusted for **388** clusters in msa_factor)

log_avg_annual_pay	Coef.	Robust Std. Err.	z	P>|z|	[95% Conf. Interval]	
log_federal_funding	.115763	.0304317	3.80	0.000	.0561179	.1754081
msa_factor						
C1038	-.4508553	5.82e-12	-7.7e+10	0.000	-.4508553	-.4508553
C1042	.2166844	5.82e-12	3.7e+10	0.000	.2166844	.2166844
C1050	.0493491	5.82e-12	8.5e+09	0.000	.0493491	.0493491
C1054	.0764216	5.81e-12	1.3e+10	0.000	.0764216	.0764216
C1058	.3118893	5.82e-12	5.4e+10	0.000	.3118893	.3118893
C1074	-2.411098	.6802787	-3.54	0.000	-3.74442	-1.077777
C1078	.0329999	5.81e-12	5.7e+09	0.000	.0329999	.0329999
C1090	.2589237	5.82e-12	4.4e+10	0.000	.2589237	.2589237
C1102	.0223424	5.82e-12	3.8e+09	0.000	.0223424	.0223424
C1110	.1238718	5.82e-12	2.1e+10	0.000	.1238718	.1238718
C1118	-1.924743	.551703	-3.49	0.000	-3.006061	-.8434254
C1126	.3615475	5.82e-12	6.2e+10	0.000	.3615475	.3615475
C1146	.4095227	5.82e-12	7.0e+10	0.000	.4095227	.4095227
C1150	.0430921	5.82e-12	7.4e+09	0.000	.0430921	.0430921
C1154	.1476945	5.82e-12	2.5e+10	0.000	.1476945	.1476945
C1164	-.4438431	5.81e-12	-7.6e+10	0.000	-.4438431	-.4438431
C1170	.0418258	5.81e-12	7.2e+09	0.000	.0418258	.0418258
C1202	.0930833	5.82e-12	1.6e+10	0.000	.0930833	.0930833

C1206	.4032619	5.82e-12	6.9e+10	0.000	.4032619	.4032619
C1210	.1855374	5.81e-12	3.2e+10	0.000	.1855374	.1855374
C1222	-.0129152	5.82e-12	-2.2e+09	0.000	-.0129152	-.0129152
C1226	.1584132	5.81e-12	2.7e+10	0.000	.1584132	.1584132
C1242	.4010153	5.82e-12	6.9e+10	0.000	.4010153	.4010153
C1254	.1709027	5.82e-12	2.9e+10	0.000	.1709027	.1709027
C1258	-.4251066	.2158818	-1.97	0.049	-.8482271	-.001986
C1262	.0421595	5.82e-12	7.2e+09	0.000	.0421595	.0421595
C1270	.1716549	5.82e-12	2.9e+10	0.000	.1716549	.1716549
C1294	.227601	5.82e-12	3.9e+10	0.000	.227601	.227601
C1298	.2585373	5.82e-12	4.4e+10	0.000	.2585373	.2585373
C1302	.1095102	5.81e-12	1.9e+10	0.000	.1095102	.1095102
C1314	.2720066	5.81e-12	4.7e+10	0.000	.2720066	.2720066
C1322	.0297519	5.82e-12	5.1e+09	0.000	.0297519	.0297519
C1338	.1082066	5.81e-12	1.9e+10	0.000	.1082066	.1082066
C1346	.0760446	5.82e-12	1.3e+10	0.000	.0760446	.0760446
C1374	.1170802	5.82e-12	2.0e+10	0.000	.1170802	.1170802
C1378	.1310824	5.81e-12	2.3e+10	0.000	.1310824	.1310824
C1382	.2833284	5.81e-12	4.9e+10	0.000	.2833284	.2833284
C1390	.1473117	5.82e-12	2.5e+10	0.000	.1473117	.1473117
C1398	.0697055	5.82e-12	1.2e+10	0.000	.0697055	.0697055
C1401	.2966344	5.82e-12	5.1e+10	0.000	.2966344	.2966344
C1402	.0534137	5.81e-12	9.2e+09	0.000	.0534137	.0534137
C1410	.193464	5.82e-12	3.3e+10	0.000	.193464	.193464
C1426	.1481157	5.81e-12	2.5e+10	0.000	.1481157	.1481157
C1446	-1.827205	.6468107	-2.82	0.005	-3.094931	-.5594797
C1450	-1.776561	.5993572	-2.96	0.003	-2.951279	-.6018425
C1454	.0368079	5.82e-12	6.3e+09	0.000	.0368079	.0368079
C1474	.2332954	5.82e-12	4.0e+10	0.000	.2332954	.2332954
C1486	.846343	5.82e-12	1.5e+11	0.000	.846343	.846343
C1518	-.1587773	5.82e-12	-2.7e+10	0.000	-.1587773	-.1587773
C1526	.0430021	5.82e-12	7.4e+09	0.000	.0430021	.0430021
C1538	.1911978	5.82e-12	3.3e+10	0.000	.1911978	.1911978
C1550	.0318365	5.82e-12	5.5e+09	0.000	.0318365	.0318365
C1554	.2811224	5.82e-12	4.8e+10	0.000	.2811224	.2811224
C1568	.5014506	5.82e-12	8.6e+10	0.000	.5014506	.5014506
C1594	.0675611	5.81e-12	1.2e+10	0.000	.0675611	.0675611
C1598	.1265817	5.82e-12	2.2e+10	0.000	.1265817	.1265817
C1602	.0033471	5.82e-12	5.8e+08	0.000	.0033471	.0033471
C1606	.0203362	5.82e-12	3.5e+09	0.000	.0203362	.0203362
C1618	.2483127	5.82e-12	4.3e+10	0.000	.2483127	.2483127
C1622	.2228823	5.82e-12	3.8e+10	0.000	.2228823	.2228823
C1630	.2591339	5.82e-12	4.5e+10	0.000	.2591339	.2591339
C1654	.0755356	5.82e-12	1.3e+10	0.000	.0755356	.0755356
C1658	.1509475	5.82e-12	2.6e+10	0.000	.1509475	.1509475
C1662	.1931874	5.82e-12	3.3e+10	0.000	.1931874	.1931874
C1670	.1598182	5.81e-12	2.7e+10	0.000	.1598182	.1598182
C1674	.3445469	5.82e-12	5.9e+10	0.000	.3445469	.3445469
C1682	-1.957943	.5785746	-3.38	0.001	-3.091928	-.8239572
C1686	.1543024	5.81e-12	2.7e+10	0.000	.1543024	.1543024
C1694	.1346125	5.82e-12	2.3e+10	0.000	.1346125	.1346125
C1698	-2.034222	.6540399	-3.11	0.002	-3.316116	-.7523271
C1702	.0391187	5.82e-12	6.7e+09	0.000	.0391187	.0391187
C1714	.3077829	5.82e-12	5.3e+10	0.000	.3077829	.3077829
C1730	-.0007619	5.82e-12	-1.3e+08	0.000	-.0007619	-.0007619
C1742	.0577086	5.82e-12	9.9e+09	0.000	.0577086	.0577086
C1746	.2965865	5.82e-12	5.1e+10	0.000	.2965865	.2965865
C1766	-.0399877	5.82e-12	-6.9e+09	0.000	-.0399877	-.0399877
C1778	.023931	5.82e-12	4.1e+09	0.000	.023931	.023931
C1782	.2322649	5.82e-12	4.0e+10	0.000	.2322649	.2322649
C1786	.0826243	5.82e-12	1.4e+10	0.000	.0826243	.0826243
C1790	.1344712	5.82e-12	2.3e+10	0.000	.1344712	.1344712
C1798	.074643	5.82e-12	1.3e+10	0.000	.074643	.074643
C1802	.2823987	5.82e-12	4.9e+10	0.000	.2823987	.2823987
C1814	.2952141	5.82e-12	5.1e+10	0.000	.2952141	.2952141
C1858	.1560991	5.82e-12	2.7e+10	0.000	.1560991	.1560991
C1870	.2655133	5.82e-12	4.6e+10	0.000	.2655133	.2655133
C1888	.0746703	5.82e-12	1.3e+10	0.000	.0746703	.0746703
C1906	-.0057896	5.82e-12	-1.0e+09	0.000	-.0057896	-.0057896
C1910	.4332167	5.81e-12	7.5e+10	0.000	.4332167	.4332167
C1914	.080653	5.82e-12	1.4e+10	0.000	.080653	.080653
C1918	.0753536	5.81e-12	1.3e+10	0.000	.0753536	.0753536

C1930	-.0820786	5.82e-12	-1.4e+10	0.000	-.0820786	-.0820786
C1934	.208952	5.82e-12	3.6e+10	0.000	.208952	.208952
C1938	.2273179	5.82e-12	3.9e+10	0.000	.2273179	.2273179
C1946	.1248837	5.82e-12	2.1e+10	0.000	.1248837	.1248837
C1950	.2483034	5.82e-12	4.3e+10	0.000	.2483034	.2483034
C1966	-.0043504	5.82e-12	-7.5e+08	0.000	-.0043504	-.0043504
C1974	-1.886075	.617578	-3.05	0.002	-3.096506	-.6756446
C1978	.3084287	5.82e-12	5.3e+10	0.000	.3084287	.3084287
C1982	.42541	5.82e-12	7.3e+10	0.000	.42541	.42541
C2002	.026259	5.81e-12	4.5e+09	0.000	.026259	.026259
C2010	.1004493	5.81e-12	1.7e+10	0.000	.1004493	.1004493
C2022	.1049333	5.82e-12	1.8e+10	0.000	.1049333	.1049333
C2026	.1149538	5.81e-12	2.0e+10	0.000	.1149538	.1149538
C2050	.4863665	5.81e-12	8.4e+10	0.000	.4863665	.4863665
C2070	.0992519	5.82e-12	1.7e+10	0.000	.0992519	.0992519
C2074	.0571577	5.82e-12	9.8e+09	0.000	.0571577	.0571577
C2094	.0056485	5.81e-12	9.7e+08	0.000	.0056485	.0056485
C2106	.0511008	5.82e-12	8.8e+09	0.000	.0511008	.0511008
C2114	.151974	5.82e-12	2.6e+10	0.000	.151974	.151974
C2130	.1334544	5.81e-12	2.3e+10	0.000	.1334544	.1334544
C2134	-.0174046	5.82e-12	-3.0e+09	0.000	-.0174046	-.0174046
C2150	.0858556	5.81e-12	1.5e+10	0.000	.0858556	.0858556
C2166	.0847455	5.82e-12	1.5e+10	0.000	.0847455	.0847455
C2178	.1452915	5.82e-12	2.5e+10	0.000	.1452915	.1452915
C2182	.3002023	5.82e-12	5.2e+10	0.000	.3002023	.3002023
C2202	.1457939	5.82e-12	2.5e+10	0.000	.1457939	.1457939
C2214	.1659079	5.82e-12	2.9e+10	0.000	.1659079	.1659079
C2218	.0575566	5.82e-12	9.9e+09	0.000	.0575566	.0575566
C2222	.2078243	5.82e-12	3.6e+10	0.000	.2078243	.2078243
C2238	.0637518	5.82e-12	1.1e+10	0.000	.0637518	.0637518
C2242	.195292	5.82e-12	3.4e+10	0.000	.195292	.195292
C2250	.071088	5.82e-12	1.2e+10	0.000	.071088	.071088
C2252	-.0136446	5.81e-12	-2.3e+09	0.000	-.0136446	-.0136446
C2254	.1038633	5.82e-12	1.8e+10	0.000	.1038633	.1038633
C2266	.2248664	5.82e-12	3.9e+10	0.000	.2248664	.2248664
C2290	-.0031857	5.82e-12	-5.5e+08	0.000	-.0031857	-.0031857
C2306	.1407287	5.82e-12	2.4e+10	0.000	.1407287	.1407287
C2342	.0897649	5.82e-12	1.5e+10	0.000	.0897649	.0897649
C2346	-.04144	5.81e-12	-7.1e+09	0.000	-.04144	-.04144
C2354	.125765	5.81e-12	2.2e+10	0.000	.125765	.125765
C2358	.1467789	5.82e-12	2.5e+10	0.000	.1467789	.1467789
C2390	.0309392	5.81e-12	5.3e+09	0.000	.0309392	.0309392
C2402	.0752735	5.81e-12	1.3e+10	0.000	.0752735	.0752735
C2414	-.0517596	5.82e-12	-8.9e+09	0.000	-.0517596	-.0517596
C2422	.0300505	5.81e-12	5.2e+09	0.000	.0300505	.0300505
C2426	-.0310162	5.82e-12	-5.3e+09	0.000	-.0310162	-.0310162
C2430	.1011778	5.81e-12	1.7e+10	0.000	.1011778	.1011778
C2434	.2032242	5.81e-12	3.5e+10	0.000	.2032242	.2032242
C2442	-.0788726	5.82e-12	-1.4e+10	0.000	-.0788726	-.0788726
C2450	-.0121322	5.82e-12	-2.1e+09	0.000	-.0121322	-.0121322
C2454	.1788398	5.82e-12	3.1e+10	0.000	.1788398	.1788398
C2458	.1881875	5.81e-12	3.2e+10	0.000	.1881875	.1881875
C2466	.1566508	5.82e-12	2.7e+10	0.000	.1566508	.1566508
C2478	.096539	5.82e-12	1.7e+10	0.000	.096539	.096539
C2486	.1331345	5.82e-12	2.3e+10	0.000	.1331345	.1331345
C2502	-.2754565	5.81e-12	-4.7e+10	0.000	-.2754565	-.2754565
C2506	.1140472	5.82e-12	2.0e+10	0.000	.1140472	.1140472
C2518	.0969597	5.82e-12	1.7e+10	0.000	.0969597	.0969597
C2522	-.0799956	5.82e-12	-1.4e+10	0.000	-.0799956	-.0799956
C2526	.0566929	5.82e-12	9.7e+09	0.000	.0566929	.0566929
C2542	.2757251	5.81e-12	4.7e+10	0.000	.2757251	.2757251
C2550	.0338619	5.81e-12	5.8e+09	0.000	.0338619	.0338619
C2554	.5114219	5.82e-12	8.8e+10	0.000	.5114219	.5114219
C2562	-.0336178	5.81e-12	-5.8e+09	0.000	-.0336178	-.0336178
C2586	.0111012	5.82e-12	1.9e+09	0.000	.0111012	.0111012
C2594	-.0083876	5.81e-12	-1.4e+09	0.000	-.0083876	-.0083876
C2598	.0178147	5.81e-12	3.1e+09	0.000	.0178147	.0178147
C2614	-.0151962	5.82e-12	-2.6e+09	0.000	-.0151962	-.0151962
C2630	-.0945319	5.81e-12	-1.6e+10	0.000	-.0945319	-.0945319
C2638	.2482335	5.82e-12	4.3e+10	0.000	.2482335	.2482335
C2642	.5102033	5.82e-12	8.8e+10	0.000	.5102033	.5102033
C2658	.1042495	5.82e-12	1.8e+10	0.000	.1042495	.1042495

C2662	.3808442	5.82e-12	6.5e+10	0.000	.3808442	.3808442
C2682	-2.265896	.6235733	-3.63	0.000	-3.488077	-1.043715
C2690	.2746735	5.82e-12	4.7e+10	0.000	.2746735	.2746735
C2698	.1889508	5.82e-12	3.2e+10	0.000	.1889508	.1889508
C2706	-.902085	.3041433	-2.97	0.003	-1.498195	-.305975
C2710	.1855858	5.82e-12	3.2e+10	0.000	.1855858	.1855858
C2714	.1079893	5.81e-12	1.9e+10	0.000	.1079893	.1079893
C2718	.0843137	5.81e-12	1.5e+10	0.000	.0843137	.0843137
C2726	.2410595	5.82e-12	4.1e+10	0.000	.2410595	.2410595
C2734	-.1462345	5.82e-12	-2.5e+10	0.000	-.1462345	-.1462345
C2750	.1450296	5.81e-12	2.5e+10	0.000	.1450296	.1450296
C2762	.0442392	5.82e-12	7.6e+09	0.000	.0442392	.0442392
C2774	.017037	5.82e-12	2.9e+09	0.000	.017037	.017037
C2778	-.0067502	5.82e-12	-1.2e+09	0.000	-.0067502	-.0067502
C2786	-.0311051	5.82e-12	-5.3e+09	0.000	-.0311051	-.0311051
C2790	-.0076097	5.81e-12	-1.3e+09	0.000	-.0076097	-.0076097
C2798	.1212327	5.82e-12	2.1e+10	0.000	.1212327	.1212327
C2802	.220941	5.81e-12	3.8e+10	0.000	.220941	.220941
C2810	.0657073	5.82e-12	1.1e+10	0.000	.0657073	.0657073
C2814	.3015696	5.82e-12	5.2e+10	0.000	.3015696	.3015696
C2842	-2.221315	.6516536	-3.41	0.001	-3.498533	-.9440974
C2866	.0746689	5.82e-12	1.3e+10	0.000	.0746689	.0746689
C2870	.1228937	5.82e-12	2.1e+10	0.000	.1228937	.1228937
C2874	.0777582	5.82e-12	1.3e+10	0.000	.0777582	.0777582
C2894	-2.310987	.6594835	-3.50	0.000	-3.603551	-1.018423
C2902	.3089332	5.81e-12	5.3e+10	0.000	.3089332	.3089332
C2910	.0646438	5.82e-12	1.1e+10	0.000	.0646438	.0646438
C2918	.1878166	5.82e-12	3.2e+10	0.000	.1878166	.1878166
C2920	.1580438	5.82e-12	2.7e+10	0.000	.1580438	.1580438
C2934	.1947587	5.82e-12	3.3e+10	0.000	.1947587	.1947587
C2942	-.0370095	5.82e-12	-6.4e+09	0.000	-.0370095	-.0370095
C2946	.0716218	5.81e-12	1.2e+10	0.000	.0716218	.0716218
C2954	.157875	5.82e-12	2.7e+10	0.000	.157875	.157875
C2962	.2556262	5.82e-12	4.4e+10	0.000	.2556262	.2556262
C2970	-.080211	5.82e-12	-1.4e+10	0.000	-.080211	-.080211
C2974	-.0234979	5.81e-12	-4.0e+09	0.000	-.0234979	-.0234979
C2982	.2299316	5.81e-12	4.0e+10	0.000	.2299316	.2299316
C2994	-.0182622	5.82e-12	-3.1e+09	0.000	-.0182622	-.0182622
C3002	-.0205926	5.81e-12	-3.5e+09	0.000	-.0205926	-.0205926
C3014	.0518191	5.82e-12	8.9e+09	0.000	.0518191	.0518191
C3030	.0156838	5.82e-12	2.7e+09	0.000	.0156838	.0156838
C3034	.0537635	5.82e-12	9.2e+09	0.000	.0537635	.0537635
C3046	.2045598	5.82e-12	3.5e+10	0.000	.2045598	.2045598
C3062	.1057852	5.82e-12	1.8e+10	0.000	.1057852	.1057852
C3070	.1084574	5.82e-12	1.9e+10	0.000	.1084574	.1084574
C3078	.1715269	5.82e-12	2.9e+10	0.000	.1715269	.1715269
C3086	-.1072826	5.82e-12	-1.8e+10	0.000	-.1072826	-.1072826
C3098	.1386348	5.82e-12	2.4e+10	0.000	.1386348	.1386348
C3102	.1728343	5.82e-12	3.0e+10	0.000	.1728343	.1728343
C3108	-2.135895	.6813731	-3.13	0.002	-3.471361	-.8004281
C3114	.2338122	5.82e-12	4.0e+10	0.000	.2338122	.2338122
C3118	.0513368	5.81e-12	8.8e+09	0.000	.0513368	.0513368
C3134	.074373	5.82e-12	1.3e+10	0.000	.074373	.074373
C3142	.084487	5.82e-12	1.5e+10	0.000	.084487	.084487
C3146	.0385782	5.82e-12	6.6e+09	0.000	.0385782	.0385782
C3154	.2684661	5.82e-12	4.6e+10	0.000	.2684661	.2684661
C3170	.4242655	5.82e-12	7.3e+10	0.000	.4242655	.4242655
C3174	-.0142092	5.81e-12	-2.4e+09	0.000	-.0142092	-.0142092
C3186	.0484911	5.82e-12	8.3e+09	0.000	.0484911	.0484911
C3190	.0271665	5.82e-12	4.7e+09	0.000	.0271665	.0271665
C3242	-.4294458	5.81e-12	-7.4e+10	0.000	-.4294458	-.4294458
C3258	-.1401563	5.81e-12	-2.4e+10	0.000	-.1401563	-.1401563
C3278	.0416434	5.82e-12	7.2e+09	0.000	.0416434	.0416434
C3282	.2791211	5.82e-12	4.8e+10	0.000	.2791211	.2791211
C3290	.0297061	5.82e-12	5.1e+09	0.000	.0297061	.0297061
C3310	.2965066	5.82e-12	5.1e+10	0.000	.2965066	.2965066
C3314	.0262863	5.81e-12	4.5e+09	0.000	.0262863	.0262863
C3322	.4479839	5.82e-12	7.7e+10	0.000	.4479839	.4479839
C3326	.425763	5.82e-12	7.3e+10	0.000	.425763	.425763
C3334	.3031037	5.82e-12	5.2e+10	0.000	.3031037	.3031037
C3346	.4374374	5.82e-12	7.5e+10	0.000	.4374374	.4374374
C3354	.0207826	5.82e-12	3.6e+09	0.000	.0207826	.0207826

C3366	.1601031	5.81e-12	2.8e+10	0.000	.1601031	.1601031
C3370	.1515762	5.82e-12	2.6e+10	0.000	.1515762	.1515762
C3374	.0057389	5.82e-12	9.9e+08	0.000	.0057389	.0057389
C3378	.2483005	5.82e-12	4.3e+10	0.000	.2483005	.2483005
C3386	.130424	5.82e-12	2.2e+10	0.000	.130424	.130424
C3406	.1545864	5.82e-12	2.7e+10	0.000	.1545864	.1545864
C3410	.0407872	5.82e-12	7.0e+09	0.000	.0407872	.0407872
C3458	.1145991	5.81e-12	2.0e+10	0.000	.1145991	.1145991
C3462	.0153834	5.82e-12	2.6e+09	0.000	.0153834	.0153834
C3474	.1016483	5.82e-12	1.7e+10	0.000	.1016483	.1016483
C3482	-.1154151	5.82e-12	-2.0e+10	0.000	-.1154151	-.1154151
C3490	.3057665	5.82e-12	5.3e+10	0.000	.3057665	.3057665
C3494	.1974111	5.81e-12	3.4e+10	0.000	.1974111	.1974111
C3498	.2982561	5.82e-12	5.1e+10	0.000	.2982561	.2982561
C3510	.0740147	5.82e-12	1.3e+10	0.000	.0740147	.0740147
C3530	.3858719	5.82e-12	6.6e+10	0.000	.3858719	.3858719
C3538	.2677887	5.81e-12	4.6e+10	0.000	.2677887	.2677887
C3562	-1.750346	.6355829	-2.75	0.006	-2.996066	-.5046269
C3566	.1844804	5.82e-12	3.2e+10	0.000	.1844804	.1844804
C3584	.111273	5.82e-12	1.9e+10	0.000	.111273	.111273
C3598	.3488348	5.82e-12	6.0e+10	0.000	.3488348	.3488348
C3610	-.0160447	5.82e-12	-2.8e+09	0.000	-.0160447	-.0160447
C3614	.0027306	5.82e-12	4.7e+08	0.000	.0027306	.0027306
C3622	.2868689	5.82e-12	4.9e+10	0.000	.2868689	.2868689
C3626	.0780742	5.82e-12	1.3e+10	0.000	.0780742	.0780742
C3642	.1815653	5.81e-12	3.1e+10	0.000	.1815653	.1815653
C3650	.2270087	5.82e-12	3.9e+10	0.000	.2270087	.2270087
C3654	.2106219	5.82e-12	3.6e+10	0.000	.2106219	.2106219
C3674	.1787155	5.81e-12	3.1e+10	0.000	.1787155	.1787155
C3678	.2614613	5.82e-12	4.5e+10	0.000	.2614613	.2614613
C3698	.0772773	5.82e-12	1.3e+10	0.000	.0772773	.0772773
C3710	.3647911	5.82e-12	6.3e+10	0.000	.3647911	.3647911
C3734	.2395643	5.81e-12	4.1e+10	0.000	.2395643	.2395643
C3746	.035287	5.82e-12	6.1e+09	0.000	.035287	.035287
C3762	.0410512	5.82e-12	7.1e+09	0.000	.0410512	.0410512
C3786	.0659017	5.82e-12	1.1e+10	0.000	.0659017	.0659017
C3790	.3032353	5.82e-12	5.2e+10	0.000	.3032353	.3032353
C3798	.4541928	5.82e-12	7.8e+10	0.000	.4541928	.4541928
C3806	.3040095	5.82e-12	5.2e+10	0.000	.3040095	.3040095
C3822	.0341735	5.82e-12	5.9e+09	0.000	.0341735	.0341735
C3830	-1.903408	.5821142	-3.27	0.001	-3.044331	-.7624855
C3834	.1665091	5.81e-12	2.9e+10	0.000	.1665091	.1665091
C3854	-.0770119	5.81e-12	-1.3e+10	0.000	-.0770119	-.0770119
C3866	-.4381103	5.81e-12	-7.5e+10	0.000	-.4381103	-.4381103
C3886	.1996331	5.82e-12	3.4e+10	0.000	.1996331	.1996331
C3890	.3543584	5.82e-12	6.1e+10	0.000	.3543584	.3543584
C3894	.0734649	5.82e-12	1.3e+10	0.000	.0734649	.0734649
C3914	-.0146397	5.82e-12	-2.5e+09	0.000	-.0146397	-.0146397
C3930	.2594403	5.81e-12	4.5e+10	0.000	.2594403	.2594403
C3934	.0870507	5.82e-12	1.5e+10	0.000	.0870507	.0870507
C3938	.0512498	5.82e-12	8.8e+09	0.000	.0512498	.0512498
C3946	-.0161818	5.82e-12	-2.8e+09	0.000	-.0161818	-.0161818
C3954	.2219277	5.82e-12	3.8e+10	0.000	.2219277	.2219277
C3958	.3111015	5.82e-12	5.3e+10	0.000	.3111015	.3111015
C3966	.001508	5.82e-12	2.6e+08	0.000	.001508	.001508
C3974	.2223848	5.82e-12	3.8e+10	0.000	.2223848	.2223848
C3982	.0799489	5.82e-12	1.4e+10	0.000	.0799489	.0799489
C3990	.2420402	5.82e-12	4.2e+10	0.000	.2420402	.2420402
C4006	.3089128	5.82e-12	5.3e+10	0.000	.3089128	.3089128
C4014	.1557645	5.82e-12	2.7e+10	0.000	.1557645	.1557645
C4022	.1144946	5.82e-12	2.0e+10	0.000	.1144946	.1144946
C4034	.3401488	5.82e-12	5.8e+10	0.000	.3401488	.3401488
C4038	.2410089	5.82e-12	4.1e+10	0.000	.2410089	.2410089
C4042	.1803081	5.82e-12	3.1e+10	0.000	.1803081	.1803081
C4058	.0206326	5.82e-12	3.5e+09	0.000	.0206326	.0206326
C4066	.0917491	5.81e-12	1.6e+10	0.000	.0917491	.0917491
C4090	.3832139	5.82e-12	6.6e+10	0.000	.3832139	.3832139
C4098	.1657215	5.82e-12	2.8e+10	0.000	.1657215	.1657215
C4106	.1001855	5.82e-12	1.7e+10	0.000	.1001855	.1001855
C4110	-.1217748	5.81e-12	-2.1e+10	0.000	-.1217748	-.1217748
C4114	.0428994	5.82e-12	7.4e+09	0.000	.0428994	.0428994
C4118	.2994832	5.82e-12	5.1e+10	0.000	.2994832	.2994832

C4142	.0825778	5.82e-12	1.4e+10	0.000	.0825778	.0825778
C4150	.1878526	5.82e-12	3.2e+10	0.000	.1878526	.1878526
C4154	.0107389	5.81e-12	1.8e+09	0.000	.0107389	.0107389
C4162	.2657912	5.82e-12	4.6e+10	0.000	.2657912	.2657912
C4166	.0287029	5.82e-12	4.9e+09	0.000	.0287029	.0287029
C4170	-1.795502	.5221831	-3.44	0.001	-2.818962	-.7720419
C4174	.4152027	5.82e-12	7.1e+10	0.000	.4152027	.4152027
C4186	-1.846236	.6799689	-2.72	0.007	-3.178951	-.5135217
C4190	-.5441144	5.82e-12	-9.4e+10	0.000	-.5441144	-.5441144
C4194	.9944585	5.82e-12	1.7e+11	0.000	.9944585	.9944585
C4198	-.2228028	5.82e-12	-3.8e+10	0.000	-.2228028	-.2228028
C4202	.1457734	5.82e-12	2.5e+10	0.000	.1457734	.1457734
C4210	.247826	5.82e-12	4.3e+10	0.000	.247826	.247826
C4214	.1433413	5.82e-12	2.5e+10	0.000	.1433413	.1433413
C4220	.2778951	5.82e-12	4.8e+10	0.000	.2778951	.2778951
C4222	.2896004	5.82e-12	5.0e+10	0.000	.2896004	.2896004
C4234	.1453107	5.82e-12	2.5e+10	0.000	.1453107	.1453107
C4254	.0791807	5.82e-12	1.4e+10	0.000	.0791807	.0791807
C4266	.5409253	5.82e-12	9.3e+10	0.000	.5409253	.5409253
C4268	.0742422	5.82e-12	1.3e+10	0.000	.0742422	.0742422
C4270	-.142764	5.81e-12	-2.5e+10	0.000	-.142764	-.142764
C4310	.1722952	5.81e-12	3.0e+10	0.000	.1722952	.1722952
C4330	.1018049	5.82e-12	1.8e+10	0.000	.1018049	.1018049
C4334	.0891687	5.82e-12	1.5e+10	0.000	.0891687	.0891687
C4342	.1374696	5.82e-12	2.4e+10	0.000	.1374696	.1374696
C4358	.0742421	5.81e-12	1.3e+10	0.000	.0742421	.0742421
C4362	.1463203	5.81e-12	2.5e+10	0.000	.1463203	.1463203
C4378	.1278524	5.82e-12	2.2e+10	0.000	.1278524	.1278524
C4390	.1634392	5.82e-12	2.8e+10	0.000	.1634392	.1634392
C4406	.1334974	5.82e-12	2.3e+10	0.000	.1334974	.1334974
C4410	.3166625	5.82e-12	5.4e+10	0.000	.3166625	.3166625
C4414	.226777	5.82e-12	3.9e+10	0.000	.226777	.226777
C4418	.0198049	5.81e-12	3.4e+09	0.000	.0198049	.0198049
C4422	.0285218	5.82e-12	4.9e+09	0.000	.0285218	.0285218
C4430	.1813097	5.81e-12	3.1e+10	0.000	.1813097	.1813097
C4442	.0356686	5.82e-12	6.1e+09	0.000	.0356686	.0356686
C4470	.1654541	5.82e-12	2.8e+10	0.000	.1654541	.1654541
C4494	-.0499449	5.82e-12	-8.6e+09	0.000	-.0499449	-.0499449
C4506	.2244165	5.82e-12	3.9e+10	0.000	.2244165	.2244165
C4522	.1179417	5.82e-12	2.0e+10	0.000	.1179417	.1179417
C4530	.2208131	5.81e-12	3.8e+10	0.000	.2208131	.2208131
C4546	.025543	5.82e-12	4.4e+09	0.000	.025543	.025543
C4550	.0573223	5.82e-12	9.9e+09	0.000	.0573223	.0573223
C4554	.023651	5.81e-12	4.1e+09	0.000	.023651	.023651
C4578	.1867201	5.82e-12	3.2e+10	0.000	.1867201	.1867201
C4582	.1154606	5.82e-12	2.0e+10	0.000	.1154606	.1154606
C4594	-1.610671	.5799924	-2.78	0.005	-2.747435	-.4739071
C4606	-1.931755	.5541269	-3.49	0.000	-3.017823	-.8456861
C4614	.2067273	5.81e-12	3.6e+10	0.000	.2067273	.2067273
C4622	.1358789	5.81e-12	2.3e+10	0.000	.1358789	.1358789
C4634	.1526344	5.82e-12	2.6e+10	0.000	.1526344	.1526344
C4652	.2569151	5.82e-12	4.4e+10	0.000	.2569151	.2569151
C4654	.0671837	5.82e-12	1.2e+10	0.000	.0671837	.0671837
C4666	-.1110912	5.81e-12	-1.9e+10	0.000	-.1110912	-.1110912
C4670	.3210919	5.82e-12	5.5e+10	0.000	.3210919	.3210919
C4702	.1268795	5.82e-12	2.2e+10	0.000	.1268795	.1268795
C4722	.1961789	5.82e-12	3.4e+10	0.000	.1961789	.1961789
C4726	-2.064378	.5869866	-3.52	0.000	-3.214851	-.9139056
C4730	-.024826	5.82e-12	-4.3e+09	0.000	-.024826	-.024826
C4738	.101442	5.81e-12	1.7e+10	0.000	.101442	.101442
C4746	.0577449	5.81e-12	9.9e+09	0.000	.0577449	.0577449
C4758	.1594181	5.82e-12	2.7e+10	0.000	.1594181	.1594181
C4790	-1.893749	.6668029	-2.84	0.005	-3.200659	-.5868393
C4794	.1333863	5.81e-12	2.3e+10	0.000	.1333863	.1333863
C4806	.046701	5.81e-12	8.0e+09	0.000	.046701	.046701
C4814	.1193102	5.82e-12	2.1e+10	0.000	.1193102	.1193102
C4826	.0335143	5.82e-12	5.8e+09	0.000	.0335143	.0335143
C4830	-.0470938	5.82e-12	-8.1e+09	0.000	-.0470938	-.0470938
C4854	.0512417	5.82e-12	8.8e+09	0.000	.0512417	.0512417
C4862	.1887256	5.82e-12	3.2e+10	0.000	.1887256	.1887256
C4866	.0084295	5.81e-12	1.4e+09	0.000	.0084295	.0084295
C4870	.0700376	5.82e-12	1.2e+10	0.000	.0700376	.0700376

C4890	.0971766	5.82e-12	1.7e+10	0.000	.0971766	.0971766
C4902	.1344184	5.82e-12	2.3e+10	0.000	.1344184	.1344184
C4918	.1785119	5.82e-12	3.1e+10	0.000	.1785119	.1785119
C4934	.3172887	5.82e-12	5.5e+10	0.000	.3172887	.3172887
C4942	-.0519192	5.82e-12	-8.9e+09	0.000	-.0519192	-.0519192
C4962	.1951661	5.82e-12	3.4e+10	0.000	.1951661	.1951661
C4966	.0544984	5.82e-12	9.4e+09	0.000	.0544984	.0544984
C4970	.1002078	5.82e-12	1.7e+10	0.000	.1002078	.1002078
C4974	-.0597814	5.81e-12	-1.0e+10	0.000	-.0597814	-.0597814
_cons	11.2713	5.81e-12	1.9e+12	0.000	11.2713	11.2713

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note: 353.msa_factor dropped because of collinearity
note: 354.msa_factor dropped because of collinearity
note: 355.msa_factor dropped because of collinearity
note: 356.msa_factor dropped because of collinearity
note: 357.msa_factor dropped because of collinearity
note: 358.msa_factor dropped because of collinearity
note: 359.msa_factor dropped because of collinearity
note: 360.msa_factor dropped because of collinearity
note: 361.msa_factor dropped because of collinearity
note: 362.msa_factor dropped because of collinearity
note: 363.msa_factor dropped because of collinearity
note: 364.msa_factor dropped because of collinearity
note: 365.msa_factor dropped because of collinearity
note: 366.msa_factor dropped because of collinearity
note: 367.msa_factor dropped because of collinearity
note: 368.msa_factor dropped because of collinearity
note: 369.msa_factor dropped because of collinearity
note: 370.msa_factor dropped because of collinearity
note: 371.msa_factor dropped because of collinearity
note: 372.msa_factor dropped because of collinearity
note: 373.msa_factor dropped because of collinearity
note: 374.msa_factor dropped because of collinearity
note: 375.msa_factor dropped because of collinearity
note: 376.msa_factor dropped because of collinearity
note: 377.msa_factor dropped because of collinearity
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note: 378.msa_factor dropped because of collinearity
note: 379.msa_factor dropped because of collinearity
note: 380.msa_factor dropped because of collinearity
note: 381.msa_factor dropped because of collinearity
note: 382.msa_factor dropped because of collinearity
note: 383.msa_factor dropped because of collinearity
note: 384.msa_factor dropped because of collinearity
note: 385.msa_factor dropped because of collinearity
note: 386.msa_factor dropped because of collinearity
note: 387.msa_factor dropped because of collinearity
note: 388.msa_factor dropped because of collinearity
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Instrumental variables (2SLS) regression

Number of obs	= 7,372
Wald chi2(**388**)	= 39.11
Prob > chi2	= 1.0000
R-squared	= 0.9941
Root MSE	= .08635

(Std. Err. adjusted for **388** clusters in msa_factor)

log_annual_avg_em~l	Coef.	Robust Std. Err.	z	P>|z|	[95% Conf. Interval]	
log_federal_funding	.0892007	.0176956	5.04	0.000	.054518	.1238833
msa_factor						
C1038	-.1858595	4.49e-11	-4.1e+09	0.000	-.1858595	-.1858595
C1042	1.598843	4.49e-11	3.6e+10	0.000	1.598843	1.598843
C1050	-.0527424	4.49e-11	-1.2e+09	0.000	-.0527424	-.0527424
C1054	-.4176549	4.49e-11	-9.3e+09	0.000	-.4176549	-.4176549
C1058	1.900301	4.49e-11	4.2e+10	0.000	1.900301	1.900301
C1074	-.2509823	.3955709	-0.63	0.526	-1.026287	.5243224
C1078	-.0404502	4.49e-11	-9.0e+08	0.000	-.0404502	-.0404502
C1090	1.646502	4.49e-11	3.7e+10	0.000	1.646502	1.646502
C1102	-.0851516	4.49e-11	-1.9e+09	0.000	-.0851516	-.0851516
C1110	.5392121	4.49e-11	1.2e+10	0.000	.5392121	.5392121
C1118	-2.011464	.3208062	-6.27	0.000	-2.640233	-1.382696
C1126	.9534633	4.49e-11	2.1e+10	0.000	.9534633	.9534633
C1146	1.12477	4.49e-11	2.5e+10	0.000	1.12477	1.12477
C1150	-.3214098	4.49e-11	-7.2e+09	0.000	-.3214098	-.3214098
C1154	.5913284	4.49e-11	1.3e+10	0.000	.5913284	.5913284
C1164	-.5547216	4.49e-11	-1.2e+10	0.000	-.5547216	-.5547216
C1170	.9913567	4.49e-11	2.2e+10	0.000	.9913567	.9913567
C1202	.2177449	4.49e-11	4.8e+09	0.000	.2177449	.2177449
C1206	3.587937	4.49e-11	8.0e+10	0.000	3.587937	3.587937
C1210	.7523179	4.49e-11	1.7e+10	0.000	.7523179	.7523179
C1222	-.2493473	4.49e-11	-5.5e+09	0.000	-.2493473	-.2493473
C1226	1.192321	4.49e-11	2.7e+10	0.000	1.192321	1.192321
C1242	2.523324	4.49e-11	5.6e+10	0.000	2.523324	2.523324
C1254	1.491161	4.49e-11	3.3e+10	0.000	1.491161	1.491161
C1258	2.343448	.1255317	18.67	0.000	2.09741	2.589486
C1262	.0878989	4.49e-11	2.0e+09	0.000	.0878989	.0878989
C1270	.3717389	4.49e-11	8.3e+09	0.000	.3717389	.3717389
C1294	1.729443	4.49e-11	3.8e+10	0.000	1.729443	1.729443
C1298	-.1201835	4.49e-11	-2.7e+09	0.000	-.1201835	-.1201835
C1302	-.5694083	4.49e-11	-1.3e+10	0.000	-.5694083	-.5694083
C1314	.902232	4.49e-11	2.0e+10	0.000	.902232	.902232
C1322	-.3851193	4.49e-11	-8.6e+09	0.000	-.3851193	-.3851193
C1338	.2352391	4.49e-11	5.2e+09	0.000	.2352391	.2352391
C1346	.0207459	4.49e-11	4.6e+08	0.000	.0207459	.0207459
C1374	.206685	4.49e-11	4.6e+09	0.000	.206685	.206685
C1378	.4919571	4.49e-11	1.1e+10	0.000	.4919571	.4919571
C1382	2.016216	4.49e-11	4.5e+10	0.000	2.016216	2.016216
C1390	-.0133653	4.49e-11	-3.0e+08	0.000	-.0133653	-.0133653
C1398	.0515284	4.49e-11	1.1e+09	0.000	.0515284	.0515284
C1401	.3413415	4.49e-11	7.6e+09	0.000	.3413415	.3413415
C1402	.0339085	4.49e-11	7.5e+08	0.000	.0339085	.0339085
C1410	-.4822284	4.49e-11	-1.1e+10	0.000	-.4822284	-.4822284
C1426	1.43531	4.49e-11	3.2e+10	0.000	1.43531	1.43531
C1446	1.745752	.3761098	4.64	0.000	1.00859	2.482913
C1450	-.8110497	.3485163	-2.33	0.020	-1.494129	-.1279702
C1454	.0313583	4.49e-11	7.0e+08	0.000	.0313583	.0313583

C1474	.255118	4.49e-11	5.7e+09	0.000	.255118	.255118
C1486	1.869919	4.49e-11	4.2e+10	0.000	1.869919	1.869919
C1518	.6813686	4.49e-11	1.5e+10	0.000	.6813686	.6813686
C1526	-.4417857	4.49e-11	-9.8e+09	0.000	-.4417857	-.4417857
C1538	2.113909	4.49e-11	4.7e+10	0.000	2.113909	2.113909
C1550	-.0812934	4.49e-11	-1.8e+09	0.000	-.0812934	-.0812934
C1554	.5847571	4.49e-11	1.3e+10	0.000	.5847571	.5847571
C1568	-.4571407	4.49e-11	-1.0e+10	0.000	-.4571407	-.4571407
C1594	.9555489	4.49e-11	2.1e+10	0.000	.9555489	.9555489
C1598	1.20959	4.49e-11	2.7e+10	0.000	1.20959	1.20959
C1602	-.3766399	4.49e-11	-8.4e+09	0.000	-.3766399	-.3766399
C1606	-.2150362	4.49e-11	-4.8e+09	0.000	-.2150362	-.2150362
C1618	-.7678165	4.49e-11	-1.7e+10	0.000	-.7678165	-.7678165
C1622	-.5191554	4.49e-11	-1.2e+10	0.000	-.5191554	-.5191554
C1630	.7563112	4.49e-11	1.7e+10	0.000	.7563112	.7563112
C1654	-.1478437	4.49e-11	-3.3e+09	0.000	-.1478437	-.1478437
C1658	.4253509	4.49e-11	9.5e+09	0.000	.4253509	.4253509
C1662	.5789356	4.49e-11	1.3e+10	0.000	.5789356	.5789356
C1670	1.494764	4.49e-11	3.3e+10	0.000	1.494764	1.494764
C1674	2.751424	4.49e-11	6.1e+10	0.000	2.751424	2.751424
C1682	-1.246331	.3364316	-3.70	0.000	-1.905724	-.5869367
C1686	1.286637	4.49e-11	2.9e+10	0.000	1.286637	1.286637
C1694	-.3999036	4.49e-11	-8.9e+09	0.000	-.3999036	-.3999036
C1698	2.291962	.3803135	6.03	0.000	1.546561	3.037363
C1702	.1664572	4.49e-11	3.7e+09	0.000	.1664572	.1664572
C1714	2.744598	4.49e-11	6.1e+10	0.000	2.744598	2.744598
C1730	.2225617	4.49e-11	5.0e+09	0.000	.2225617	.2225617
C1742	-.4571936	4.49e-11	-1.0e+10	0.000	-.4571936	-.4571936
C1746	2.76591	4.49e-11	6.2e+10	0.000	2.76591	2.76591
C1766	-.1836833	4.49e-11	-4.1e+09	0.000	-.1836833	-.1836833
C1778	.4038435	4.49e-11	9.0e+09	0.000	.4038435	.4038435
C1782	1.379696	4.49e-11	3.1e+10	0.000	1.379696	1.379696
C1786	.2799164	4.49e-11	6.2e+09	0.000	.2799164	.2799164
C1790	1.677458	4.49e-11	3.7e+10	0.000	1.677458	1.677458
C1798	.5928419	4.49e-11	1.3e+10	0.000	.5928419	.5928419
C1802	-.3543558	4.49e-11	-7.9e+09	0.000	-.3543558	-.3543558
C1814	2.684481	4.49e-11	6.0e+10	0.000	2.684481	2.684481
C1858	1.021177	4.49e-11	2.3e+10	0.000	1.021177	1.021177
C1870	-.5943215	4.49e-11	-1.3e+10	0.000	-.5943215	-.5943215
C1888	.4394683	4.49e-11	9.8e+09	0.000	.4394683	.4394683
C1906	-.5495389	4.49e-11	-1.2e+10	0.000	-.5495389	-.5495389
C1910	3.845133	4.49e-11	8.6e+10	0.000	3.845133	3.845133
C1914	.0596721	4.49e-11	1.3e+09	0.000	.0596721	.0596721
C1918	-.7986335	4.49e-11	-1.8e+10	0.000	-.7986335	-.7986335
C1930	-.0454798	4.49e-11	-1.0e+09	0.000	-.0454798	-.0454798
C1934	1.039921	4.49e-11	2.3e+10	0.000	1.039921	1.039921
C1938	1.754556	4.49e-11	3.9e+10	0.000	1.754556	1.754556
C1946	-.1867073	4.49e-11	-4.2e+09	0.000	-.1867073	-.1867073
C1950	-.2299742	4.49e-11	-5.1e+09	0.000	-.2299742	-.2299742
C1966	1.016737	4.49e-11	2.3e+10	0.000	1.016737	1.016737
C1974	1.174628	.3591114	3.27	0.001	.4707821	1.878473
C1978	1.621527	4.49e-11	3.6e+10	0.000	1.621527	1.621527
C1982	3.368765	4.49e-11	7.5e+10	0.000	3.368765	3.368765
C2002	-.1223154	4.49e-11	-2.7e+09	0.000	-.1223154	-.1223154
C2010	-.0399469	4.49e-11	-8.9e+08	0.000	-.0399469	-.0399469
C2022	-.1600175	4.49e-11	-3.6e+09	0.000	-.1600175	-.1600175
C2026	.6623413	4.49e-11	1.5e+10	0.000	.6623413	.6623413
C2050	1.446021	4.49e-11	3.2e+10	0.000	1.446021	1.446021
C2070	-.1494813	4.49e-11	-3.3e+09	0.000	-.1494813	-.1494813
C2074	.1915526	4.49e-11	4.3e+09	0.000	.1915526	.1915526
C2094	-.0986222	4.49e-11	-2.2e+09	0.000	-.0986222	-.0986222
C2106	-.2348005	4.49e-11	-5.2e+09	0.000	-.2348005	-.2348005
C2114	.6150931	4.49e-11	1.4e+10	0.000	.6150931	.6150931
C2130	-.5316398	4.49e-11	-1.2e+10	0.000	-.5316398	-.5316398
C2134	1.460057	4.49e-11	3.2e+10	0.000	1.460057	1.460057
C2150	.6697987	4.49e-11	1.5e+10	0.000	.6697987	.6697987
C2166	.8109934	4.49e-11	1.8e+10	0.000	.8109934	.8109934
C2178	.8552358	4.49e-11	1.9e+10	0.000	.8552358	.8552358
C2182	-.5664175	4.49e-11	-1.3e+10	0.000	-.5664175	-.5664175
C2202	.6251874	4.49e-11	1.4e+10	0.000	.6251874	.6251874
C2214	-.2818802	4.49e-11	-6.3e+09	0.000	-.2818802	-.2818802
C2218	.6645222	4.49e-11	1.5e+10	0.000	.6645222	.6645222

C2222	1.139492	4.49e-11	2.5e+10	0.000	1.139492	1.139492
C2238	-.1071614	4.49e-11	-2.4e+09	0.000	-.1071614	-.1071614
C2242	.7755613	4.49e-11	1.7e+10	0.000	.7755613	.7755613
C2250	.2470617	4.49e-11	5.5e+09	0.000	.2470617	.2470617
C2252	-.209282	4.49e-11	-4.7e+09	0.000	-.209282	-.209282
C2254	-.337052	4.49e-11	-7.5e+09	0.000	-.337052	-.337052
C2266	.748512	4.49e-11	1.7e+10	0.000	.748512	.748512
C2290	.5353	4.49e-11	1.2e+10	0.000	.5353	.5353
C2306	1.151438	4.49e-11	2.6e+10	0.000	1.151438	1.151438
C2342	1.701109	4.49e-11	3.8e+10	0.000	1.701109	1.701109
C2346	-.587829	4.49e-11	-1.3e+10	0.000	-.587829	-.587829
C2354	.6739185	4.49e-11	1.5e+10	0.000	.6739185	.6739185
C2358	.1378566	4.49e-11	3.1e+09	0.000	.1378566	.1378566
C2390	-.6440474	4.49e-11	-1.4e+10	0.000	-.6440474	-.6440474
C2402	-.1922228	4.49e-11	-4.3e+09	0.000	-.1922228	-.1922228
C2414	-.3875071	4.49e-11	-8.6e+09	0.000	-.3875071	-.3875071
C2422	-.2307249	4.49e-11	-5.1e+09	0.000	-.2307249	-.2307249
C2426	-.4623901	4.49e-11	-1.0e+10	0.000	-.4623901	-.4623901
C2430	-.0936842	4.49e-11	-2.1e+09	0.000	-.0936842	-.0936842
C2434	2.03376	4.49e-11	4.5e+10	0.000	2.03376	2.03376
C2442	-.9730903	4.49e-11	-2.2e+10	0.000	-.9730903	-.9730903
C2450	-.6132597	4.49e-11	-1.4e+10	0.000	-.6132597	-.6132597
C2454	.3030802	4.49e-11	6.7e+09	0.000	.3030802	.3030802
C2458	.9453624	4.49e-11	2.1e+10	0.000	.9453624	.9453624
C2466	1.68806	4.49e-11	3.8e+10	0.000	1.68806	1.68806
C2478	.103313	4.49e-11	2.3e+09	0.000	.103313	.103313
C2486	1.713874	4.49e-11	3.8e+10	0.000	1.713874	1.713874
C2502	-1.379411	4.49e-11	-3.1e+10	0.000	-1.379411	-1.379411
C2506	.8324794	4.49e-11	1.9e+10	0.000	.8324794	.8324794
C2518	.403929	4.49e-11	9.0e+09	0.000	.403929	.403929
C2522	-.4599147	4.49e-11	-1.0e+10	0.000	-.4599147	-.4599147
C2526	-.4182354	4.49e-11	-9.3e+09	0.000	-.4182354	-.4182354
C2542	1.587784	4.49e-11	3.5e+10	0.000	1.587784	1.587784
C2550	-.0655507	4.49e-11	-1.5e+09	0.000	-.0655507	-.0655507
C2554	2.245517	4.49e-11	5.0e+10	0.000	2.245517	2.245517
C2562	-.1341346	4.49e-11	-3.0e+09	0.000	-.1341346	-.1341346
C2586	.8639744	4.49e-11	1.9e+10	0.000	.8639744	.8639744
C2594	.0553808	4.49e-11	1.2e+09	0.000	.0553808	.0553808
C2598	-1.2611	4.49e-11	-2.8e+10	0.000	-1.2611	-1.2611
C2614	-.7061057	4.49e-11	-1.6e+10	0.000	-.7061057	-.7061057
C2630	-.5682459	4.49e-11	-1.3e+10	0.000	-.5682459	-.5682459
C2638	.3243366	4.49e-11	7.2e+09	0.000	.3243366	.3243366
C2642	3.693299	4.49e-11	8.2e+10	0.000	3.693299	3.693299
C2658	.7071794	4.49e-11	1.6e+10	0.000	.7071794	.7071794
C2662	1.140712	4.49e-11	2.5e+10	0.000	1.140712	1.140712
C2682	-1.91971	.3625976	-5.29	0.000	-2.630388	-1.209031
C2690	2.660786	4.49e-11	5.9e+10	0.000	2.660786	2.660786
C2698	.2690469	4.49e-11	6.0e+09	0.000	.2690469	.2690469
C2706	-1.148391	.1768544	-6.49	0.000	-1.495019	-.8017627
C2710	-.1256699	4.49e-11	-2.8e+09	0.000	-.1256699	-.1256699
C2714	1.346931	4.49e-11	3.0e+10	0.000	1.346931	1.346931
C2718	-.0341195	4.49e-11	-7.6e+08	0.000	-.0341195	-.0341195
C2726	2.215346	4.49e-11	4.9e+10	0.000	2.215346	2.215346
C2734	-.3509634	4.49e-11	-7.8e+09	0.000	-.3509634	-.3509634
C2750	.0054346	4.49e-11	1.2e+08	0.000	.0054346	.0054346
C2762	.1531347	4.49e-11	3.4e+09	0.000	.1531347	.1531347
C2774	.1549291	4.49e-11	3.4e+09	0.000	.1549291	.1549291
C2778	-.1430452	4.49e-11	-3.2e+09	0.000	-.1430452	-.1430452
C2786	-.2568664	4.49e-11	-5.7e+09	0.000	-.2568664	-.2568664
C2790	.1795377	4.49e-11	4.0e+09	0.000	.1795377	.1795377
C2798	.101511	4.49e-11	2.3e+09	0.000	.101511	.101511
C2802	.7583881	4.49e-11	1.7e+10	0.000	.7583881	.7583881
C2810	-.401213	4.49e-11	-8.9e+09	0.000	-.401213	-.401213
C2814	2.716208	4.49e-11	6.0e+10	0.000	2.716208	2.716208
C2842	-1.414025	.3789259	-3.73	0.000	-2.156706	-.6713435
C2866	.6564623	4.49e-11	1.5e+10	0.000	.6564623	.6564623
C2870	.5978897	4.49e-11	1.3e+10	0.000	.5978897	.5978897
C2874	-.061622	4.49e-11	-1.4e+09	0.000	-.061622	-.061622
C2894	-.2252879	.3834788	-0.59	0.557	-.9768927	.5263168
C2902	-.490569	4.49e-11	-1.1e+10	0.000	-.490569	-.490569
C2910	.1125968	4.49e-11	2.5e+09	0.000	.1125968	.1125968
C2918	1.144021	4.49e-11	2.5e+10	0.000	1.144021	1.144021

C2920	.2881227	4.49e-11	6.4e+09	0.000	.2881227	.2881227
C2934	.3688894	4.49e-11	8.2e+09	0.000	.3688894	.3688894
C2942	-.2968603	4.49e-11	-6.6e+09	0.000	-.2968603	-.2968603
C2946	1.137826	4.49e-11	2.5e+10	0.000	1.137826	1.137826
C2954	1.265171	4.49e-11	2.8e+10	0.000	1.265171	1.265171
C2962	1.172467	4.49e-11	2.6e+10	0.000	1.172467	1.172467
C2970	.3190878	4.49e-11	7.1e+09	0.000	.3190878	.3190878
C2974	.0559722	4.49e-11	1.2e+09	0.000	.0559722	.0559722
C2982	2.598184	4.49e-11	5.8e+10	0.000	2.598184	2.598184
C2994	-.2959296	4.49e-11	-6.6e+09	0.000	-.2959296	-.2959296
C3002	-.4078566	4.49e-11	-9.1e+09	0.000	-.4078566	-.4078566
C3014	-.296168	4.49e-11	-6.6e+09	0.000	-.296168	-.296168
C3030	-.8880511	4.49e-11	-2.0e+10	0.000	-.8880511	-.8880511
C3034	-.2826126	4.49e-11	-6.3e+09	0.000	-.2826127	-.2826126
C3046	1.34874	4.49e-11	3.0e+10	0.000	1.34874	1.34874
C3062	-.2008147	4.49e-11	-4.5e+09	0.000	-.2008147	-.2008147
C3070	.943109	4.49e-11	2.1e+10	0.000	.943109	.943109
C3078	1.617888	4.49e-11	3.6e+10	0.000	1.617888	1.617888
C3086	-.2351406	4.49e-11	-5.2e+09	0.000	-.2351406	-.2351406
C3098	.367639	4.49e-11	8.2e+09	0.000	.367639	.367639
C3102	-.5504133	4.49e-11	-1.2e+10	0.000	-.5504133	-.5504133
C3108	2.477843	.3962072	6.25	0.000	1.701291	3.254395
C3114	2.215894	4.49e-11	4.9e+10	0.000	2.215894	2.215894
C3118	.7037274	4.49e-11	1.6e+10	0.000	.7037274	.7037274
C3134	.4343482	4.49e-11	9.7e+09	0.000	.4343482	.4343482
C3142	.4053025	4.49e-11	9.0e+09	0.000	.4053025	.4053025
C3146	-.3484647	4.49e-11	-7.8e+09	0.000	-.3484647	-.3484647
C3154	1.706437	4.49e-11	3.8e+10	0.000	1.706437	1.706437
C3170	1.111402	4.49e-11	2.5e+10	0.000	1.111402	1.111402
C3174	-.5608451	4.49e-11	-1.2e+10	0.000	-.5608451	-.5608451
C3186	-.2240533	4.49e-11	-5.0e+09	0.000	-.2240533	-.2240533
C3190	-.1734513	4.49e-11	-3.9e+09	0.000	-.1734513	-.1734513
C3242	-.5525425	4.49e-11	-1.2e+10	0.000	-.5525425	-.5525425
C3258	1.229436	4.49e-11	2.7e+10	0.000	1.229436	1.229436
C3278	.2309505	4.49e-11	5.1e+09	0.000	.2309505	.2309505
C3282	2.23147	4.49e-11	5.0e+10	0.000	2.23147	2.23147
C3290	.111692	4.49e-11	2.5e+09	0.000	.111692	.111692
C3310	3.579406	4.49e-11	8.0e+10	0.000	3.579406	3.579406
C3314	-.4059116	4.49e-11	-9.0e+09	0.000	-.4059116	-.4059116
C3322	-.5876801	4.49e-11	-1.3e+10	0.000	-.5876801	-.5876801
C3326	.1441644	4.49e-11	3.2e+09	0.000	.1441644	.1441644
C3334	2.538876	4.49e-11	5.6e+10	0.000	2.538876	2.538876
C3346	3.321519	4.49e-11	7.4e+10	0.000	3.321519	3.321519
C3354	-.147497	4.49e-11	-3.3e+09	0.000	-.147497	-.147497
C3366	.9630099	4.49e-11	2.1e+10	0.000	.9630099	.9630099
C3370	.9945019	4.49e-11	2.2e+10	0.000	.9945019	.9945019
C3374	.1685052	4.49e-11	3.7e+09	0.000	.1685052	.1685052
C3378	-.4532549	4.49e-11	-1.0e+10	0.000	-.4532549	-.4532549
C3386	.9330346	4.49e-11	2.1e+10	0.000	.9330346	.9330346
C3406	-.1050763	4.49e-11	-2.3e+09	0.000	-.1050763	-.1050763
C3410	-.4028277	4.49e-11	-9.0e+09	0.000	-.4028277	-.4028277
C3458	-.2988824	4.49e-11	-6.7e+09	0.000	-.2988824	-.2988824
C3462	-.3159533	4.49e-11	-7.0e+09	0.000	-.3159533	-.3159533
C3474	-.036093	4.49e-11	-8.0e+08	0.000	-.036093	-.036093
C3482	.7859763	4.49e-11	1.7e+10	0.000	.7859763	.7859763
C3490	.0766478	4.49e-11	1.7e+09	0.000	.0766478	.0766478
C3494	.6811773	4.49e-11	1.5e+10	0.000	.6811773	.6811773
C3498	2.536577	4.49e-11	5.6e+10	0.000	2.536577	2.536577
C3510	-.3706971	4.49e-11	-8.2e+09	0.000	-.3706971	-.3706971
C3530	1.728181	4.49e-11	3.8e+10	0.000	1.728181	1.728181
C3538	2.137006	4.49e-11	4.8e+10	0.000	2.137006	2.137006
C3562	3.036397	.369581	8.22	0.000	2.312031	3.760762
C3566	-.0423889	4.49e-11	-9.4e+08	0.000	-.0423889	-.0423889
C3584	1.429555	4.49e-11	3.2e+10	0.000	1.429555	1.429555
C3598	.6735449	4.49e-11	1.5e+10	0.000	.6735449	.6735449
C3610	.3928396	4.49e-11	8.7e+09	0.000	.3928396	.3928396
C3614	-.4427413	4.49e-11	-9.9e+09	0.000	-.4427413	-.4427413
C3622	-.0221598	4.49e-11	-4.9e+08	0.000	-.0221598	-.0221598
C3626	1.236127	4.49e-11	2.8e+10	0.000	1.236127	1.236127
C3642	2.174153	4.49e-11	4.8e+10	0.000	2.174153	2.174153
C3650	.4428002	4.49e-11	9.9e+09	0.000	.4428002	.4428002
C3654	1.941855	4.49e-11	4.3e+10	0.000	1.941855	1.941855

C3674	2.769068	4.49e-11	6.2e+10	0.000	2.769068	2.769068
C3678	.3403491	4.49e-11	7.6e+09	0.000	.3403491	.3403491
C3698	-.2515662	4.49e-11	-5.6e+09	0.000	-.2515662	-.2515662
C3710	1.579963	4.49e-11	3.5e+10	0.000	1.579963	1.579963
C3734	1.122434	4.49e-11	2.5e+10	0.000	1.122434	1.122434
C3746	.1555096	4.49e-11	3.5e+09	0.000	.1555096	.1555096
C3762	-.4845573	4.49e-11	-1.1e+10	0.000	-.4845573	-.4845573
C3786	.9035532	4.49e-11	2.0e+10	0.000	.9035532	.9035532
C3790	.9964977	4.49e-11	2.2e+10	0.000	.9964977	.9964977
C3798	3.728411	4.49e-11	8.3e+10	0.000	3.728411	3.728411
C3806	3.330819	4.49e-11	7.4e+10	0.000	3.330819	3.330819
C3822	-.5954487	4.49e-11	-1.3e+10	0.000	-.5954487	-.5954487
C3830	1.134211	.3384898	3.35	0.001	.470783	1.797639
C3834	-.0375463	4.49e-11	-8.4e+08	0.000	-.0375463	-.0375463
C3854	-.6774673	4.49e-11	-1.5e+10	0.000	-.6774673	-.6774673
C3866	.158748	4.49e-11	3.5e+09	0.000	.158748	.158748
C3886	1.390333	4.49e-11	3.1e+10	0.000	1.390333	1.390333
C3890	2.777757	4.49e-11	6.2e+10	0.000	2.777757	2.777757
C3894	.6728136	4.49e-11	1.5e+10	0.000	.6728136	.6728136
C3914	-.1018156	4.49e-11	-2.3e+09	0.000	-.1018156	-.1018156
C3930	2.360136	4.49e-11	5.3e+10	0.000	2.360136	2.360136
C3934	1.048371	4.49e-11	2.3e+10	0.000	1.048371	1.048371
C3938	-.1184046	4.49e-11	-2.6e+09	0.000	-.1184046	-.1184046
C3946	-.3982574	4.49e-11	-8.9e+09	0.000	-.3982574	-.3982574
C3954	.1527769	4.49e-11	3.4e+09	0.000	.1527769	.1527769
C3958	2.075254	4.49e-11	4.6e+10	0.000	2.075254	2.075254
C3966	-.0226929	4.49e-11	-5.0e+08	0.000	-.0226929	-.0226929
C3974	.9560029	4.49e-11	2.1e+10	0.000	.9560029	.9560029
C3982	.0030591	4.49e-11	6.8e+07	0.000	.0030591	.0030591
C3990	1.17241	4.49e-11	2.6e+10	0.000	1.17241	1.17241
C4006	2.226439	4.49e-11	5.0e+10	0.000	2.226439	2.226439
C4014	2.972534	4.49e-11	6.6e+10	0.000	2.972534	2.972534
C4022	.8541874	4.49e-11	1.9e+10	0.000	.8541874	.8541874
C4034	.539012	4.49e-11	1.2e+10	0.000	.539012	.539012
C4038	2.053639	4.49e-11	4.6e+10	0.000	2.053639	2.053639
C4042	.8207277	4.49e-11	1.8e+10	0.000	.8207277	.8207277
C4058	-.0639403	4.49e-11	-1.4e+09	0.000	-.0639403	-.0639403
C4066	-.4913024	4.49e-11	-1.1e+10	0.000	-.4913024	-.4913024
C4090	2.646987	4.49e-11	5.9e+10	0.000	2.646987	2.646987
C4098	.2878865	4.49e-11	6.4e+09	0.000	.2878865	.2878865
C4106	.4170444	4.49e-11	9.3e+09	0.000	.4170444	.4170444
C4110	-.2515625	4.49e-11	-5.6e+09	0.000	-.2515625	-.2515625
C4114	-.1708672	4.49e-11	-3.8e+09	0.000	-.1708672	-.1708672
C4118	2.998615	4.49e-11	6.7e+10	0.000	2.998615	2.998615
C4142	.8929814	4.49e-11	2.0e+10	0.000	.8929814	.8929814
C4150	1.007926	4.49e-11	2.2e+10	0.000	1.007926	1.007926
C4154	.8289856	4.49e-11	1.8e+10	0.000	.8289856	.8289856
C4162	2.249466	4.49e-11	5.0e+10	0.000	2.249466	2.249466
C4166	-.3294677	4.49e-11	-7.3e+09	0.000	-.3294677	-.3294677
C4170	1.062786	.3036409	3.50	0.000	.4676609	1.657911
C4174	3.024288	4.49e-11	6.7e+10	0.000	3.024288	3.024288
C4186	1.499037	.3953908	3.79	0.000	.7240851	2.273988
C4190	-1.10342	4.49e-11	-2.5e+10	0.000	-1.10342	-1.10342
C4194	2.70143	4.49e-11	6.0e+10	0.000	2.70143	2.70143
C4198	2.374243	4.49e-11	5.3e+10	0.000	2.374243	2.374243
C4202	.5103144	4.49e-11	1.1e+10	0.000	.5103144	.5103144
C4210	.4308187	4.49e-11	9.6e+09	0.000	.4308187	.4308187
C4214	-.03966	4.49e-11	-8.8e+08	0.000	-.03966	-.03966
C4220	1.070452	4.49e-11	2.4e+10	0.000	1.070452	1.070452
C4222	1.095988	4.49e-11	2.4e+10	0.000	1.095988	1.095988
C4234	.8618578	4.49e-11	1.9e+10	0.000	.8618578	.8618578
C4254	1.36082	4.49e-11	3.0e+10	0.000	1.36082	1.36082
C4266	3.289771	4.49e-11	7.3e+10	0.000	3.289771	3.289771
C4268	-.2943014	4.49e-11	-6.5e+09	0.000	-.2943014	-.2943014
C4270	-.8562848	4.49e-11	-1.9e+10	0.000	-.8562848	-.8562848
C4310	-.0716208	4.49e-11	-1.6e+09	0.000	-.0716208	-.0716208
C4330	-.3888022	4.49e-11	-8.7e+09	0.000	-.3888022	-.3888022
C4334	1.030413	4.49e-11	2.3e+10	0.000	1.030413	1.030413
C4342	-.5925132	4.49e-11	-1.3e+10	0.000	-.5925132	-.5925132
C4358	.2820979	4.49e-11	6.3e+09	0.000	.2820979	.2820979
C4362	.7367612	4.49e-11	1.6e+10	0.000	.7367612	.7367612
C4378	.7093288	4.49e-11	1.6e+10	0.000	.7093288	.7093288

C4390	.7005456	4.49e-11	1.6e+10	0.000	.7005456	.7005456
C4406	1.22213	4.49e-11	2.7e+10	0.000	1.22213	1.22213
C4410	.7320022	4.49e-11	1.6e+10	0.000	.7320022	.7320022
C4414	1.406298	4.49e-11	3.1e+10	0.000	1.406298	1.406298
C4418	1.065954	4.49e-11	2.4e+10	0.000	1.065954	1.065954
C4422	-.2497039	4.49e-11	-5.6e+09	0.000	-.2497039	-.2497039
C4430	.0327231	4.49e-11	7.3e+08	0.000	.0327231	.0327231
C4442	-.3078718	4.49e-11	-6.9e+09	0.000	-.3078718	-.3078718
C4470	1.239013	4.49e-11	2.8e+10	0.000	1.239013	1.239013
C4494	-.5465253	4.49e-11	-1.2e+10	0.000	-.5465253	-.5465253
C4506	1.545671	4.49e-11	3.4e+10	0.000	1.545671	1.545671
C4522	.948541	4.49e-11	2.1e+10	0.000	.948541	.948541
C4530	2.910721	4.49e-11	6.5e+10	0.000	2.910721	2.910721
C4546	.05563	4.49e-11	1.2e+09	0.000	.05563	.05563
C4550	-.0929365	4.49e-11	-2.1e+09	0.000	-.0929365	-.0929365
C4554	-1.217269	4.49e-11	-2.7e+10	0.000	-1.217269	-1.217269
C4578	1.519233	4.49e-11	3.4e+10	0.000	1.519233	1.519233
C4582	.5257081	4.49e-11	1.2e+10	0.000	.5257081	.5257081
C4594	-.4168464	.337256	-1.24	0.216	-1.077856	.2441632
C4606	.0818605	.3222157	0.25	0.799	-.5496706	.7133916
C4614	1.856927	4.49e-11	4.1e+10	0.000	1.856927	1.856927
C4622	.3649834	4.49e-11	8.1e+09	0.000	.3649834	.3649834
C4634	.3809917	4.49e-11	8.5e+09	0.000	.3809917	.3809917
C4652	1.94048	4.49e-11	4.3e+10	0.000	1.94048	1.94048
C4654	.6597761	4.49e-11	1.5e+10	0.000	.6597761	.6597761
C4666	-.1881165	4.49e-11	-4.2e+09	0.000	-.1881165	-.1881165
C4670	.6961036	4.49e-11	1.5e+10	0.000	.6961036	.6961036
C4702	-.4752122	4.49e-11	-1.1e+10	0.000	-.4752122	-.4752122
C4722	-.0724419	4.49e-11	-1.6e+09	0.000	-.0724419	-.0724419
C4726	.7067711	.341323	2.07	0.038	.0377902	1.375752
C4730	.8359821	4.49e-11	1.9e+10	0.000	.8359821	.8359821
C4738	.5153805	4.49e-11	1.1e+10	0.000	.5153805	.5153805
C4746	-.8429081	4.49e-11	-1.9e+10	0.000	-.8429081	-.8429081
C4758	.0408601	4.49e-11	9.1e+08	0.000	.0408601	.0408601
C4790	1.867104	.3877349	4.82	0.000	1.107157	2.62705
C4794	.2973999	4.49e-11	6.6e+09	0.000	.2973999	.2973999
C4806	-.4493644	4.49e-11	-1.0e+10	0.000	-.4493644	-.4493644
C4814	.0682955	4.49e-11	1.5e+09	0.000	.0682955	.0682955
C4826	-.4118979	4.49e-11	-9.2e+09	0.000	-.4118979	-.4118979
C4830	-.2405027	4.49e-11	-5.4e+09	0.000	-.2405027	-.2405027
C4854	-.0103447	4.49e-11	-2.3e+08	0.000	-.0103447	-.0103447
C4862	1.503372	4.49e-11	3.3e+10	0.000	1.503372	1.503372
C4866	-.0957628	4.49e-11	-2.1e+09	0.000	-.0957628	-.0957628
C4870	-.2066021	4.49e-11	-4.6e+09	0.000	-.2066021	-.2066021
C4890	.5468322	4.49e-11	1.2e+10	0.000	.5468322	.5468322
C4902	-.1446499	4.49e-11	-3.2e+09	0.000	-.1446499	-.1446499
C4918	1.364948	4.49e-11	3.0e+10	0.000	1.364948	1.364948
C4934	1.73682	4.49e-11	3.9e+10	0.000	1.73682	1.73682
C4942	.4693614	4.49e-11	1.0e+10	0.000	.4693614	.4693614
C4962	.9904048	4.49e-11	2.2e+10	0.000	.9904048	.9904048
C4966	1.248511	4.49e-11	2.8e+10	0.000	1.248511	1.248511
C4970	-.3554547	4.49e-11	-7.9e+09	0.000	-.3554547	-.3554547
C4974	-.0102475	4.49e-11	-2.3e+08	0.000	-.0102475	-.0102475
_cons	11.75803	4.49e-11	2.6e+11	0.000	11.75803	11.75803

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71.msa_factor 72.msa_factor 73.msa_factor
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                  defense_funding_instrument

399 outreg2 using output/defense_iv.doc, append ctitle("Average employment (log-log)") k
  > eep(log_federal_funding)
  output/defense_iv.doc
  dir : seeout


400
401
402
403 //make table for slides (note: not log-log)
404 reg avg_annual_pay federal_funding i.year i.msa_factor i.ffrdc_count, robust cluster
  > (msa_factor)
  note: 2.ffrdc_count omitted because of collinearity
  note: 3.ffrdc_count omitted because of collinearity
  note: 5.ffrdc_count omitted because of collinearity
  note: 13.ffrdc_count omitted because of collinearity
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Linear regression				Number of obs	=	7,372
				$F(19, 387)$	=	.
				Prob > F	=	.
				R-squared	=	0.9647
				Root MSE	=	1.6898

(Std. Err. adjusted for **388** clusters in msa_factor)

avg_annual_pay	Coef.	Robust Std. Err.	t	P>|t|	[95% Conf. Interval]	
federal_funding	.0005768	.0007174	0.80	0.422	-.0008337	.0019873
year						
2002	.4443612	.0400104	11.11	0.000	.3656962	.5230261
2003	.7375188	.0479297	15.39	0.000	.6432837	.8317539
2004	1.244319	.0542111	22.95	0.000	1.137734	1.350904
2005	1.121	.0642782	17.44	0.000	.9946219	1.247378
2006	1.528718	.0789724	19.36	0.000	1.37345	1.683987
2007	2.006244	.0959931	20.90	0.000	1.817511	2.194978
2008	1.563875	.1101003	14.20	0.000	1.347405	1.780344
2009	2.110062	.1181795	17.85	0.000	1.877708	2.342417
2010	2.300569	.129305	17.79	0.000	2.046341	2.554797
2011	1.969904	.1377928	14.30	0.000	1.698988	2.24082
2012	1.994093	.148551	13.42	0.000	1.702025	2.286161
2013	1.847674	.1534502	12.04	0.000	1.545973	2.149374
2014	2.340398	.1692199	13.83	0.000	2.007693	2.673103
2015	3.531999	.1677307	21.06	0.000	3.202221	3.861776
2016	3.543466	.1658834	21.36	0.000	3.21732	3.869611
2017	3.951515	.1856586	21.28	0.000	3.58649	4.316541
2018	4.278274	.2046276	20.91	0.000	3.875953	4.680595
2019	4.876612	.2161203	22.56	0.000	4.451695	5.301529
msa_factor						
C1038	-14.31439	1.30e-13	-1.1e+14	0.000	-14.31439	-14.31439
C1042	9.435658	1.30e-13	7.3e+13	0.000	9.435658	9.435658

C1050	1.918012	1.30e-13	1.5e+13	0.000	1.918012	1.918012
C1054	3.063446	1.30e-13	2.4e+13	0.000	3.063446	3.063446
C1058	14.33511	1.30e-13	1.1e+14	0.000	14.33511	14.33511
C1074	6.574161	2.120057	3.10	0.002	2.40589	10.74243
C1078	1.265649	1.30e-13	9.8e+12	0.000	1.265649	1.265649
C1090	11.5436	1.30e-13	8.9e+13	0.000	11.5436	11.5436
C1102	.8377593	1.30e-13	6.5e+12	0.000	.8377593	.8377593
C1110	5.161588	1.30e-13	4.0e+13	0.000	5.161588	5.161588
C1118	7.97973	1.124685	7.10	0.000	5.768473	10.19099
C1126	17.05607	1.30e-13	1.3e+14	0.000	17.05607	17.05607
C1146	19.82154	1.30e-13	1.5e+14	0.000	19.82154	19.82154
C1150	1.685616	1.30e-13	1.3e+13	0.000	1.685616	1.685616
C1154	6.198388	1.30e-13	4.8e+13	0.000	6.198388	6.198388
C1164	-14.12712	1.30e-13	-1.1e+14	0.000	-14.12712	-14.12712
C1170	1.616884	1.30e-13	1.2e+13	0.000	1.616884	1.616884
C1202	3.779103	1.30e-13	2.9e+13	0.000	3.779103	3.779103
C1206	19.44891	1.30e-13	1.5e+14	0.000	19.44891	19.44891
C1210	7.94364	1.30e-13	6.1e+13	0.000	7.94364	7.94364
C1222	-.5626745	1.30e-13	-4.3e+12	0.000	-.5626745	-.5626745
C1226	6.687573	1.30e-13	5.2e+13	0.000	6.687573	6.687573
C1242	19.35954	1.30e-13	1.5e+14	0.000	19.35954	19.35954
C1254	7.268423	1.30e-13	5.6e+13	0.000	7.268423	7.268423
C1258	19.22054	.4147502	46.34	0.000	18.40509	20.03598
C1262	1.635593	1.30e-13	1.3e+13	0.000	1.635593	1.635593
C1270	7.30154	1.30e-13	5.6e+13	0.000	7.30154	7.30154
C1294	10.07243	1.30e-13	7.8e+13	0.000	10.07243	10.07243
C1298	11.53756	1.30e-13	8.9e+13	0.000	11.53756	11.53756
C1302	4.479609	1.30e-13	3.5e+13	0.000	4.479609	4.479609
C1314	12.34371	1.30e-13	9.5e+13	0.000	12.34371	12.34371
C1322	1.156446	1.30e-13	8.9e+12	0.000	1.156446	1.156446
C1338	4.5083	1.30e-13	3.5e+13	0.000	4.5083	4.5083
C1346	3.087731	1.30e-13	2.4e+13	0.000	3.087731	3.087731
C1374	4.901555	1.30e-13	3.8e+13	0.000	4.901555	4.901555
C1378	5.443066	1.30e-13	4.2e+13	0.000	5.443066	5.443066
C1382	12.81149	1.30e-13	9.9e+13	0.000	12.81149	12.81149
C1390	6.391189	1.30e-13	4.9e+13	0.000	6.391189	6.391189
C1398	2.775237	1.30e-13	2.1e+13	0.000	2.775237	2.775237
C1401	13.50206	1.30e-13	1.0e+14	0.000	13.50206	13.50206
C1402	2.137125	1.30e-13	1.6e+13	0.000	2.137125	2.137125
C1410	8.438332	1.30e-13	6.5e+13	0.000	8.438332	8.438332
C1426	6.216221	1.30e-13	4.8e+13	0.000	6.216221	6.216221
C1446	34.75939	1.260962	27.57	0.000	32.2802	37.23859
C1450	26.10829	1.127372	23.16	0.000	23.89174	28.32483
C1454	1.415942	1.30e-13	1.1e+13	0.000	1.415942	1.415942
C1474	10.28998	1.30e-13	7.9e+13	0.000	10.28998	10.28998
C1486	52.24754	1.30e-13	4.0e+14	0.000	52.24754	52.24754
C1518	-5.826742	1.30e-13	-4.5e+13	0.000	-5.826742	-5.826742
C1526	1.681595	1.30e-13	1.3e+13	0.000	1.681595	1.681595
C1538	8.224147	1.30e-13	6.3e+13	0.000	8.224147	8.224147
C1550	1.210693	1.30e-13	9.3e+12	0.000	1.210693	1.210693
C1554	12.69583	1.30e-13	9.8e+13	0.000	12.69583	12.69583
C1568	25.66967	1.30e-13	2.0e+14	0.000	25.66967	25.66967
C1594	2.677074	1.30e-13	2.1e+13	0.000	2.677074	2.677074
C1598	5.25115	1.30e-13	4.1e+13	0.000	5.25115	5.25115
C1602	.0711503	1.30e-13	5.5e+11	0.000	.0711503	.0711503
C1606	.7832935	1.30e-13	6.0e+12	0.000	.7832935	.7832935
C1618	11.02264	1.30e-13	8.5e+13	0.000	11.02264	11.02264
C1622	9.940256	1.30e-13	7.7e+13	0.000	9.940256	9.940256
C1630	11.58172	1.30e-13	8.9e+13	0.000	11.58172	11.58172
C1654	3.028598	1.30e-13	2.3e+13	0.000	3.028598	3.028598
C1658	6.360099	1.30e-13	4.9e+13	0.000	6.360099	6.360099
C1662	8.309893	1.30e-13	6.4e+13	0.000	8.309893	8.309893
C1670	6.799671	1.30e-13	5.2e+13	0.000	6.799671	6.799671
C1674	16.11353	1.30e-13	1.2e+14	0.000	16.11353	16.11353
C1682	11.26063	1.124686	10.01	0.000	9.049368	13.47189
C1686	6.515723	1.30e-13	5.0e+13	0.000	6.515723	6.515723
C1694	5.660238	1.30e-13	4.4e+13	0.000	5.660238	5.660238
C1698	21.86932	.7754524	28.20	0.000	20.34469	23.39394
C1702	1.532054	1.30e-13	1.2e+13	0.000	1.532054	1.532054
C1714	14.09921	1.30e-13	1.1e+14	0.000	14.09921	14.09921
C1730	-.0872919	1.30e-13	-6.7e+11	0.000	-.0872919	-.0872919
C1742	2.269303	1.30e-13	1.8e+13	0.000	2.269303	2.269303

C1746	13.49697	1.30e-13	1.0e+14	0.000	13.49697	13.49697
C1766	-1.587088	1.30e-13	-1.2e+13	0.000	-1.587088	-1.587088
C1778	.9310357	1.30e-13	7.2e+12	0.000	.9310357	.9310357
C1782	10.20559	1.30e-13	7.9e+13	0.000	10.20559	10.20559
C1786	3.341587	1.30e-13	2.6e+13	0.000	3.341587	3.341587
C1790	5.595211	1.30e-13	4.3e+13	0.000	5.595211	5.595211
C1798	2.987929	1.30e-13	2.3e+13	0.000	2.987929	2.987929
C1802	12.79054	1.30e-13	9.9e+13	0.000	12.79054	12.79054
C1814	13.43252	1.30e-13	1.0e+14	0.000	13.43252	13.43252
C1858	6.621647	1.30e-13	5.1e+13	0.000	6.621647	6.621647
C1870	11.88199	1.30e-13	9.2e+13	0.000	11.88199	11.88199
C1888	3.029422	1.30e-13	2.3e+13	0.000	3.029422	3.029422
C1906	-.2815775	1.30e-13	-2.2e+12	0.000	-.2815775	-.2815775
C1910	21.24204	1.30e-13	1.6e+14	0.000	21.24204	21.24204
C1914	3.239488	1.30e-13	2.5e+13	0.000	3.239488	3.239488
C1918	3.012259	1.30e-13	2.3e+13	0.000	3.012259	3.012259
C1930	-3.149031	1.30e-13	-2.4e+13	0.000	-3.149031	-3.149031
C1934	9.087404	1.30e-13	7.0e+13	0.000	9.087404	9.087404
C1938	9.957992	1.30e-13	7.7e+13	0.000	9.957992	9.957992
C1946	5.157963	1.30e-13	4.0e+13	0.000	5.157963	5.157963
C1950	11.02794	1.30e-13	8.5e+13	0.000	11.02794	11.02794
C1966	-.2316818	1.30e-13	-1.8e+12	0.000	-.2316818	-.2316818
C1974	23.45024	1.140202	20.57	0.000	21.20847	25.692
C1978	14.16461	1.30e-13	1.1e+14	0.000	14.16461	14.16461
C1982	20.76722	1.30e-13	1.6e+14	0.000	20.76722	20.76722
C2002	.9941069	1.30e-13	7.7e+12	0.000	.9941069	.9941069
C2010	4.095217	1.30e-13	3.2e+13	0.000	4.095217	4.095217
C2022	4.310917	1.30e-13	3.3e+13	0.000	4.310917	4.310917
C2026	4.733437	1.30e-13	3.7e+13	0.000	4.733437	4.733437
C2050	24.55074	1.30e-13	1.9e+14	0.000	24.55074	24.55074
C2070	4.044563	1.30e-13	3.1e+13	0.000	4.044563	4.044563
C2074	2.278433	1.30e-13	1.8e+13	0.000	2.278433	2.278433
C2094	.1661182	1.30e-13	1.3e+12	0.000	.1661182	.1661182
C2106	2.006028	1.30e-13	1.5e+13	0.000	2.006028	2.006028
C2114	6.437449	1.30e-13	5.0e+13	0.000	6.437449	6.437449
C2130	5.597214	1.30e-13	4.3e+13	0.000	5.597214	5.597214
C2134	-.7393453	1.30e-13	-5.7e+12	0.000	-.7393453	-.7393453
C2150	3.453774	1.30e-13	2.7e+13	0.000	3.453774	3.453774
C2166	3.416086	1.30e-13	2.6e+13	0.000	3.416086	3.416086
C2178	6.07877	1.30e-13	4.7e+13	0.000	6.07877	6.07877
C2182	13.70781	1.30e-13	1.1e+14	0.000	13.70781	13.70781
C2202	6.216104	1.30e-13	4.8e+13	0.000	6.216104	6.216104
C2214	7.077074	1.30e-13	5.5e+13	0.000	7.077074	7.077074
C2218	2.286947	1.30e-13	1.8e+13	0.000	2.286947	2.286947
C2222	9.132206	1.30e-13	7.0e+13	0.000	9.132206	9.132206
C2238	2.556832	1.30e-13	2.0e+13	0.000	2.556832	2.556832
C2242	8.467297	1.30e-13	6.5e+13	0.000	8.467297	8.467297
C2250	2.82688	1.30e-13	2.2e+13	0.000	2.82688	2.82688
C2252	-.5911042	1.30e-13	-4.6e+12	0.000	-.5911042	-.5911042
C2254	4.254001	1.30e-13	3.3e+13	0.000	4.254001	4.254001
C2266	9.867523	1.30e-13	7.6e+13	0.000	9.867523	9.867523
C2290	-.1829597	1.30e-13	-1.4e+12	0.000	-.1829597	-.1829597
C2306	5.876309	1.30e-13	4.5e+13	0.000	5.876309	5.876309
C2342	3.637382	1.30e-13	2.8e+13	0.000	3.637382	3.637382
C2346	-1.66046	1.30e-13	-1.3e+13	0.000	-1.66046	-1.66046
C2354	5.285386	1.30e-13	4.1e+13	0.000	5.285386	5.285386
C2358	6.167755	1.30e-13	4.8e+13	0.000	6.167755	6.167755
C2390	1.182853	1.30e-13	9.1e+12	0.000	1.182853	1.182853
C2402	3.024838	1.30e-13	2.3e+13	0.000	3.024838	3.024838
C2414	-2.046031	1.30e-13	-1.6e+13	0.000	-2.046031	-2.046031
C2422	1.27712	1.30e-13	9.9e+12	0.000	1.27712	1.27712
C2426	-1.229901	1.30e-13	-9.5e+12	0.000	-1.229901	-1.229901
C2430	4.159394	1.30e-13	3.2e+13	0.000	4.159394	4.159394
C2434	8.787703	1.30e-13	6.8e+13	0.000	8.787703	8.787703
C2442	-3.035598	1.30e-13	-2.3e+13	0.000	-3.035598	-3.035598
C2450	-.4779561	1.30e-13	-3.7e+12	0.000	-.4779561	-.4779561
C2454	7.720426	1.30e-13	6.0e+13	0.000	7.720426	7.720426
C2458	8.076196	1.30e-13	6.2e+13	0.000	8.076196	8.076196
C2466	6.593309	1.30e-13	5.1e+13	0.000	6.593309	6.593309
C2478	3.94371	1.30e-13	3.0e+13	0.000	3.94371	3.94371
C2486	5.534566	1.30e-13	4.3e+13	0.000	5.534566	5.534566
C2502	-9.455676	1.30e-13	-7.3e+13	0.000	-9.455676	-9.455676

C2506	4.710814	1.30e-13	3.6e+13	0.000	4.710814	4.710814
C2518	3.934216	1.30e-13	3.0e+13	0.000	3.934216	3.934216
C2522	-3.018007	1.30e-13	-2.3e+13	0.000	-3.018007	-3.018007
C2526	2.260986	1.30e-13	1.7e+13	0.000	2.260986	2.260986
C2542	12.41386	1.30e-13	9.6e+13	0.000	12.41386	12.41386
C2550	1.290885	1.30e-13	1.0e+13	0.000	1.290885	1.290885
C2554	26.15924	1.31e-13	2.0e+14	0.000	26.15924	26.15924
C2562	-1.363931	1.30e-13	-1.1e+13	0.000	-1.363931	-1.363931
C2586	.3813593	1.30e-13	2.9e+12	0.000	.3813593	.3813593
C2594	-.3856022	1.30e-13	-3.0e+12	0.000	-.3856022	-.3856022
C2598	.6852068	1.30e-13	5.3e+12	0.000	.6852068	.6852068
C2614	-.6498401	1.30e-13	-5.0e+12	0.000	-.6498401	-.6498401
C2630	-3.601284	1.30e-13	-2.8e+13	0.000	-3.601284	-3.601284
C2638	11.22198	1.30e-13	8.7e+13	0.000	11.22198	11.22198
C2642	26.15939	1.30e-13	2.0e+14	0.000	26.15939	26.15939
C2658	4.270862	1.30e-13	3.3e+13	0.000	4.270862	4.270862
C2662	18.16439	1.30e-13	1.4e+14	0.000	18.16439	18.16439
C2682	4.638022	1.151647	4.03	0.000	2.373755	6.90229
C2690	12.35022	1.30e-13	9.5e+13	0.000	12.35022	12.35022
C2698	8.142307	1.30e-13	6.3e+13	0.000	8.142307	8.142307
C2706	11.69528	.651373	17.95	0.000	10.4146	12.97595
C2710	7.953773	1.30e-13	6.1e+13	0.000	7.953773	7.953773
C2714	4.413286	1.30e-13	3.4e+13	0.000	4.413286	4.413286
C2718	3.388866	1.30e-13	2.6e+13	0.000	3.388866	3.388866
C2726	10.65096	1.30e-13	8.2e+13	0.000	10.65096	10.65096
C2734	-5.379169	1.30e-13	-4.2e+13	0.000	-5.379169	-5.379169
C2750	6.081161	1.30e-13	4.7e+13	0.000	6.081161	6.081161
C2762	1.712717	1.30e-13	1.3e+13	0.000	1.712717	1.712717
C2774	.6214545	1.30e-13	4.8e+12	0.000	.6214545	.6214545
C2778	-.3265624	1.30e-13	-2.5e+12	0.000	-.3265624	-.3265624
C2786	-1.252287	1.30e-13	-9.7e+12	0.000	-1.252287	-1.252287
C2790	-.3548327	1.30e-13	-2.7e+12	0.000	-.3548327	-.3548327
C2798	5.020955	1.30e-13	3.9e+13	0.000	5.020955	5.020955
C2802	9.666923	1.30e-13	7.5e+13	0.000	9.666923	9.666923
C2810	2.610627	1.30e-13	2.0e+13	0.000	2.610627	2.610627
C2814	13.7615	1.30e-13	1.1e+14	0.000	13.7615	13.7615
C2842	11.44113	1.310835	8.73	0.000	8.863878	14.01838
C2866	3.085051	1.30e-13	2.4e+13	0.000	3.085051	3.085051
C2870	5.069163	1.30e-13	3.9e+13	0.000	5.069163	5.069163
C2874	3.147652	1.30e-13	2.4e+13	0.000	3.147652	3.147652
C2894	8.314545	1.439792	5.77	0.000	5.483752	11.14534
C2902	14.38093	1.30e-13	1.1e+14	0.000	14.38093	14.38093
C2910	2.580973	1.30e-13	2.0e+13	0.000	2.580973	2.580973
C2918	8.131383	1.30e-13	6.3e+13	0.000	8.131383	8.131383
C2920	6.674268	1.30e-13	5.1e+13	0.000	6.674268	6.674268
C2934	8.544319	1.30e-13	6.6e+13	0.000	8.544319	8.544319
C2942	-1.486881	1.30e-13	-1.1e+13	0.000	-1.486881	-1.486881
C2946	2.851448	1.30e-13	2.2e+13	0.000	2.851448	2.851448
C2954	6.65312	1.30e-13	5.1e+13	0.000	6.65312	6.65312
C2962	11.37513	1.30e-13	8.8e+13	0.000	11.37513	11.37513
C2970	-3.085496	1.30e-13	-2.4e+13	0.000	-3.085496	-3.085496
C2974	-.9548874	1.30e-13	-7.4e+12	0.000	-.9548874	-.9548874
C2982	10.10105	1.30e-13	7.8e+13	0.000	10.10105	10.10105
C2994	-.7689797	1.30e-13	-5.9e+12	0.000	-.7689797	-.7689797
C3002	-.8396237	1.30e-13	-6.5e+12	0.000	-.8396237	-.8396237
C3014	2.035583	1.30e-13	1.6e+13	0.000	2.035583	2.035583
C3030	.567591	1.30e-13	4.4e+12	0.000	.567591	.567591
C3034	2.115684	1.30e-13	1.6e+13	0.000	2.115684	2.115684
C3046	8.84962	1.30e-13	6.8e+13	0.000	8.84962	8.84962
C3062	4.326948	1.30e-13	3.3e+13	0.000	4.326948	4.326948
C3070	4.445322	1.30e-13	3.4e+13	0.000	4.445322	4.445322
C3078	7.290588	1.30e-13	5.6e+13	0.000	7.290588	7.290588
C3086	-4.037007	1.30e-13	-3.1e+13	0.000	-4.037007	-4.037007
C3098	5.887353	1.30e-13	4.5e+13	0.000	5.887353	5.887353
C3102	7.394507	1.30e-13	5.7e+13	0.000	7.394507	7.394507
C3108	21.09052	1.944134	10.85	0.000	17.26813	24.9129
C3114	10.29575	1.30e-13	7.9e+13	0.000	10.29575	10.29575
C3118	2.046704	1.30e-13	1.6e+13	0.000	2.046704	2.046704
C3134	2.965926	1.30e-13	2.3e+13	0.000	2.965926	2.965926
C3142	3.401237	1.30e-13	2.6e+13	0.000	3.401237	3.401237
C3146	1.531411	1.30e-13	1.2e+13	0.000	1.531411	1.531411
C3154	12.07999	1.30e-13	9.3e+13	0.000	12.07999	12.07999

C3170	20.70814	1.30e-13	1.6e+14	0.000	20.70814	20.70814
C3174	-.6088102	1.30e-13	-4.7e+12	0.000	-.6088102	-.6088102
C3186	1.926252	1.30e-13	1.5e+13	0.000	1.926252	1.926252
C3190	1.062173	1.30e-13	8.2e+12	0.000	1.062173	1.062173
C3242	-13.76084	1.30e-13	-1.1e+14	0.000	-13.76084	-13.76084
C3258	-5.194479	1.30e-13	-4.0e+13	0.000	-5.194479	-5.194479
C3278	1.623233	1.30e-13	1.3e+13	0.000	1.623233	1.623233
C3282	12.58445	1.30e-13	9.7e+13	0.000	12.58445	12.58445
C3290	1.1565	1.30e-13	8.9e+12	0.000	1.1565	1.1565
C3310	13.50469	1.30e-13	1.0e+14	0.000	13.50469	13.50469
C3314	.9785821	1.30e-13	7.6e+12	0.000	.9785821	.9785821
C3322	22.19668	1.30e-13	1.7e+14	0.000	22.19668	22.19668
C3326	21.67534	1.30e-13	1.7e+14	0.000	21.67534	21.67534
C3334	13.84094	1.30e-13	1.1e+14	0.000	13.84094	13.84094
C3346	21.50196	1.30e-13	1.7e+14	0.000	21.50196	21.50196
C3354	.7857618	1.30e-13	6.1e+12	0.000	.7857618	.7857618
C3366	6.795862	1.30e-13	5.2e+13	0.000	6.795862	6.795862
C3370	6.387213	1.30e-13	4.9e+13	0.000	6.387213	6.387213
C3374	.1694884	1.30e-13	1.3e+12	0.000	.1694884	.1694884
C3378	11.01616	1.30e-13	8.5e+13	0.000	11.01616	11.01616
C3386	5.410358	1.30e-13	4.2e+13	0.000	5.410358	5.410358
C3406	6.660808	1.30e-13	5.1e+13	0.000	6.660808	6.660808
C3410	1.572399	1.30e-13	1.2e+13	0.000	1.572399	1.572399
C3458	4.824721	1.30e-13	3.7e+13	0.000	4.824721	4.824721
C3462	.5608197	1.30e-13	4.3e+12	0.000	.5608197	.5608197
C3474	4.139599	1.30e-13	3.2e+13	0.000	4.139599	4.139599
C3482	-4.339104	1.30e-13	-3.3e+13	0.000	-4.339104	-4.339104
C3490	14.01182	1.30e-13	1.1e+14	0.000	14.01182	14.01182
C3494	8.530023	1.30e-13	6.6e+13	0.000	8.530023	8.530023
C3498	13.63094	1.30e-13	1.1e+14	0.000	13.63094	13.63094
C3510	2.954085	1.30e-13	2.3e+13	0.000	2.954085	2.954085
C3530	18.42394	1.30e-13	1.4e+14	0.000	18.42394	18.42394
C3538	12.08153	1.30e-13	9.3e+13	0.000	12.08153	12.08153
C3562	37.43445	1.185018	31.59	0.000	35.10457	39.76433
C3566	7.905252	1.30e-13	6.1e+13	0.000	7.905252	7.905252
C3584	4.579014	1.30e-13	3.5e+13	0.000	4.579014	4.579014
C3598	16.32582	1.30e-13	1.3e+14	0.000	16.32582	16.32582
C3610	-.6892108	1.30e-13	-5.3e+12	0.000	-.6892108	-.6892108
C3614	.0456722	1.30e-13	3.5e+11	0.000	.0456722	.0456722
C3622	13.50876	1.30e-13	1.0e+14	0.000	13.50876	13.50876
C3626	3.132079	1.30e-13	2.4e+13	0.000	3.132079	3.132079
C3642	7.84358	1.30e-13	6.1e+13	0.000	7.84358	7.84358
C3650	9.972703	1.30e-13	7.7e+13	0.000	9.972703	9.972703
C3654	9.162244	1.30e-13	7.1e+13	0.000	9.162244	9.162244
C3674	7.627723	1.30e-13	5.9e+13	0.000	7.627723	7.627723
C3678	11.68214	1.30e-13	9.0e+13	0.000	11.68214	11.68214
C3698	3.107822	1.30e-13	2.4e+13	0.000	3.107822	3.107822
C3710	17.22973	1.30e-13	1.3e+14	0.000	17.22973	17.22973
C3734	10.5736	1.30e-13	8.2e+13	0.000	10.5736	10.5736
C3746	1.358754	1.30e-13	1.0e+13	0.000	1.358754	1.358754
C3762	1.581939	1.30e-13	1.2e+13	0.000	1.581939	1.581939
C3786	2.620221	1.30e-13	2.0e+13	0.000	2.620221	2.620221
C3790	13.9081	1.30e-13	1.1e+14	0.000	13.9081	13.9081
C3798	22.52488	1.30e-13	1.7e+14	0.000	22.52488	22.52488
C3806	13.89381	1.30e-13	1.1e+14	0.000	13.89381	13.89381
C3822	1.299265	1.30e-13	1.0e+13	0.000	1.299265	1.299265
C3830	14.7832	1.124835	13.14	0.000	12.57165	16.99475
C3834	7.056306	1.30e-13	5.4e+13	0.000	7.056306	7.056306
C3854	-2.973999	1.30e-13	-2.3e+13	0.000	-2.973999	-2.973999
C3866	-13.98964	1.30e-13	-1.1e+14	0.000	-13.98964	-13.98964
C3886	8.636904	1.30e-13	6.7e+13	0.000	8.636904	8.636904
C3890	16.69246	1.30e-13	1.3e+14	0.000	16.69246	16.69246
C3894	2.938093	1.30e-13	2.3e+13	0.000	2.938093	2.938093
C3914	-.6164533	1.30e-13	-4.8e+12	0.000	-.6164533	-.6164533
C3930	11.58947	1.30e-13	8.9e+13	0.000	11.58947	11.58947
C3934	3.576062	1.30e-13	2.8e+13	0.000	3.576062	3.576062
C3938	2.027733	1.30e-13	1.6e+13	0.000	2.027733	2.027733
C3946	-.6657629	1.30e-13	-5.1e+12	0.000	-.6657629	-.6657629
C3954	9.690395	1.30e-13	7.5e+13	0.000	9.690395	9.690395
C3958	14.31063	1.30e-13	1.1e+14	0.000	14.31063	14.31063
C3966	.0411457	1.30e-13	3.2e+11	0.000	.0411457	.0411457
C3974	9.7251	1.30e-13	7.5e+13	0.000	9.7251	9.7251

C3982	3.215136	1.30e-13	2.5e+13	0.000	3.215136	3.215136
C3990	10.69547	1.30e-13	8.3e+13	0.000	10.69547	10.69547
C4006	14.15097	1.30e-13	1.1e+14	0.000	14.15097	14.15097
C4014	6.558965	1.30e-13	5.1e+13	0.000	6.558965	6.558965
C4022	4.699662	1.30e-13	3.6e+13	0.000	4.699662	4.699662
C4034	15.91014	1.30e-13	1.2e+14	0.000	15.91014	15.91014
C4038	10.63707	1.30e-13	8.2e+13	0.000	10.63707	10.63707
C4042	7.696102	1.30e-13	5.9e+13	0.000	7.696102	7.696102
C4058	.7595821	1.30e-13	5.9e+12	0.000	.7595821	.7595821
C4066	3.712135	1.30e-13	2.9e+13	0.000	3.712135	3.712135
C4090	18.29538	1.30e-13	1.4e+14	0.000	18.29538	18.29538
C4098	7.055087	1.30e-13	5.4e+13	0.000	7.055087	7.055087
C4106	4.116644	1.30e-13	3.2e+13	0.000	4.116644	4.116644
C4110	-4.540441	1.30e-13	-3.5e+13	0.000	-4.540441	-4.540441
C4114	1.69171	1.30e-13	1.3e+13	0.000	1.69171	1.69171
C4118	13.64978	1.30e-13	1.1e+14	0.000	13.64978	13.64978
C4142	3.349393	1.30e-13	2.6e+13	0.000	3.349393	3.349393
C4150	8.05858	1.30e-13	6.2e+13	0.000	8.05858	8.05858
C4154	.3730266	1.30e-13	2.9e+12	0.000	.3730266	.3730266
C4162	11.95381	1.30e-13	9.2e+13	0.000	11.95381	11.95381
C4166	1.139945	1.30e-13	8.8e+12	0.000	1.139945	1.139945
C4170	8.762562	1.1251	7.79	0.000	6.550487	10.97464
C4174	20.19139	1.30e-13	1.6e+14	0.000	20.19139	20.19139
C4186	41.9171	1.817279	23.07	0.000	38.34413	45.49008
C4190	-16.48238	1.30e-13	-1.3e+14	0.000	-16.48238	-16.48238
C4194	67.82051	1.30e-13	5.2e+14	0.000	67.82051	67.82051
C4198	-7.902355	1.30e-13	-6.1e+13	0.000	-7.902355	-7.902355
C4202	6.140044	1.30e-13	4.7e+13	0.000	6.140044	6.140044
C4210	10.99869	1.30e-13	8.5e+13	0.000	10.99869	10.99869
C4214	5.998222	1.30e-13	4.6e+13	0.000	5.998222	5.998222
C4220	12.54649	1.30e-13	9.7e+13	0.000	12.54649	12.54649
C4222	13.15078	1.30e-13	1.0e+14	0.000	13.15078	13.15078
C4234	6.087038	1.30e-13	4.7e+13	0.000	6.087038	6.087038
C4254	3.176381	1.30e-13	2.4e+13	0.000	3.176381	3.176381
C4266	28.38108	1.30e-13	2.2e+14	0.000	28.38108	28.38108
C4268	2.976768	1.30e-13	2.3e+13	0.000	2.976768	2.976768
C4270	-5.280053	1.30e-13	-4.1e+13	0.000	-5.280053	-5.280053
C4310	7.343345	1.30e-13	5.7e+13	0.000	7.343345	7.343345
C4330	4.141923	1.30e-13	3.2e+13	0.000	4.141923	4.141923
C4334	3.609799	1.30e-13	2.8e+13	0.000	3.609799	3.609799
C4342	5.790216	1.30e-13	4.5e+13	0.000	5.790216	5.790216
C4358	3.008816	1.30e-13	2.3e+13	0.000	3.008816	3.008816
C4362	6.190104	1.30e-13	4.8e+13	0.000	6.190104	6.190104
C4378	5.291574	1.30e-13	4.1e+13	0.000	5.291574	5.291574
C4390	6.90644	1.30e-13	5.3e+13	0.000	6.90644	6.90644
C4406	5.59826	1.30e-13	4.3e+13	0.000	5.59826	5.59826
C4410	14.58122	1.30e-13	1.1e+14	0.000	14.58122	14.58122
C4414	9.933148	1.30e-13	7.7e+13	0.000	9.933148	9.933148
C4418	.7315357	1.30e-13	5.6e+12	0.000	.7315357	.7315357
C4422	1.081595	1.30e-13	8.3e+12	0.000	1.081595	1.081595
C4430	7.819201	1.30e-13	6.0e+13	0.000	7.819201	7.819201
C4442	1.365507	1.30e-13	1.1e+13	0.000	1.365507	1.365507
C4470	7.008146	1.30e-13	5.4e+13	0.000	7.008146	7.008146
C4494	-1.962163	1.30e-13	-1.5e+13	0.000	-1.962163	-1.962163
C4506	9.826725	1.30e-13	7.6e+13	0.000	9.826725	9.826725
C4522	4.852075	1.30e-13	3.7e+13	0.000	4.852075	4.852075
C4530	9.663873	1.30e-13	7.5e+13	0.000	9.663873	9.663873
C4546	.9507492	1.30e-13	7.3e+12	0.000	.9507492	.9507492
C4550	2.256657	1.30e-13	1.7e+13	0.000	2.256657	2.256657
C4554	.8860289	1.30e-13	6.8e+12	0.000	.8860289	.8860289
C4578	7.997138	1.30e-13	6.2e+13	0.000	7.997138	7.997138
C4582	4.742946	1.30e-13	3.7e+13	0.000	4.742946	4.742946
C4594	32.42039	1.12465	28.83	0.000	30.2092	34.63157
C4606	8.015246	1.124612	7.13	0.000	5.804132	10.22636
C4614	8.983462	1.30e-13	6.9e+13	0.000	8.983462	8.983462
C4622	5.662011	1.30e-13	4.4e+13	0.000	5.662011	5.662011
C4634	6.411239	1.30e-13	4.9e+13	0.000	6.411239	6.411239
C4652	11.47602	1.30e-13	8.9e+13	0.000	11.47602	11.47602
C4654	2.675621	1.30e-13	2.1e+13	0.000	2.675621	2.675621
C4666	-4.172828	1.30e-13	-3.2e+13	0.000	-4.172828	-4.172828
C4670	14.93825	1.30e-13	1.2e+14	0.000	14.93825	14.93825
C4702	5.310183	1.30e-13	4.1e+13	0.000	5.310183	5.310183

C4722	8.446136	1.30e-13	6.5e+13	0.000	8.446136	8.446136
C4726	7.631524	1.125116	6.78	0.000	5.419418	9.843629
C4730	-1.003346	1.30e-13	-7.7e+12	0.000	-1.003346	-1.003346
C4738	4.166711	1.30e-13	3.2e+13	0.000	4.166711	4.166711
C4746	2.322452	1.30e-13	1.8e+13	0.000	2.322452	2.322452
C4758	6.724566	1.30e-13	5.2e+13	0.000	6.724566	6.724566
C4790	35.23114	1.851407	19.03	0.000	31.59107	38.87122
C4794	5.572424	1.30e-13	4.3e+13	0.000	5.572424	5.572424
C4806	1.823135	1.30e-13	1.4e+13	0.000	1.823135	1.823135
C4814	4.933121	1.30e-13	3.8e+13	0.000	4.933121	4.933121
C4826	1.279481	1.30e-13	9.9e+12	0.000	1.279481	1.279481
C4830	-1.835218	1.30e-13	-1.4e+13	0.000	-1.835218	-1.835218
C4854	2.13272	1.30e-13	1.6e+13	0.000	2.13272	2.13272
C4862	8.090517	1.30e-13	6.2e+13	0.000	8.090517	8.090517
C4866	.2813616	1.30e-13	2.2e+12	0.000	.2813616	.2813616
C4870	2.831601	1.30e-13	2.2e+13	0.000	2.831601	2.831601
C4890	3.957169	1.30e-13	3.1e+13	0.000	3.957169	3.957169
C4902	5.600928	1.30e-13	4.3e+13	0.000	5.600928	5.600928
C4918	7.619098	1.30e-13	5.9e+13	0.000	7.619098	7.619098
C4934	14.59971	1.30e-13	1.1e+14	0.000	14.59971	14.59971
C4942	-2.015695	1.30e-13	-1.6e+13	0.000	-2.015695	-2.015695
C4962	8.404685	1.30e-13	6.5e+13	0.000	8.404685	8.404685
C4966	2.140985	1.30e-13	1.7e+13	0.000	2.140985	2.140985
C4970	4.102068	1.30e-13	3.2e+13	0.000	4.102068	4.102068
C4974	-2.287051	1.30e-13	-1.8e+13	0.000	-2.287051	-2.287051
ffrdc_count						
1	-.5351128	1.125529	-0.48	0.635	-2.74803	1.677805
2	0	(omitted)				
3	0	(omitted)				
5	0	(omitted)				
8	-3.071877	1.292394	-2.38	0.018	-5.61287	-.5308836
9	-.9497794	1.231288	-0.77	0.441	-3.37063	1.471071
10	-.6955954	.6484852	-1.07	0.284	-1.970591	.5793997
11	.6056364	.1341505	4.51	0.000	.3418813	.8693914
12	-.2283909	.1761295	-1.30	0.195	-.5746814	.1178995
13	0	(omitted)				
_cons	37.15939	.1023223	363.16	0.000	36.95822	37.36057

```
405 outreg2 using output/results_slides.doc, replace ctitle("OLS full controls, Average
  > annual pay (thousands 2019$)") keep(federal_funding) addtext(MSA FE, Yes, Year FE, Y
  > es, FFRDC count FE, Yes)
  output/results_slides.doc
  dir : seeout

406
407 reg annual_avg_emplvl federal_funding i.year i.msa_factor i.ffrdc_count, robust clus
  > ter(msa_factor)
  note: 2.ffrdc_count omitted because of collinearity
  note: 3.ffrdc_count omitted because of collinearity
  note: 5.ffrdc_count omitted because of collinearity
  note: 13.ffrdc_count omitted because of collinearity
```

Linear regression					
		Number of obs	=	7,372	
		$F_{(19, 387)}$	=	.	
		Prob > F	=	.	
		R-squared	=	0.9964	
		Root MSE	=	43.316	

(Std. Err. adjusted for **388** clusters in msa_factor)

annual_avg_em~l	Coef.	Robust Std. Err.	t	P>|t|	[95% Conf. Interval]	
federal_funding	.1296279	.0742056	1.75	0.081	-.0162687	.2755244
year						
2002	-3.160579	.7357135	-4.30	0.000	-4.607075	-1.714083
2003	-3.833463	1.085369	-3.53	0.000	-5.967422	-1.699505
2004	-.5897066	1.22817	-0.48	0.631	-3.004428	1.825014
2005	4.630922	1.419732	3.26	0.001	1.839569	7.422275
2006	9.776493	1.729532	5.65	0.000	6.376037	13.17695
2007	13.47976	2.070825	6.51	0.000	9.408286	17.55124
2008	11.77315	2.054996	5.73	0.000	7.732791	15.8135
2009	-2.060061	2.188736	-0.94	0.347	-6.363363	2.243241
2010	-4.776999	2.802857	-1.70	0.089	-10.28773	.7337344
2011	-1.348082	2.615829	-0.52	0.607	-6.491096	3.794932
2012	4.17851	2.474912	1.69	0.092	-.6874459	9.044466
2013	9.550347	2.640505	3.62	0.000	4.358816	14.74188
2014	15.6437	3.128277	5.00	0.000	9.493156	21.79425
2015	21.93895	3.756936	5.84	0.000	14.55239	29.32551
2016	27.61587	4.333043	6.37	0.000	19.09662	36.13512
2017	32.10558	4.945845	6.49	0.000	22.38149	41.82967
2018	37.22442	5.608932	6.64	0.000	26.19663	48.25221
2019	41.77163	6.265478	6.67	0.000	29.45299	54.09026
msa_factor						
C1038	-10.86058	2.45e-11	-4.4e+11	0.000	-10.86058	-10.86058
C1042	252.2172	2.45e-11	1.0e+13	0.000	252.2172	252.2172
C1050	-3.312842	2.45e-11	-1.4e+11	0.000	-3.312842	-3.312842
C1054	-21.78326	2.45e-11	-8.9e+11	0.000	-21.78326	-21.78326
C1058	363.4595	2.45e-11	1.5e+13	0.000	363.4595	363.4595
C1074	-60.95353	185.2763	-0.33	0.742	-425.2277	303.3206
C1078	-2.559211	2.45e-11	-1.0e+11	0.000	-2.559211	-2.559211
C1090	267.8855	2.45e-11	1.1e+13	0.000	267.8855	267.8855
C1102	-5.268421	2.45e-11	-2.2e+11	0.000	-5.268421	-5.268421
C1110	45.70632	2.45e-11	1.9e+12	0.000	45.70632	45.70632
C1118	-54.48791	8.039775	-6.78	0.000	-70.29501	-38.6808
C1126	102.0568	2.45e-11	4.2e+12	0.000	102.0568	102.0568
C1146	133.0119	2.45e-11	5.4e+12	0.000	133.0119	133.0119
C1150	-17.56142	2.45e-11	-7.2e+11	0.000	-17.56142	-17.56142
C1154	51.53711	2.45e-11	2.1e+12	0.000	51.53711	51.53711
C1164	-27.19958	2.45e-11	-1.1e+12	0.000	-27.19958	-27.19958
C1170	108.557	2.45e-11	4.4e+12	0.000	108.557	108.557
C1202	15.625	2.45e-11	6.4e+11	0.000	15.625	15.625
C1206	2251.835	2.45e-11	9.2e+13	0.000	2251.835	2251.835
C1210	71.86116	2.45e-11	2.9e+12	0.000	71.86116	71.86116
C1222	-13.83447	2.45e-11	-5.7e+11	0.000	-13.83447	-13.83447
C1226	146.6969	2.45e-11	6.0e+12	0.000	146.6969	146.6969
C1242	742.4767	2.45e-11	3.0e+13	0.000	742.4767	742.4767
C1254	221.2273	2.45e-11	9.0e+12	0.000	221.2273	221.2273
C1258	1172.597	3.260421	359.65	0.000	1166.187	1179.007
C1262	5.818474	2.45e-11	2.4e+11	0.000	5.818474	5.818474
C1270	28.75321	2.45e-11	1.2e+12	0.000	28.75321	28.75321
C1294	296.7584	2.45e-11	1.2e+13	0.000	296.7584	296.7584
C1298	-7.226368	2.45e-11	-3.0e+11	0.000	-7.226368	-7.226368
C1302	-27.75184	2.45e-11	-1.1e+12	0.000	-27.75184	-27.75184
C1314	93.57584	2.45e-11	3.8e+12	0.000	93.57584	93.57584
C1322	-20.45942	2.45e-11	-8.4e+11	0.000	-20.45942	-20.45942
C1338	17.14589	2.45e-11	7.0e+11	0.000	17.14589	17.14589
C1346	1.954053	2.45e-11	8.0e+10	0.000	1.954053	1.954053
C1374	14.75974	2.45e-11	6.0e+11	0.000	14.75974	14.75974
C1378	40.64321	2.45e-11	1.7e+12	0.000	40.64321	40.64321
C1382	416.018	2.45e-11	1.7e+13	0.000	416.018	416.018
C1390	-.5536316	2.45e-11	-2.3e+10	0.000	-.5536316	-.5536316
C1398	3.346842	2.45e-11	1.4e+11	0.000	3.346842	3.346842
C1401	25.94558	2.45e-11	1.1e+12	0.000	25.94558	25.94558
C1402	2.165789	2.45e-11	8.8e+10	0.000	2.165789	2.165789
C1410	-24.46816	2.45e-11	-1.0e+12	0.000	-24.46816	-24.46816
C1426	205.7781	2.45e-11	8.4e+12	0.000	205.7781	205.7781
C1446	2236.512	58.72117	38.09	0.000	2121.06	2351.965

C1450	48.87215	10.63285	4.60	0.000	27.96677	69.77752
C1454	2.142684	2.45e-11	8.8e+10	0.000	2.142684	2.142684
C1474	18.62579	2.45e-11	7.6e+11	0.000	18.62579	18.62579
C1486	350.6137	2.45e-11	1.4e+13	0.000	350.6137	350.6137
C1518	62.68116	2.45e-11	2.6e+12	0.000	62.68116	62.68116
C1526	-22.83763	2.45e-11	-9.3e+11	0.000	-22.83763	-22.83763
C1538	465.1362	2.45e-11	1.9e+13	0.000	465.1362	465.1362
C1550	-5.009474	2.45e-11	-2.0e+11	0.000	-5.009474	-5.009474
C1554	50.78342	2.45e-11	2.1e+12	0.000	50.78342	50.78342
C1568	-23.37889	2.45e-11	-9.6e+11	0.000	-23.37889	-23.37889
C1594	102.3015	2.45e-11	4.2e+12	0.000	102.3015	102.3015
C1598	151.9798	2.45e-11	6.2e+12	0.000	151.9798	151.9798
C1602	-20.10105	2.45e-11	-8.2e+11	0.000	-20.10105	-20.10105
C1606	-12.40737	2.45e-11	-5.1e+11	0.000	-12.40737	-12.40737
C1618	-34.25068	2.45e-11	-1.4e+12	0.000	-34.25068	-34.25068
C1622	-25.814	2.45e-11	-1.1e+12	0.000	-25.814	-25.814
C1630	72.26158	2.45e-11	3.0e+12	0.000	72.26158	72.26158
C1654	-8.713053	2.45e-11	-3.6e+11	0.000	-8.713053	-8.713053
C1658	33.82474	2.45e-11	1.4e+12	0.000	33.82474	33.82474
C1662	50.17579	2.45e-11	2.1e+12	0.000	50.17579	50.17579
C1670	222.601	2.45e-11	9.1e+12	0.000	222.601	222.601
C1674	941.7281	2.45e-11	3.8e+13	0.000	941.7281	941.7281
C1682	-4.955684	7.602215	-0.65	0.515	-19.9025	9.991128
C1686	167.5512	2.45e-11	6.8e+12	0.000	167.5512	167.5512
C1694	-21.01126	2.45e-11	-8.6e+11	0.000	-21.01126	-21.01126
C1698	4097.338	80.20821	51.08	0.000	3939.639	4255.036
C1702	11.62279	2.45e-11	4.7e+11	0.000	11.62279	11.62279
C1714	930.5742	2.45e-11	3.8e+13	0.000	930.5742	930.5742
C1730	16.04974	2.45e-11	6.6e+11	0.000	16.04974	16.04974
C1742	-23.389	2.45e-11	-9.6e+11	0.000	-23.389	-23.389
C1746	952.0483	2.45e-11	3.9e+13	0.000	952.0483	952.0483
C1766	-10.49347	2.45e-11	-4.3e+11	0.000	-10.49347	-10.49347
C1778	32.27784	2.45e-11	1.3e+12	0.000	32.27784	32.27784
C1782	190.3709	2.45e-11	7.8e+12	0.000	190.3709	190.3709
C1786	20.80947	2.45e-11	8.5e+11	0.000	20.80947	20.80947
C1790	278.5511	2.45e-11	1.1e+13	0.000	278.5511	278.5511
C1798	51.64779	2.45e-11	2.1e+12	0.000	51.64779	51.64779
C1802	-18.92837	2.45e-11	-7.7e+11	0.000	-18.92837	-18.92837
C1814	873.4222	2.45e-11	3.6e+13	0.000	873.4222	873.4222
C1858	113.6626	2.45e-11	4.6e+12	0.000	113.6626	113.6626
C1870	-28.65711	2.45e-11	-1.2e+12	0.000	-28.65711	-28.65711
C1888	35.43147	2.45e-11	1.4e+12	0.000	35.43147	35.43147
C1906	-27.06668	2.45e-11	-1.1e+12	0.000	-27.06668	-27.06668
C1910	2938.652	2.45e-11	1.2e+14	0.000	2938.652	2938.652
C1914	4.076579	2.45e-11	1.7e+11	0.000	4.076579	4.076579
C1918	-35.15547	2.45e-11	-1.4e+12	0.000	-35.15547	-35.15547
C1930	-2.412579	2.45e-11	-9.9e+10	0.000	-2.412579	-2.412579
C1934	116.8138	2.45e-11	4.8e+12	0.000	116.8138	116.8138
C1938	305.8018	2.45e-11	1.2e+13	0.000	305.8018	305.8018
C1946	-10.91037	2.45e-11	-4.5e+11	0.000	-10.91037	-10.91037
C1950	-13.15658	2.45e-11	-5.4e+11	0.000	-13.15658	-13.15658
C1966	113.0801	2.45e-11	4.6e+12	0.000	113.0801	113.0801
C1974	1133.535	20.17495	56.19	0.000	1093.868	1173.201
C1978	260.3355	2.45e-11	1.1e+13	0.000	260.3355	260.3355
C1982	1794.967	2.45e-11	7.3e+13	0.000	1794.967	1794.967
C2002	-7.382105	2.45e-11	-3.0e+11	0.000	-7.382105	-7.382105
C2010	-2.388421	2.45e-11	-9.8e+10	0.000	-2.388421	-2.388421
C2022	-9.408632	2.45e-11	-3.8e+11	0.000	-9.408632	-9.408632
C2026	59.97642	2.45e-11	2.5e+12	0.000	59.97642	59.97642
C2050	207.8684	2.45e-11	8.5e+12	0.000	207.8684	207.8684
C2070	-8.877632	2.45e-11	-3.6e+11	0.000	-8.877632	-8.877632
C2074	13.50989	2.45e-11	5.5e+11	0.000	13.50989	13.50989
C2094	-5.886947	2.45e-11	-2.4e+11	0.000	-5.886947	-5.886947
C2106	-13.33537	2.45e-11	-5.4e+11	0.000	-13.33537	-13.33537
C2114	54.78937	2.45e-11	2.2e+12	0.000	54.78937	54.78937
C2130	-26.36789	2.45e-11	-1.1e+12	0.000	-26.36789	-26.36789
C2134	211.8314	2.45e-11	8.7e+12	0.000	211.8314	211.8314
C2150	60.90674	2.45e-11	2.5e+12	0.000	60.90674	60.90674
C2166	80.00874	2.45e-11	3.3e+12	0.000	80.00874	80.00874
C2178	86.33705	2.45e-11	3.5e+12	0.000	86.33705	86.33705
C2182	-27.66053	2.45e-11	-1.1e+12	0.000	-27.66053	-27.66053
C2202	56.14716	2.45e-11	2.3e+12	0.000	56.14716	56.14716

C2214	-15.70626	2.45e-11	-6.4e+11	0.000	-15.70626	-15.70626
C2218	60.31095	2.45e-11	2.5e+12	0.000	60.31095	60.31095
C2222	136.8944	2.45e-11	5.6e+12	0.000	136.8944	136.8944
C2238	-6.438789	2.45e-11	-2.6e+11	0.000	-6.438789	-6.438789
C2242	75.20105	2.45e-11	3.1e+12	0.000	75.20105	75.20105
C2250	17.89679	2.45e-11	7.3e+11	0.000	17.89679	17.89679
C2252	-12.09779	2.45e-11	-4.9e+11	0.000	-12.09779	-12.09779
C2254	-18.31605	2.45e-11	-7.5e+11	0.000	-18.31605	-18.31605
C2266	71.81379	2.45e-11	2.9e+12	0.000	71.81379	71.81379
C2290	45.22832	2.45e-11	1.8e+12	0.000	45.22832	45.22832
C2306	138.2133	2.45e-11	5.6e+12	0.000	138.2133	138.2133
C2342	286.8317	2.45e-11	1.2e+13	0.000	286.8317	286.8317
C2346	-28.44	2.45e-11	-1.2e+12	0.000	-28.44	-28.44
C2354	61.51263	2.45e-11	2.5e+12	0.000	61.51263	61.51263
C2358	9.775053	2.45e-11	4.0e+11	0.000	9.775053	9.775053
C2390	-30.37021	2.45e-11	-1.2e+12	0.000	-30.37021	-30.37021
C2402	-11.21184	2.45e-11	-4.6e+11	0.000	-11.21184	-11.21184
C2414	-20.56442	2.45e-11	-8.4e+11	0.000	-20.56442	-20.56442
C2422	-13.17947	2.45e-11	-5.4e+11	0.000	-13.17947	-13.17947
C2426	-23.65589	2.45e-11	-9.7e+11	0.000	-23.65589	-23.65589
C2430	-5.644579	2.45e-11	-2.3e+11	0.000	-5.644579	-5.644579
C2434	425.784	2.45e-11	1.7e+13	0.000	425.784	425.784
C2442	-39.72468	2.45e-11	-1.6e+12	0.000	-39.72468	-39.72468
C2450	-29.32695	2.45e-11	-1.2e+12	0.000	-29.32695	-29.32695
C2454	23.50121	2.45e-11	9.6e+11	0.000	23.50121	23.50121
C2458	100.5674	2.45e-11	4.1e+12	0.000	100.5674	100.5674
C2466	281.7521	2.45e-11	1.2e+13	0.000	281.7521	281.7521
C2478	7.017947	2.45e-11	2.9e+11	0.000	7.017947	7.017947
C2486	291.3842	2.45e-11	1.2e+13	0.000	291.3842	291.3842
C2502	-47.79353	2.45e-11	-2.0e+12	0.000	-47.79353	-47.79353
C2506	82.95763	2.45e-11	3.4e+12	0.000	82.95763	82.95763
C2518	31.80989	2.45e-11	1.3e+12	0.000	31.80989	31.80989
C2522	-23.49121	2.45e-11	-9.6e+11	0.000	-23.49121	-23.49121
C2526	-21.74505	2.45e-11	-8.9e+11	0.000	-21.74505	-21.74505
C2542	248.7456	2.45e-11	1.0e+13	0.000	248.7456	248.7456
C2550	-4.049632	2.45e-11	-1.7e+11	0.000	-4.049632	-4.049632
C2554	539.6216	2.45e-11	2.2e+13	0.000	539.6216	539.6216
C2562	-7.940579	2.45e-11	-3.2e+11	0.000	-7.940579	-7.940579
C2586	87.98295	2.45e-11	3.6e+12	0.000	87.98295	87.98295
C2594	3.778684	2.45e-11	1.5e+11	0.000	3.778684	3.778684
C2598	-45.78016	2.45e-11	-1.9e+12	0.000	-45.78016	-45.78016
C2614	-32.37258	2.45e-11	-1.3e+12	0.000	-32.37258	-32.37258
C2630	-27.74237	2.45e-11	-1.1e+12	0.000	-27.74237	-27.74237
C2638	24.613	2.45e-11	1.0e+12	0.000	24.613	24.613
C2642	2516.802	2.45e-11	1.0e+14	0.000	2516.802	2516.802
C2658	65.65442	2.45e-11	2.7e+12	0.000	65.65442	65.65442
C2662	136.4979	2.45e-11	5.6e+12	0.000	136.4979	136.4979
C2682	-87.93593	26.03957	-3.38	0.001	-139.1327	-36.73921
C2690	851.7349	2.45e-11	3.5e+13	0.000	851.7349	851.7349
C2698	19.89011	2.45e-11	8.1e+11	0.000	19.89011	19.89011
C2706	-32.34959	5.084904	-6.36	0.000	-42.34709	-22.35209
C2710	-7.549053	2.45e-11	-3.1e+11	0.000	-7.549053	-7.549053
C2714	181.9108	2.45e-11	7.4e+12	0.000	181.9108	181.9108
C2718	-2.142263	2.45e-11	-8.8e+10	0.000	-2.142263	-2.142263
C2726	523.2941	2.45e-11	2.1e+13	0.000	523.2941	523.2941
C2734	-18.82463	2.45e-11	-7.7e+11	0.000	-18.82463	-18.82463
C2750	.3699474	2.45e-11	1.5e+10	0.000	.3699474	.3699474
C2762	10.52474	2.45e-11	4.3e+11	0.000	10.52474	10.52474
C2774	10.68363	2.45e-11	4.4e+11	0.000	10.68363	10.68363
C2778	-8.512211	2.45e-11	-3.5e+11	0.000	-8.512211	-8.512211
C2786	-14.39821	2.45e-11	-5.9e+11	0.000	-14.39821	-14.39821
C2790	12.52005	2.45e-11	5.1e+11	0.000	12.52005	12.52005
C2798	6.935	2.45e-11	2.8e+11	0.000	6.935	6.935
C2802	72.51032	2.45e-11	3.0e+12	0.000	72.51032	72.51032
C2810	-21.15505	2.45e-11	-8.6e+11	0.000	-21.15505	-21.15505
C2814	903.0753	2.45e-11	3.7e+13	0.000	903.0753	903.0753
C2842	-117.5628	69.31027	-1.70	0.091	-253.8346	18.70905
C2866	59.80726	2.45e-11	2.4e+12	0.000	59.80726	59.80726
C2870	52.23726	2.45e-11	2.1e+12	0.000	52.23726	52.23726
C2874	-3.849368	2.45e-11	-1.6e+11	0.000	-3.849368	-3.849368
C2894	88.91321	92.53527	0.96	0.337	-93.02158	270.848
C2902	-24.71589	2.45e-11	-1.0e+12	0.000	-24.71589	-24.71589

C2910	7.584158	2.45e-11	3.1e+11	0.000	7.584158	7.584158
C2918	136.8529	2.45e-11	5.6e+12	0.000	136.8529	136.8529
C2920	21.38168	2.45e-11	8.7e+11	0.000	21.38168	21.38168
C2934	28.92658	2.45e-11	1.2e+12	0.000	28.92658	28.92658
C2942	-16.34111	2.45e-11	-6.7e+11	0.000	-16.34111	-16.34111
C2946	135.7547	2.45e-11	5.5e+12	0.000	135.7547	135.7547
C2954	162.5988	2.45e-11	6.6e+12	0.000	162.5988	162.5988
C2962	142.5228	2.45e-11	5.8e+12	0.000	142.5228	142.5228
C2970	24.46953	2.45e-11	1.0e+12	0.000	24.46953	24.46953
C2974	3.764947	2.45e-11	1.5e+11	0.000	3.764947	3.764947
C2982	798.8328	2.45e-11	3.3e+13	0.000	798.8328	798.8328
C2994	-16.40716	2.45e-11	-6.7e+11	0.000	-16.40716	-16.40716
C3002	-21.40484	2.45e-11	-8.7e+11	0.000	-21.40484	-21.40484
C3014	-16.38253	2.45e-11	-6.7e+11	0.000	-16.38253	-16.38253
C3030	-37.64811	2.45e-11	-1.5e+12	0.000	-37.64811	-37.64811
C3034	-15.77726	2.45e-11	-6.4e+11	0.000	-15.77726	-15.77726
C3046	182.5527	2.45e-11	7.5e+12	0.000	182.5527	182.5527
C3062	-11.60579	2.45e-11	-4.7e+11	0.000	-11.60579	-11.60579
C3070	100.3039	2.45e-11	4.1e+12	0.000	100.3039	100.3039
C3078	258.3331	2.45e-11	1.1e+13	0.000	258.3331	258.3331
C3086	-13.17279	2.45e-11	-5.4e+11	0.000	-13.17279	-13.17279
C3098	28.50421	2.45e-11	1.2e+12	0.000	28.50421	28.50421
C3102	-27.078	2.45e-11	-1.1e+12	0.000	-27.078	-27.078
C3108	5200.107	201.0898	25.86	0.000	4804.742	5595.472
C3114	522.6599	2.45e-11	2.1e+13	0.000	522.6599	522.6599
C3118	65.44016	2.45e-11	2.7e+12	0.000	65.44016	65.44016
C3134	34.71721	2.45e-11	1.4e+12	0.000	34.71721	34.71721
C3142	31.90458	2.45e-11	1.3e+12	0.000	31.90458	31.90458
C3146	-18.71247	2.45e-11	-7.6e+11	0.000	-18.71247	-18.71247
C3154	288.5816	2.45e-11	1.2e+13	0.000	288.5816	288.5816
C3170	130.2742	2.45e-11	5.3e+12	0.000	130.2742	130.2742
C3174	-27.40521	2.45e-11	-1.1e+12	0.000	-27.40521	-27.40521
C3186	-12.81974	2.45e-11	-5.2e+11	0.000	-12.81974	-12.81974
C3190	-10.09247	2.45e-11	-4.1e+11	0.000	-10.09247	-10.09247
C3242	-26.96953	2.45e-11	-1.1e+12	0.000	-26.96953	-26.96953
C3258	156.4162	2.45e-11	6.4e+12	0.000	156.4162	156.4162
C3278	16.69558	2.45e-11	6.8e+11	0.000	16.69558	16.69558
C3282	531.3224	2.45e-11	2.2e+13	0.000	531.3224	531.3224
C3290	7.655368	2.45e-11	3.1e+11	0.000	7.655368	7.655368
C3310	2231.299	2.45e-11	9.1e+13	0.000	2231.299	2231.299
C3314	-21.30763	2.45e-11	-8.7e+11	0.000	-21.30763	-21.30763
C3322	-28.42674	2.45e-11	-1.2e+12	0.000	-28.42674	-28.42674
C3326	11.70168	2.45e-11	4.8e+11	0.000	11.70168	11.70168
C3334	745.4393	2.45e-11	3.0e+13	0.000	745.4393	745.4393
C3346	1707.685	2.45e-11	7.0e+13	0.000	1707.685	1707.685
C3354	-8.724053	2.45e-11	-3.6e+11	0.000	-8.724053	-8.724053
C3366	103.4567	2.45e-11	4.2e+12	0.000	103.4567	103.4567
C3370	109.0326	2.45e-11	4.5e+12	0.000	109.0326	109.0326
C3374	11.68147	2.45e-11	4.8e+11	0.000	11.68147	11.68147
C3378	-23.27205	2.45e-11	-9.5e+11	0.000	-23.27205	-23.27205
C3386	98.52595	2.45e-11	4.0e+12	0.000	98.52595	98.52595
C3406	-6.230526	2.45e-11	-2.5e+11	0.000	-6.230526	-6.230526
C3410	-21.18868	2.45e-11	-8.7e+11	0.000	-21.18868	-21.18868
C3458	-16.49511	2.45e-11	-6.7e+11	0.000	-16.49511	-16.49511
C3462	-17.28968	2.45e-11	-7.1e+11	0.000	-17.28968	-17.28968
C3474	-2.274211	2.45e-11	-9.3e+10	0.000	-2.274211	-2.274211
C3482	76.87	2.45e-11	3.1e+12	0.000	76.87	76.87
C3490	5.234895	2.45e-11	2.1e+11	0.000	5.234895	5.234895
C3494	62.89174	2.45e-11	2.6e+12	0.000	62.89174	62.89174
C3498	747.2991	2.45e-11	3.1e+13	0.000	747.2991	747.2991
C3510	-19.82789	2.45e-11	-8.1e+11	0.000	-19.82789	-19.82789
C3530	295.8254	2.45e-11	1.2e+13	0.000	295.8254	295.8254
C3538	478.5798	2.45e-11	2.0e+13	0.000	478.5798	478.5798
C3562	8415.621	38.63015	217.85	0.000	8339.67	8491.573
C3566	-2.672368	2.45e-11	-1.1e+11	0.000	-2.672368	-2.672368
C3584	203.6205	2.45e-11	8.3e+12	0.000	203.6205	203.6205
C3598	61.38816	2.45e-11	2.5e+12	0.000	61.38816	61.38816
C3610	30.95016	2.45e-11	1.3e+12	0.000	30.95016	30.95016
C3614	-22.89737	2.45e-11	-9.4e+11	0.000	-22.89737	-22.89737
C3622	-.6656316	2.45e-11	-2.7e+10	0.000	-.6656316	-.6656316
C3626	156.9956	2.45e-11	6.4e+12	0.000	156.9956	156.9956
C3642	498.7889	2.45e-11	2.0e+13	0.000	498.7889	498.7889

C3650	35.96063	2.45e-11	1.5e+12	0.000	35.96063	35.96063
C3654	381.8925	2.45e-11	1.6e+13	0.000	381.8925	381.8925
C3674	961.2488	2.45e-11	3.9e+13	0.000	961.2488	961.2488
C3678	25.87137	2.45e-11	1.1e+12	0.000	25.87137	25.87137
C3698	-14.23421	2.45e-11	-5.8e+11	0.000	-14.23421	-14.23421
C3710	246.3986	2.45e-11	1.0e+13	0.000	246.3986	246.3986
C3734	132.6268	2.45e-11	5.4e+12	0.000	132.6268	132.6268
C3746	10.86689	2.45e-11	4.4e+11	0.000	10.86689	10.86689
C3762	-24.53368	2.45e-11	-1.0e+12	0.000	-24.53368	-24.53368
C3786	94.00237	2.45e-11	3.8e+12	0.000	94.00237	94.00237
C3790	109.1832	2.45e-11	4.5e+12	0.000	109.1832	109.1832
C3798	2595.517	2.45e-11	1.1e+14	0.000	2595.517	2595.517
C3806	1728.72	2.45e-11	7.1e+13	0.000	1728.72	1728.72
C3822	-28.60942	2.45e-11	-1.2e+12	0.000	-28.60942	-28.60942
C3830	987.5285	7.765767	127.16	0.000	972.2602	1002.797
C3834	-2.405947	2.45e-11	-9.8e+10	0.000	-2.405947	-2.405947
C3854	-31.46137	2.45e-11	-1.3e+12	0.000	-31.46137	-31.46137
C3866	11.07505	2.45e-11	4.5e+11	0.000	11.07505	11.07505
C3886	192.7905	2.45e-11	7.9e+12	0.000	192.7905	192.7905
C3890	966.8713	2.45e-11	4.0e+13	0.000	966.8713	966.8713
C3894	61.82989	2.45e-11	2.5e+12	0.000	61.82989	61.82989
C3914	-6.048474	2.45e-11	-2.5e+11	0.000	-6.048474	-6.048474
C3930	613.0109	2.45e-11	2.5e+13	0.000	613.0109	613.0109
C3934	121.1853	2.45e-11	5.0e+12	0.000	121.1853	121.1853
C3938	-7.130316	2.45e-11	-2.9e+11	0.000	-7.130316	-7.130316
C3946	-20.91979	2.45e-11	-8.5e+11	0.000	-20.91979	-20.91979
C3954	10.50874	2.45e-11	4.3e+11	0.000	10.50874	10.50874
C3958	448.9616	2.45e-11	1.8e+13	0.000	448.9616	448.9616
C3966	-1.424	2.45e-11	-5.8e+10	0.000	-1.424	-1.424
C3974	102.306	2.45e-11	4.2e+12	0.000	102.306	102.306
C3982	.2091053	2.45e-11	8.5e+09	0.000	.2091053	.2091053
C3990	143.0827	2.45e-11	5.8e+12	0.000	143.0827	143.0827
C4006	528.6889	2.45e-11	2.2e+13	0.000	528.6889	528.6889
C4014	1191.608	2.45e-11	4.9e+13	0.000	1191.608	1191.608
C4022	86.18942	2.45e-11	3.5e+12	0.000	86.18942	86.18942
C4034	45.67758	2.45e-11	1.9e+12	0.000	45.67758	45.67758
C4038	434.1923	2.45e-11	1.8e+13	0.000	434.1923	434.1923
C4042	81.31321	2.45e-11	3.3e+12	0.000	81.31321	81.31321
C4058	-3.916947	2.45e-11	-1.6e+11	0.000	-3.916947	-3.916947
C4066	-24.81726	2.45e-11	-1.0e+12	0.000	-24.81726	-24.81726
C4090	839.0358	2.45e-11	3.4e+13	0.000	839.0358	839.0358
C4098	21.35737	2.45e-11	8.7e+11	0.000	21.35737	21.35737
C4106	33.11716	2.45e-11	1.4e+12	0.000	33.11716	33.11716
C4110	-13.39779	2.45e-11	-5.5e+11	0.000	-13.39779	-13.39779
C4114	-10.05011	2.45e-11	-4.1e+11	0.000	-10.05011	-10.05011
C4118	1217.905	2.45e-11	5.0e+13	0.000	1217.905	1217.905
C4142	92.46805	2.45e-11	3.8e+12	0.000	92.46805	92.46805
C4150	111.4069	2.45e-11	4.6e+12	0.000	111.4069	111.4069
C4154	82.58479	2.45e-11	3.4e+12	0.000	82.58479	82.58479
C4162	545.0836	2.45e-11	2.2e+13	0.000	545.0836	545.0836
C4166	-17.95826	2.45e-11	-7.3e+11	0.000	-17.95826	-17.95826
C4170	764.892	8.785539	87.06	0.000	747.6186	782.1653
C4174	1253.115	2.45e-11	5.1e+13	0.000	1253.115	1253.115
C4186	1713.234	187.9686	9.11	0.000	1343.666	2082.801
C4190	-42.70805	2.45e-11	-1.7e+12	0.000	-42.70805	-42.70805
C4194	892.1745	2.45e-11	3.6e+13	0.000	892.1745	892.1745
C4198	623.9958	2.45e-11	2.5e+13	0.000	623.9958	623.9958
C4202	42.69547	2.45e-11	1.7e+12	0.000	42.69547	42.69547
C4210	34.43916	2.45e-11	1.4e+12	0.000	34.43916	34.43916
C4214	-2.509737	2.45e-11	-1.0e+11	0.000	-2.509737	-2.509737
C4220	122.5739	2.45e-11	5.0e+12	0.000	122.5739	122.5739
C4222	127.4965	2.45e-11	5.2e+12	0.000	127.4965	127.4965
C4234	87.84584	2.45e-11	3.6e+12	0.000	87.84584	87.84584
C4254	185.1996	2.45e-11	7.6e+12	0.000	185.1996	185.1996
C4266	1656.888	2.45e-11	6.8e+13	0.000	1656.888	1656.888
C4268	-16.25279	2.45e-11	-6.6e+11	0.000	-16.25279	-16.25279
C4270	-36.77695	2.45e-11	-1.5e+12	0.000	-36.77695	-36.77695
C4310	-4.440105	2.45e-11	-1.8e+11	0.000	-4.440105	-4.440105
C4330	-20.60284	2.45e-11	-8.4e+11	0.000	-20.60284	-20.60284
C4334	115.1464	2.45e-11	4.7e+12	0.000	115.1464	115.1464
C4342	-28.567	2.45e-11	-1.2e+12	0.000	-28.567	-28.567
C4358	20.79858	2.45e-11	8.5e+11	0.000	20.79858	20.79858

C4362	70.10042	2.45e-11	2.9e+12	0.000	70.10042	70.10042
C4378	65.99274	2.45e-11	2.7e+12	0.000	65.99274	65.99274
C4390	65.20547	2.45e-11	2.7e+12	0.000	65.20547	65.20547
C4406	153.2179	2.45e-11	6.3e+12	0.000	153.2179	153.2179
C4410	68.98574	2.45e-11	2.8e+12	0.000	68.98574	68.98574
C4414	196.8922	2.45e-11	8.0e+12	0.000	196.8922	196.8922
C4418	121.8614	2.45e-11	5.0e+12	0.000	121.8614	121.8614
C4422	-14.12389	2.45e-11	-5.8e+11	0.000	-14.12389	-14.12389
C4430	2.095526	2.45e-11	8.6e+10	0.000	2.095526	2.095526
C4442	-16.97195	2.45e-11	-6.9e+11	0.000	-16.97195	-16.97195
C4470	157.2271	2.45e-11	6.4e+12	0.000	157.2271	157.2271
C4494	-26.92847	2.45e-11	-1.1e+12	0.000	-26.92847	-26.92847
C4506	235.7908	2.45e-11	9.6e+12	0.000	235.7908	235.7908
C4522	101.0914	2.45e-11	4.1e+12	0.000	101.0914	101.0914
C4530	1111.53	2.45e-11	4.5e+13	0.000	1111.53	1111.53
C4546	3.610789	2.45e-11	1.5e+11	0.000	3.610789	3.610789
C4550	-5.711684	2.45e-11	-2.3e+11	0.000	-5.711684	-5.711684
C4554	-43.68574	2.45e-11	-1.8e+12	0.000	-43.68574	-43.68574
C4578	228.2209	2.45e-11	9.3e+12	0.000	228.2209	228.2209
C4582	44.15126	2.45e-11	1.8e+12	0.000	44.15126	44.15126
C4594	125.8364	7.565993	16.63	0.000	110.9608	140.712
C4606	253.8159	7.887701	32.18	0.000	238.3078	269.324
C4614	345.4824	2.45e-11	1.4e+13	0.000	345.4824	345.4824
C4622	28.26579	2.45e-11	1.2e+12	0.000	28.26579	28.26579
C4634	29.79663	2.45e-11	1.2e+12	0.000	29.79663	29.79663
C4652	381.3083	2.45e-11	1.6e+13	0.000	381.3083	381.3083
C4654	59.66532	2.45e-11	2.4e+12	0.000	59.66532	59.66532
C4666	-10.98211	2.45e-11	-4.5e+11	0.000	-10.98211	-10.98211
C4670	64.383	2.45e-11	2.6e+12	0.000	64.383	64.383
C4702	-24.18916	2.45e-11	-9.9e+11	0.000	-24.18916	-24.18916
C4722	-4.501158	2.45e-11	-1.8e+11	0.000	-4.501158	-4.501158
C4726	615.6539	8.096092	76.04	0.000	599.7361	631.5717
C4730	83.77279	2.45e-11	3.4e+12	0.000	83.77279	83.77279
C4738	43.13505	2.45e-11	1.8e+12	0.000	43.13505	43.13505
C4746	-36.425	2.45e-11	-1.5e+12	0.000	-36.425	-36.425
C4758	2.786421	2.45e-11	1.1e+11	0.000	2.786421	2.786421
C4790	2687.713	193.115	13.92	0.000	2308.027	3067.399
C4794	22.10268	2.45e-11	9.0e+11	0.000	22.10268	22.10268
C4806	-23.16489	2.45e-11	-9.5e+11	0.000	-23.16489	-23.16489
C4814	4.497684	2.45e-11	1.8e+11	0.000	4.497684	4.497684
C4826	-21.45632	2.45e-11	-8.8e+11	0.000	-21.45632	-21.45632
C4830	-13.53779	2.45e-11	-5.5e+11	0.000	-13.53779	-13.53779
C4854	-.7100526	2.45e-11	-2.9e+10	0.000	-.7100526	-.7100526
C4862	223.4353	2.45e-11	9.1e+12	0.000	223.4353	223.4353
C4866	-5.874105	2.45e-11	-2.4e+11	0.000	-5.874105	-5.874105
C4870	-11.97258	2.45e-11	-4.9e+11	0.000	-11.97258	-11.97258
C4890	46.84295	2.45e-11	1.9e+12	0.000	46.84295	46.84295
C4902	-8.554947	2.45e-11	-3.5e+11	0.000	-8.554947	-8.554947
C4918	186.3368	2.45e-11	7.6e+12	0.000	186.3368	186.3368
C4934	299.1468	2.45e-11	1.2e+13	0.000	299.1468	299.1468
C4942	38.48684	2.45e-11	1.6e+12	0.000	38.48684	38.48684
C4962	108.1326	2.45e-11	4.4e+12	0.000	108.1326	108.1326
C4966	159.0706	2.45e-11	6.5e+12	0.000	159.0706	159.0706
C4970	-19.11137	2.45e-11	-7.8e+11	0.000	-19.11137	-19.11137
C4974	-.6013684	2.45e-11	-2.5e+10	0.000	-.6013684	-.6013684
ffrdc_count						
1	28.7557	9.450351	3.04	0.003	10.17524	47.33615
2	0	(omitted)				
3	0	(omitted)				
5	0	(omitted)				
8	-93.43631	135.9036	-0.69	0.492	-360.6381	173.7655
9	25.3309	128.9908	0.20	0.844	-228.2796	278.9414
10	-59.67783	67.87118	-0.88	0.380	-193.1202	73.76456
11	-207.8757	5.454446	-38.11	0.000	-218.5998	-197.1517
12	-106.9215	17.13749	-6.24	0.000	-140.6157	-73.22724
13	0	(omitted)				
_cons	52.6855	2.198852	23.96	0.000	48.36231	57.00869

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408 outreg2 using output/results_slides.doc, append ctitle("OLS full controls, Average e
  > mployment (thousands)") keep(federal_funding) addtext(MSA FE, Yes, Year FE, Yes, FFR
  > DC count FE, Yes)
  output/results_slides.doc
  dir : seeout

409
410 ivregress 2sls avg_annual_pay i.msa_factor (federal_funding = defense_funding_instru
  > ment i.msa_factor), robust cluster(msa_factor)
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note: 388.msa_factor dropped because of collinearity
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Instrumental variables (2SLS) regression

Number of obs	= 7,372
Wald chi2(388)	= 1.56e+22
Prob > chi2	= 0.0000
R-squared	= 0.9430
Root MSE	= 2.0854

(Std. Err. adjusted for 388 clusters in msa_factor)

avg_annual_pay	Coef.	Robust Std. Err.	z	P>|z|	[95% Conf. Interval]	
federal_funding	.0051019	.001447	3.53	0.000	.002266	.0079379
msa_factor						
C1038	-14.31439	5.43e-10	-2.6e+10	0.000	-14.31439	-14.31439
C1042	9.435658	5.43e-10	1.7e+10	0.000	9.435658	9.435658
C1050	1.918012	5.43e-10	3.5e+09	0.000	1.918012	1.918012
C1054	3.063446	5.43e-10	5.6e+09	0.000	3.063446	3.063446
C1058	14.33511	5.43e-10	2.6e+10	0.000	14.33511	14.33511
C1074	-5.603721	3.722873	-1.51	0.132	-12.90042	1.692977
C1078	1.265649	5.43e-10	2.3e+09	0.000	1.265649	1.265649
C1090	11.5436	5.43e-10	2.1e+10	0.000	11.5436	11.5436
C1102	.8377593	5.43e-10	1.5e+09	0.000	.8377593	.8377593
C1110	5.161588	5.43e-10	9.5e+09	0.000	5.161588	5.161588
C1118	7.273439	.0547355	132.88	0.000	7.166159	7.380719
C1126	17.05607	5.43e-10	3.1e+10	0.000	17.05607	17.05607
C1146	19.82154	5.43e-10	3.7e+10	0.000	19.82154	19.82154
C1150	1.685616	5.43e-10	3.1e+09	0.000	1.685616	1.685616
C1154	6.198388	5.43e-10	1.1e+10	0.000	6.198388	6.198388
C1164	-14.12712	5.43e-10	-2.6e+10	0.000	-14.12712	-14.12712
C1170	1.616884	5.43e-10	3.0e+09	0.000	1.616884	1.616884
C1202	3.779103	5.43e-10	7.0e+09	0.000	3.779103	3.779103
C1206	19.44891	5.43e-10	3.6e+10	0.000	19.44891	19.44891
C1210	7.94364	5.43e-10	1.5e+10	0.000	7.94364	7.94364

C1222	-.5626745	5.43e-10	-1.0e+09	0.000	-.5626745	-.5626745
C1226	6.687573	5.43e-10	1.2e+10	0.000	6.687573	6.687573
C1242	19.35954	5.43e-10	3.6e+10	0.000	19.35954	19.35954
C1254	7.268423	5.43e-10	1.3e+10	0.000	7.268423	7.268423
C1258	18.78626	.0758236	247.76	0.000	18.63765	18.93487
C1262	1.635593	5.43e-10	3.0e+09	0.000	1.635593	1.635593
C1270	7.30154	5.43e-10	1.3e+10	0.000	7.30154	7.30154
C1294	10.07243	5.43e-10	1.9e+10	0.000	10.07243	10.07243
C1298	11.53756	5.43e-10	2.1e+10	0.000	11.53756	11.53756
C1302	4.479609	5.43e-10	8.3e+09	0.000	4.479609	4.479609
C1314	12.34371	5.43e-10	2.3e+10	0.000	12.34371	12.34371
C1322	1.156446	5.43e-10	2.1e+09	0.000	1.156446	1.156446
C1338	4.5083	5.43e-10	8.3e+09	0.000	4.5083	4.5083
C1346	3.087731	5.43e-10	5.7e+09	0.000	3.087731	3.087731
C1374	4.901555	5.43e-10	9.0e+09	0.000	4.901555	4.901555
C1378	5.443066	5.43e-10	1.0e+10	0.000	5.443066	5.443066
C1382	12.81149	5.43e-10	2.4e+10	0.000	12.81149	12.81149
C1390	6.391189	5.43e-10	1.2e+10	0.000	6.391189	6.391189
C1398	2.775237	5.43e-10	5.1e+09	0.000	2.775237	2.775237
C1401	13.50206	5.43e-10	2.5e+10	0.000	13.50206	13.50206
C1402	2.137125	5.43e-10	3.9e+09	0.000	2.137125	2.137125
C1410	8.438332	5.43e-10	1.6e+10	0.000	8.438332	8.438332
C1426	6.216221	5.43e-10	1.1e+10	0.000	6.216221	6.216221
C1446	30.31886	1.248791	24.28	0.000	27.87127	32.76645
C1450	24.75773	.2607439	94.95	0.000	24.24668	25.26878
C1454	1.415942	5.43e-10	2.6e+09	0.000	1.415942	1.415942
C1474	10.28998	5.43e-10	1.9e+10	0.000	10.28998	10.28998
C1486	52.24754	5.43e-10	9.6e+10	0.000	52.24754	52.24754
C1518	-5.826742	5.43e-10	-1.1e+10	0.000	-5.826742	-5.826742
C1526	1.681595	5.43e-10	3.1e+09	0.000	1.681595	1.681595
C1538	8.224147	5.43e-10	1.5e+10	0.000	8.224147	8.224147
C1550	1.210693	5.43e-10	2.2e+09	0.000	1.210693	1.210693
C1554	12.69583	5.43e-10	2.3e+10	0.000	12.69583	12.69583
C1568	25.66967	5.43e-10	4.7e+10	0.000	25.66967	25.66967
C1594	2.677074	5.43e-10	4.9e+09	0.000	2.677074	2.677074
C1598	5.25115	5.43e-10	9.7e+09	0.000	5.25115	5.25115
C1602	.0711503	5.43e-10	1.3e+08	0.000	.0711503	.0711503
C1606	.7832935	5.43e-10	1.4e+09	0.000	.7832935	.7832935
C1618	11.02264	5.43e-10	2.0e+10	0.000	11.02264	11.02264
C1622	9.940256	5.43e-10	1.8e+10	0.000	9.940256	9.940256
C1630	11.58172	5.43e-10	2.1e+10	0.000	11.58172	11.58172
C1654	3.028598	5.43e-10	5.6e+09	0.000	3.028598	3.028598
C1658	6.360099	5.43e-10	1.2e+10	0.000	6.360099	6.360099
C1662	8.309893	5.43e-10	1.5e+10	0.000	8.309893	8.309893
C1670	6.799671	5.43e-10	1.3e+10	0.000	6.799671	6.799671
C1674	16.11353	5.43e-10	3.0e+10	0.000	16.11353	16.11353
C1682	10.28354	.1413241	72.77	0.000	10.00655	10.56053
C1686	6.515723	5.43e-10	1.2e+10	0.000	6.515723	6.515723
C1694	5.660238	5.43e-10	1.0e+10	0.000	5.660238	5.660238
C1698	16.97813	1.563999	10.86	0.000	13.91274	20.04351
C1702	1.532054	5.43e-10	2.8e+09	0.000	1.532054	1.532054
C1714	14.09921	5.43e-10	2.6e+10	0.000	14.09921	14.09921
C1730	-.0872919	5.43e-10	-1.6e+08	0.000	-.0872919	-.0872919
C1742	2.269303	5.43e-10	4.2e+09	0.000	2.269303	2.269303
C1746	13.49697	5.43e-10	2.5e+10	0.000	13.49697	13.49697
C1766	-1.587088	5.43e-10	-2.9e+09	0.000	-1.587088	-1.587088
C1778	.9310357	5.43e-10	1.7e+09	0.000	.9310357	.9310357
C1782	10.20559	5.43e-10	1.9e+10	0.000	10.20559	10.20559
C1786	3.341587	5.43e-10	6.2e+09	0.000	3.341587	3.341587
C1790	5.595211	5.43e-10	1.0e+10	0.000	5.595211	5.595211
C1798	2.987929	5.43e-10	5.5e+09	0.000	2.987929	2.987929
C1802	12.79054	5.43e-10	2.4e+10	0.000	12.79054	12.79054
C1814	13.43252	5.43e-10	2.5e+10	0.000	13.43252	13.43252
C1858	6.621647	5.43e-10	1.2e+10	0.000	6.621647	6.621647
C1870	11.88199	5.43e-10	2.2e+10	0.000	11.88199	11.88199
C1888	3.029422	5.43e-10	5.6e+09	0.000	3.029422	3.029422
C1906	-.2815775	5.43e-10	-5.2e+08	0.000	-.2815775	-.2815775
C1910	21.24204	5.43e-10	3.9e+10	0.000	21.24204	21.24204
C1914	3.239488	5.43e-10	6.0e+09	0.000	3.239488	3.239488
C1918	3.012259	5.43e-10	5.5e+09	0.000	3.012259	3.012259
C1930	-3.149031	5.43e-10	-5.8e+09	0.000	-3.149031	-3.149031
C1934	9.087404	5.43e-10	1.7e+10	0.000	9.087404	9.087404

C1938	9.957992	5.43e-10	1.8e+10	0.000	9.957992	9.957992
C1946	5.157963	5.43e-10	9.5e+09	0.000	5.157963	5.157963
C1950	11.02794	5.43e-10	2.0e+10	0.000	11.02794	11.02794
C1966	-.2316818	5.43e-10	-4.3e+08	0.000	-.2316818	-.2316818
C1974	21.41852	.4785502	44.76	0.000	20.48058	22.35647
C1978	14.16461	5.43e-10	2.6e+10	0.000	14.16461	14.16461
C1982	20.76722	5.43e-10	3.8e+10	0.000	20.76722	20.76722
C2002	.9941069	5.43e-10	1.8e+09	0.000	.9941069	.9941069
C2010	4.095217	5.43e-10	7.5e+09	0.000	4.095217	4.095217
C2022	4.310917	5.43e-10	7.9e+09	0.000	4.310917	4.310917
C2026	4.733437	5.43e-10	8.7e+09	0.000	4.733437	4.733437
C2050	24.55074	5.43e-10	4.5e+10	0.000	24.55074	24.55074
C2070	4.044563	5.43e-10	7.4e+09	0.000	4.044563	4.044563
C2074	2.278433	5.43e-10	4.2e+09	0.000	2.278433	2.278433
C2094	.1661182	5.43e-10	3.1e+08	0.000	.1661182	.1661182
C2106	2.006028	5.43e-10	3.7e+09	0.000	2.006028	2.006028
C2114	6.437449	5.43e-10	1.2e+10	0.000	6.437449	6.437449
C2130	5.597214	5.43e-10	1.0e+10	0.000	5.597214	5.597214
C2134	-.7393453	5.43e-10	-1.4e+09	0.000	-.7393454	-.7393453
C2150	3.453774	5.43e-10	6.4e+09	0.000	3.453774	3.453774
C2166	3.416086	5.43e-10	6.3e+09	0.000	3.416086	3.416086
C2178	6.07877	5.43e-10	1.1e+10	0.000	6.07877	6.07877
C2182	13.70781	5.43e-10	2.5e+10	0.000	13.70781	13.70781
C2202	6.216104	5.43e-10	1.1e+10	0.000	6.216104	6.216104
C2214	7.077074	5.43e-10	1.3e+10	0.000	7.077074	7.077074
C2218	2.286947	5.43e-10	4.2e+09	0.000	2.286947	2.286947
C2222	9.132206	5.43e-10	1.7e+10	0.000	9.132206	9.132206
C2238	2.556832	5.43e-10	4.7e+09	0.000	2.556832	2.556832
C2242	8.467297	5.43e-10	1.6e+10	0.000	8.467297	8.467297
C2250	2.82688	5.43e-10	5.2e+09	0.000	2.82688	2.82688
C2252	-.5911042	5.43e-10	-1.1e+09	0.000	-.5911042	-.5911042
C2254	4.254001	5.43e-10	7.8e+09	0.000	4.254001	4.254001
C2266	9.867523	5.43e-10	1.8e+10	0.000	9.867523	9.867523
C2290	-.1829597	5.43e-10	-3.4e+08	0.000	-.1829597	-.1829597
C2306	5.876309	5.43e-10	1.1e+10	0.000	5.876309	5.876309
C2342	3.637382	5.43e-10	6.7e+09	0.000	3.637382	3.637382
C2346	-1.66046	5.43e-10	-3.1e+09	0.000	-1.66046	-1.66046
C2354	5.285386	5.43e-10	9.7e+09	0.000	5.285386	5.285386
C2358	6.167755	5.43e-10	1.1e+10	0.000	6.167755	6.167755
C2390	1.182853	5.43e-10	2.2e+09	0.000	1.182853	1.182853
C2402	3.024838	5.43e-10	5.6e+09	0.000	3.024838	3.024838
C2414	-2.046031	5.43e-10	-3.8e+09	0.000	-2.046031	-2.046031
C2422	1.27712	5.43e-10	2.4e+09	0.000	1.27712	1.27712
C2426	-1.229901	5.43e-10	-2.3e+09	0.000	-1.229901	-1.229901
C2430	4.159394	5.43e-10	7.7e+09	0.000	4.159394	4.159394
C2434	8.787703	5.43e-10	1.6e+10	0.000	8.787703	8.787703
C2442	-3.035598	5.43e-10	-5.6e+09	0.000	-3.035598	-3.035598
C2450	-.4779561	5.43e-10	-8.8e+08	0.000	-.4779561	-.4779561
C2454	7.720426	5.43e-10	1.4e+10	0.000	7.720426	7.720426
C2458	8.076196	5.43e-10	1.5e+10	0.000	8.076196	8.076196
C2466	6.593309	5.43e-10	1.2e+10	0.000	6.593309	6.593309
C2478	3.94371	5.43e-10	7.3e+09	0.000	3.94371	3.94371
C2486	5.534566	5.43e-10	1.0e+10	0.000	5.534566	5.534566
C2502	-9.455676	5.43e-10	-1.7e+10	0.000	-9.455676	-9.455676
C2506	4.710814	5.43e-10	8.7e+09	0.000	4.710814	4.710814
C2518	3.934216	5.43e-10	7.2e+09	0.000	3.934216	3.934216
C2522	-3.018007	5.43e-10	-5.6e+09	0.000	-3.018007	-3.018007
C2526	2.260986	5.43e-10	4.2e+09	0.000	2.260986	2.260986
C2542	12.41386	5.43e-10	2.3e+10	0.000	12.41386	12.41386
C2550	1.290885	5.43e-10	2.4e+09	0.000	1.290885	1.290885
C2554	26.15924	5.43e-10	4.8e+10	0.000	26.15924	26.15924
C2562	-1.363931	5.43e-10	-2.5e+09	0.000	-1.363931	-1.363931
C2586	.3813593	5.43e-10	7.0e+08	0.000	.3813593	.3813593
C2594	-.3856022	5.43e-10	-7.1e+08	0.000	-.3856022	-.3856022
C2598	.6852068	5.43e-10	1.3e+09	0.000	.6852068	.6852068
C2614	-.6498401	5.43e-10	-1.2e+09	0.000	-.6498401	-.6498401
C2630	-3.601284	5.43e-10	-6.6e+09	0.000	-3.601284	-3.601284
C2638	11.22198	5.43e-10	2.1e+10	0.000	11.22198	11.22198
C2642	26.15939	5.43e-10	4.8e+10	0.000	26.15939	26.15939
C2658	4.270862	5.43e-10	7.9e+09	0.000	4.270862	4.270862
C2662	18.16439	5.43e-10	3.3e+10	0.000	18.16439	18.16439
C2682	2.228025	.59951	3.72	0.000	1.053007	3.403043

C2690	12.35022	5.43e-10	2.3e+10	0.000	12.35022	12.35022
C2698	8.142307	5.43e-10	1.5e+10	0.000	8.142307	8.142307
C2706	11.34428	.0131707	861.33	0.000	11.31847	11.3701
C2710	7.953773	5.43e-10	1.5e+10	0.000	7.953773	7.953773
C2714	4.413286	5.43e-10	8.1e+09	0.000	4.413286	4.413286
C2718	3.388866	5.43e-10	6.2e+09	0.000	3.388866	3.388866
C2726	10.65096	5.43e-10	2.0e+10	0.000	10.65096	10.65096
C2734	-5.379169	5.43e-10	-9.9e+09	0.000	-5.379169	-5.379169
C2750	6.081161	5.43e-10	1.1e+10	0.000	6.081161	6.081161
C2762	1.712717	5.43e-10	3.2e+09	0.000	1.712717	1.712717
C2774	.6214545	5.43e-10	1.1e+09	0.000	.6214545	.6214545
C2778	-.3265624	5.43e-10	-6.0e+08	0.000	-.3265624	-.3265624
C2786	-1.252287	5.43e-10	-2.3e+09	0.000	-1.252287	-1.252287
C2790	-.3548327	5.43e-10	-6.5e+08	0.000	-.3548327	-.3548327
C2798	5.020955	5.43e-10	9.2e+09	0.000	5.020955	5.020955
C2802	9.666923	5.43e-10	1.8e+10	0.000	9.666923	9.666923
C2810	2.610627	5.43e-10	4.8e+09	0.000	2.610627	2.610627
C2814	13.7615	5.43e-10	2.5e+10	0.000	13.7615	13.7615
C2842	6.350394	1.456698	4.36	0.000	3.495319	9.20547
C2866	3.085051	5.43e-10	5.7e+09	0.000	3.085051	3.085051
C2870	5.069163	5.43e-10	9.3e+09	0.000	5.069163	5.069163
C2874	3.147652	5.43e-10	5.8e+09	0.000	3.147652	3.147652
C2894	1.801333	1.911547	0.94	0.346	-1.94523	5.547897
C2902	14.38093	5.43e-10	2.6e+10	0.000	14.38093	14.38093
C2910	2.580973	5.43e-10	4.8e+09	0.000	2.580973	2.580973
C2918	8.131383	5.43e-10	1.5e+10	0.000	8.131383	8.131383
C2920	6.674268	5.43e-10	1.2e+10	0.000	6.674268	6.674268
C2934	8.544319	5.43e-10	1.6e+10	0.000	8.544319	8.544319
C2942	-1.486881	5.43e-10	-2.7e+09	0.000	-1.486881	-1.486881
C2946	2.851448	5.43e-10	5.3e+09	0.000	2.851448	2.851448
C2954	6.65312	5.43e-10	1.2e+10	0.000	6.65312	6.65312
C2962	11.37513	5.43e-10	2.1e+10	0.000	11.37513	11.37513
C2970	-3.085496	5.43e-10	-5.7e+09	0.000	-3.085496	-3.085496
C2974	-.9548874	5.43e-10	-1.8e+09	0.000	-.9548874	-.9548874
C2982	10.10105	5.43e-10	1.9e+10	0.000	10.10105	10.10105
C2994	-.7689797	5.43e-10	-1.4e+09	0.000	-.7689797	-.7689797
C3002	-.8396237	5.43e-10	-1.5e+09	0.000	-.8396237	-.8396237
C3014	2.035583	5.43e-10	3.7e+09	0.000	2.035583	2.035583
C3030	.567591	5.43e-10	1.0e+09	0.000	.567591	.567591
C3034	2.115684	5.43e-10	3.9e+09	0.000	2.115684	2.115684
C3046	8.84962	5.43e-10	1.6e+10	0.000	8.84962	8.84962
C3062	4.326948	5.43e-10	8.0e+09	0.000	4.326948	4.326948
C3070	4.445322	5.43e-10	8.2e+09	0.000	4.445322	4.445322
C3078	7.290588	5.43e-10	1.3e+10	0.000	7.290588	7.290588
C3086	-4.037007	5.43e-10	-7.4e+09	0.000	-4.037007	-4.037007
C3098	5.887353	5.43e-10	1.1e+10	0.000	5.887353	5.887353
C3102	7.394507	5.43e-10	1.4e+10	0.000	7.394507	7.394507
C3108	8.827826	3.921098	2.25	0.024	1.142615	16.51304
C3114	10.29575	5.43e-10	1.9e+10	0.000	10.29575	10.29575
C3118	2.046704	5.43e-10	3.8e+09	0.000	2.046704	2.046704
C3134	2.965926	5.43e-10	5.5e+09	0.000	2.965926	2.965926
C3142	3.401237	5.43e-10	6.3e+09	0.000	3.401237	3.401237
C3146	1.531411	5.43e-10	2.8e+09	0.000	1.531411	1.531411
C3154	12.07999	5.43e-10	2.2e+10	0.000	12.07999	12.07999
C3170	20.70814	5.43e-10	3.8e+10	0.000	20.70814	20.70814
C3174	-.6088102	5.43e-10	-1.1e+09	0.000	-.6088102	-.6088102
C3186	1.926252	5.43e-10	3.5e+09	0.000	1.926252	1.926252
C3190	1.062173	5.43e-10	2.0e+09	0.000	1.062173	1.062173
C3242	-13.76084	5.43e-10	-2.5e+10	0.000	-13.76084	-13.76084
C3258	-5.194479	5.43e-10	-9.6e+09	0.000	-5.194479	-5.194479
C3278	1.623233	5.43e-10	3.0e+09	0.000	1.623233	1.623233
C3282	12.58445	5.43e-10	2.3e+10	0.000	12.58445	12.58445
C3290	1.1565	5.43e-10	2.1e+09	0.000	1.1565	1.1565
C3310	13.50469	5.43e-10	2.5e+10	0.000	13.50469	13.50469
C3314	.9785821	5.43e-10	1.8e+09	0.000	.9785821	.9785821
C3322	22.19668	5.43e-10	4.1e+10	0.000	22.19668	22.19668
C3326	21.67534	5.43e-10	4.0e+10	0.000	21.67534	21.67534
C3334	13.84094	5.43e-10	2.5e+10	0.000	13.84094	13.84094
C3346	21.50196	5.43e-10	4.0e+10	0.000	21.50196	21.50196
C3354	.7857618	5.43e-10	1.4e+09	0.000	.7857618	.7857618
C3366	6.795862	5.43e-10	1.3e+10	0.000	6.795862	6.795862
C3370	6.387213	5.43e-10	1.2e+10	0.000	6.387213	6.387213

C3374	.1694884	5.43e-10	3.1e+08	0.000	.1694884	.1694884
C3378	11.01616	5.43e-10	2.0e+10	0.000	11.01616	11.01616
C3386	5.410358	5.43e-10	1.0e+10	0.000	5.410358	5.410358
C3406	6.660808	5.43e-10	1.2e+10	0.000	6.660808	6.660808
C3410	1.572399	5.43e-10	2.9e+09	0.000	1.572399	1.572399
C3458	4.824721	5.43e-10	8.9e+09	0.000	4.824721	4.824721
C3462	.5608197	5.43e-10	1.0e+09	0.000	.5608197	.5608197
C3474	4.139599	5.43e-10	7.6e+09	0.000	4.139599	4.139599
C3482	-4.339104	5.43e-10	-8.0e+09	0.000	-4.339104	-4.339104
C3490	14.01182	5.43e-10	2.6e+10	0.000	14.01182	14.01182
C3494	8.530023	5.43e-10	1.6e+10	0.000	8.530023	8.530023
C3498	13.63094	5.43e-10	2.5e+10	0.000	13.63094	13.63094
C3510	2.954085	5.43e-10	5.4e+09	0.000	2.954085	2.954085
C3530	18.42394	5.43e-10	3.4e+10	0.000	18.42394	18.42394
C3538	12.08153	5.43e-10	2.2e+10	0.000	12.08153	12.08153
C3562	34.23443	.8521261	40.18	0.000	32.56429	35.90456
C3566	7.905252	5.43e-10	1.5e+10	0.000	7.905252	7.905252
C3584	4.579014	5.43e-10	8.4e+09	0.000	4.579014	4.579014
C3598	16.32582	5.43e-10	3.0e+10	0.000	16.32582	16.32582
C3610	-.6892108	5.43e-10	-1.3e+09	0.000	-.6892108	-.6892108
C3614	.0456722	5.43e-10	8.4e+07	0.000	.0456722	.0456722
C3622	13.50876	5.43e-10	2.5e+10	0.000	13.50876	13.50876
C3626	3.132079	5.43e-10	5.8e+09	0.000	3.132079	3.132079
C3642	7.84358	5.43e-10	1.4e+10	0.000	7.84358	7.84358
C3650	9.972703	5.43e-10	1.8e+10	0.000	9.972703	9.972703
C3654	9.162244	5.43e-10	1.7e+10	0.000	9.162244	9.162244
C3674	7.627723	5.43e-10	1.4e+10	0.000	7.627723	7.627723
C3678	11.68214	5.43e-10	2.2e+10	0.000	11.68214	11.68214
C3698	3.107822	5.43e-10	5.7e+09	0.000	3.107822	3.107822
C3710	17.22973	5.43e-10	3.2e+10	0.000	17.22973	17.22973
C3734	10.5736	5.43e-10	1.9e+10	0.000	10.5736	10.5736
C3746	1.358754	5.43e-10	2.5e+09	0.000	1.358754	1.358754
C3762	1.581939	5.43e-10	2.9e+09	0.000	1.581939	1.581939
C3786	2.620221	5.43e-10	4.8e+09	0.000	2.620221	2.620221
C3790	13.9081	5.43e-10	2.6e+10	0.000	13.9081	13.9081
C3798	22.52488	5.43e-10	4.1e+10	0.000	22.52488	22.52488
C3806	13.89381	5.43e-10	2.6e+10	0.000	13.89381	13.89381
C3822	1.299265	5.43e-10	2.4e+09	0.000	1.299265	1.299265
C3830	13.76351	.1549462	88.83	0.000	13.45982	14.0672
C3834	7.056306	5.43e-10	1.3e+10	0.000	7.056306	7.056306
C3854	-2.973999	5.43e-10	-5.5e+09	0.000	-2.973999	-2.973999
C3866	-13.98964	5.43e-10	-2.6e+10	0.000	-13.98964	-13.98964
C3886	8.636904	5.43e-10	1.6e+10	0.000	8.636904	8.636904
C3890	16.69246	5.43e-10	3.1e+10	0.000	16.69246	16.69246
C3894	2.938093	5.43e-10	5.4e+09	0.000	2.938093	2.938093
C3914	-.6164533	5.43e-10	-1.1e+09	0.000	-.6164533	-.6164533
C3930	11.58947	5.43e-10	2.1e+10	0.000	11.58947	11.58947
C3934	3.576062	5.43e-10	6.6e+09	0.000	3.576062	3.576062
C3938	2.027733	5.43e-10	3.7e+09	0.000	2.027733	2.027733
C3946	-.6657629	5.43e-10	-1.2e+09	0.000	-.6657629	-.6657628
C3954	9.690395	5.43e-10	1.8e+10	0.000	9.690395	9.690395
C3958	14.31063	5.43e-10	2.6e+10	0.000	14.31063	14.31063
C3966	.0411457	5.43e-10	7.6e+07	0.000	.0411457	.0411457
C3974	9.7251	5.43e-10	1.8e+10	0.000	9.7251	9.7251
C3982	3.215136	5.43e-10	5.9e+09	0.000	3.215136	3.215136
C3990	10.69547	5.43e-10	2.0e+10	0.000	10.69547	10.69547
C4006	14.15097	5.43e-10	2.6e+10	0.000	14.15097	14.15097
C4014	6.558965	5.43e-10	1.2e+10	0.000	6.558965	6.558965
C4022	4.699662	5.43e-10	8.7e+09	0.000	4.699662	4.699662
C4034	15.91014	5.43e-10	2.9e+10	0.000	15.91014	15.91014
C4038	10.63707	5.43e-10	2.0e+10	0.000	10.63707	10.63707
C4042	7.696102	5.43e-10	1.4e+10	0.000	7.696102	7.696102
C4058	.7595821	5.43e-10	1.4e+09	0.000	.7595821	.7595821
C4066	3.712135	5.43e-10	6.8e+09	0.000	3.712135	3.712135
C4090	18.29538	5.43e-10	3.4e+10	0.000	18.29538	18.29538
C4098	7.055087	5.43e-10	1.3e+10	0.000	7.055087	7.055087
C4106	4.116644	5.43e-10	7.6e+09	0.000	4.116644	4.116644
C4110	-4.540441	5.43e-10	-8.4e+09	0.000	-4.540441	-4.540441
C4114	1.69171	5.43e-10	3.1e+09	0.000	1.69171	1.69171
C4118	13.64978	5.43e-10	2.5e+10	0.000	13.64978	13.64978
C4142	3.349393	5.43e-10	6.2e+09	0.000	3.349393	3.349393
C4150	8.05858	5.43e-10	1.5e+10	0.000	8.05858	8.05858

C4154	.3730266	5.43e-10	6.9e+08	0.000	.3730266	.3730266
C4162	11.95381	5.43e-10	2.2e+10	0.000	11.95381	11.95381
C4166	1.139945	5.43e-10	2.1e+09	0.000	1.139945	1.139945
C4170	8.156595	.0226562	360.02	0.000	8.112189	8.201
C4174	20.19139	5.43e-10	3.7e+10	0.000	20.19139	20.19139
C4186	30.45456	3.665246	8.31	0.000	23.27081	37.63831
C4190	-16.48238	5.43e-10	-3.0e+10	0.000	-16.48238	-16.48238
C4194	67.82051	5.43e-10	1.2e+11	0.000	67.82051	67.82051
C4198	-7.902355	5.43e-10	-1.5e+10	0.000	-7.902355	-7.902355
C4202	6.140044	5.43e-10	1.1e+10	0.000	6.140044	6.140044
C4210	10.99869	5.43e-10	2.0e+10	0.000	10.99869	10.99869
C4214	5.998222	5.43e-10	1.1e+10	0.000	5.998222	5.998222
C4220	12.54649	5.43e-10	2.3e+10	0.000	12.54649	12.54649
C4222	13.15078	5.43e-10	2.4e+10	0.000	13.15078	13.15078
C4234	6.087038	5.43e-10	1.1e+10	0.000	6.087038	6.087038
C4254	3.176381	5.43e-10	5.9e+09	0.000	3.176381	3.176381
C4266	28.38108	5.43e-10	5.2e+10	0.000	28.38108	28.38108
C4268	2.976768	5.43e-10	5.5e+09	0.000	2.976768	2.976768
C4270	-5.280053	5.43e-10	-9.7e+09	0.000	-5.280053	-5.280053
C4310	7.343345	5.43e-10	1.4e+10	0.000	7.343345	7.343345
C4330	4.141923	5.43e-10	7.6e+09	0.000	4.141923	4.141923
C4334	3.609799	5.43e-10	6.6e+09	0.000	3.609799	3.609799
C4342	5.790216	5.43e-10	1.1e+10	0.000	5.790216	5.790216
C4358	3.008816	5.43e-10	5.5e+09	0.000	3.008816	3.008816
C4362	6.190104	5.43e-10	1.1e+10	0.000	6.190104	6.190104
C4378	5.291574	5.43e-10	9.7e+09	0.000	5.291574	5.291574
C4390	6.90644	5.43e-10	1.3e+10	0.000	6.90644	6.90644
C4406	5.59826	5.43e-10	1.0e+10	0.000	5.59826	5.59826
C4410	14.58122	5.43e-10	2.7e+10	0.000	14.58122	14.58122
C4414	9.933148	5.43e-10	1.8e+10	0.000	9.933148	9.933148
C4418	.7315357	5.43e-10	1.3e+09	0.000	.7315357	.7315357
C4422	1.081595	5.43e-10	2.0e+09	0.000	1.081595	1.081595
C4430	7.819201	5.43e-10	1.4e+10	0.000	7.819201	7.819201
C4442	1.365507	5.43e-10	2.5e+09	0.000	1.365507	1.365507
C4470	7.008146	5.43e-10	1.3e+10	0.000	7.008146	7.008146
C4494	-1.962163	5.43e-10	-3.6e+09	0.000	-1.962163	-1.962163
C4506	9.826725	5.43e-10	1.8e+10	0.000	9.826725	9.826725
C4522	4.852075	5.43e-10	8.9e+09	0.000	4.852075	4.852075
C4530	9.663873	5.43e-10	1.8e+10	0.000	9.663873	9.663873
C4546	.9507492	5.43e-10	1.8e+09	0.000	.9507492	.9507492
C4550	2.256657	5.43e-10	4.2e+09	0.000	2.256657	2.256657
C4554	.8860289	5.43e-10	1.6e+09	0.000	.8860289	.8860289
C4578	7.997138	5.43e-10	1.5e+10	0.000	7.997138	7.997138
C4582	4.742946	5.43e-10	8.7e+09	0.000	4.742946	4.742946
C4594	31.45573	.1373496	229.02	0.000	31.18653	31.72493
C4606	7.282319	.063253	115.13	0.000	7.158345	7.406292
C4614	8.983462	5.43e-10	1.7e+10	0.000	8.983462	8.983462
C4622	5.662011	5.43e-10	1.0e+10	0.000	5.662011	5.662011
C4634	6.411239	5.43e-10	1.2e+10	0.000	6.411239	6.411239
C4652	11.47602	5.43e-10	2.1e+10	0.000	11.47602	11.47602
C4654	2.675621	5.43e-10	4.9e+09	0.000	2.675621	2.675621
C4666	-4.172828	5.43e-10	-7.7e+09	0.000	-4.172828	-4.172828
C4670	14.93825	5.43e-10	2.8e+10	0.000	14.93825	14.93825
C4702	5.310183	5.43e-10	9.8e+09	0.000	5.310183	5.310183
C4722	8.446136	5.43e-10	1.6e+10	0.000	8.446136	8.446136
C4726	6.55141	.1742688	37.59	0.000	6.209849	6.89297
C4730	-1.003346	5.43e-10	-1.8e+09	0.000	-1.003346	-1.003346
C4738	4.166711	5.43e-10	7.7e+09	0.000	4.166711	4.166711
C4746	2.322452	5.43e-10	4.3e+09	0.000	2.322452	2.322452
C4758	6.724566	5.43e-10	1.2e+10	0.000	6.724566	6.724566
C4790	25.79948	2.722977	9.47	0.000	20.46255	31.13642
C4794	5.572424	5.43e-10	1.0e+10	0.000	5.572424	5.572424
C4806	1.823135	5.43e-10	3.4e+09	0.000	1.823135	1.823135
C4814	4.933121	5.43e-10	9.1e+09	0.000	4.933121	4.933121
C4826	1.279481	5.43e-10	2.4e+09	0.000	1.279481	1.279481
C4830	-1.835218	5.43e-10	-3.4e+09	0.000	-1.835218	-1.835218
C4854	2.13272	5.43e-10	3.9e+09	0.000	2.13272	2.13272
C4862	8.090517	5.43e-10	1.5e+10	0.000	8.090517	8.090517
C4866	.2813616	5.43e-10	5.2e+08	0.000	.2813616	.2813616
C4870	2.831601	5.43e-10	5.2e+09	0.000	2.831601	2.831601
C4890	3.957169	5.43e-10	7.3e+09	0.000	3.957169	3.957169
C4902	5.600928	5.43e-10	1.0e+10	0.000	5.600928	5.600928

C4918	7.619098	5.43e-10	1.4e+10	0.000	7.619098	7.619098
C4934	14.59971	5.43e-10	2.7e+10	0.000	14.59971	14.59971
C4942	-2.015695	5.43e-10	-3.7e+09	0.000	-2.015695	-2.015695
C4962	8.404685	5.43e-10	1.5e+10	0.000	8.404685	8.404685
C4966	2.140985	5.43e-10	3.9e+09	0.000	2.140985	2.140985
C4970	4.102068	5.43e-10	7.6e+09	0.000	4.102068	4.102068
C4974	-2.287051	5.43e-10	-4.2e+09	0.000	-2.287051	-2.287051
_cons	39.33785	5.43e-10	7.2e+10	0.000	39.33785	39.33785

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411 outreg2 using output/results_slides.doc, append ctitle("IV defense instrument, Avera
  > ge annual pay (thousands 2019$)") keep(federal_funding) addtext(MSA FE, Yes, Year FE
  > , No, FFRDC count FE, No)
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412 ivregress 2sls annual_avg_emplvl i.msa_factor (federal_funding = defense_funding_ins
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note: 388.msa_factor dropped because of collinearity
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Instrumental variables (2SLS) regression

Number of obs	= 7,372
Wald chi2(**388**)	= 3.28e+24
Prob > chi2	= 0.0000
R-squared	= 0.9960
Root MSE	= 44.596

(Std. Err. adjusted for **388** clusters in msa_factor)

annual_avg_em~l	Coef.	Robust Std. Err.	z	P>|z|	[95% Conf. Interval]	
federal_funding	.1299543	.0249502	5.21	0.000	.0810528	.1788557
msa_factor						
C1038	-10.86058	1.87e-08	-5.8e+08	0.000	-10.86058	-10.86058
C1042	252.2172	1.87e-08	1.4e+10	0.000	252.2172	252.2172
C1050	-3.312842	1.87e-08	-1.8e+08	0.000	-3.312842	-3.312842
C1054	-21.78326	1.87e-08	-1.2e+09	0.000	-21.78326	-21.78326
C1058	363.4595	1.87e-08	1.9e+10	0.000	363.4595	363.4595
C1074	-33.03755	64.19443	-0.51	0.607	-158.8563	92.78122
C1078	-2.559211	1.87e-08	-1.4e+08	0.000	-2.559211	-2.55921
C1090	267.8855	1.87e-08	1.4e+10	0.000	267.8855	267.8855
C1102	-5.268421	1.87e-08	-2.8e+08	0.000	-5.268421	-5.268421
C1110	45.70632	1.87e-08	2.4e+09	0.000	45.70632	45.70632
C1118	-25.74456	.943818	-27.28	0.000	-27.59441	-23.89471
C1126	102.0568	1.87e-08	5.5e+09	0.000	102.0568	102.0568
C1146	133.0119	1.87e-08	7.1e+09	0.000	133.0119	133.0119
C1150	-17.56142	1.87e-08	-9.4e+08	0.000	-17.56142	-17.56142
C1154	51.53711	1.87e-08	2.8e+09	0.000	51.53711	51.53711
C1164	-27.19958	1.87e-08	-1.5e+09	0.000	-27.19958	-27.19958
C1170	108.557	1.87e-08	5.8e+09	0.000	108.557	108.557
C1202	15.625	1.87e-08	8.4e+08	0.000	15.625	15.625
C1206	2251.835	1.87e-08	1.2e+11	0.000	2251.835	2251.835
C1210	71.86116	1.87e-08	3.8e+09	0.000	71.86116	71.86116
C1222	-13.83447	1.87e-08	-7.4e+08	0.000	-13.83447	-13.83447

C1226	146.6969	1.87e-08	7.9e+09	0.000	146.6969	146.6969
C1242	742.4767	1.87e-08	4.0e+10	0.000	742.4767	742.4767
C1254	221.2273	1.87e-08	1.2e+10	0.000	221.2273	221.2273
C1258	1183.174	1.307446	904.95	0.000	1180.611	1185.737
C1262	5.818474	1.87e-08	3.1e+08	0.000	5.818474	5.818474
C1270	28.75321	1.87e-08	1.5e+09	0.000	28.75321	28.75321
C1294	296.7584	1.87e-08	1.6e+10	0.000	296.7584	296.7584
C1298	-7.226368	1.87e-08	-3.9e+08	0.000	-7.226368	-7.226368
C1302	-27.75184	1.87e-08	-1.5e+09	0.000	-27.75184	-27.75184
C1314	93.57584	1.87e-08	5.0e+09	0.000	93.57584	93.57584
C1322	-20.45942	1.87e-08	-1.1e+09	0.000	-20.45942	-20.45942
C1338	17.14589	1.87e-08	9.2e+08	0.000	17.14589	17.14589
C1346	1.954053	1.87e-08	1.0e+08	0.000	1.954053	1.954053
C1374	14.75974	1.87e-08	7.9e+08	0.000	14.75974	14.75974
C1378	40.64321	1.87e-08	2.2e+09	0.000	40.64321	40.64321
C1382	416.018	1.87e-08	2.2e+10	0.000	416.018	416.018
C1390	-.5536316	1.87e-08	-3.0e+07	0.000	-.5536316	-.5536315
C1398	3.346842	1.87e-08	1.8e+08	0.000	3.346842	3.346842
C1401	25.94558	1.87e-08	1.4e+09	0.000	25.94558	25.94558
C1402	2.165789	1.87e-08	1.2e+08	0.000	2.165789	2.16579
C1410	-24.46816	1.87e-08	-1.3e+09	0.000	-24.46816	-24.46816
C1426	205.7781	1.87e-08	1.1e+10	0.000	205.7781	205.7781
C1446	2264.987	21.53321	105.19	0.000	2222.782	2307.191
C1450	77.56903	4.496071	17.25	0.000	68.75689	86.38117
C1454	2.142684	1.87e-08	1.1e+08	0.000	2.142684	2.142684
C1474	18.62579	1.87e-08	1.0e+09	0.000	18.62579	18.62579
C1486	350.6137	1.87e-08	1.9e+10	0.000	350.6137	350.6137
C1518	62.68116	1.87e-08	3.4e+09	0.000	62.68116	62.68116
C1526	-22.83763	1.87e-08	-1.2e+09	0.000	-22.83763	-22.83763
C1538	465.1362	1.87e-08	2.5e+10	0.000	465.1362	465.1362
C1550	-5.009474	1.87e-08	-2.7e+08	0.000	-5.009474	-5.009474
C1554	50.78342	1.87e-08	2.7e+09	0.000	50.78342	50.78342
C1568	-23.37889	1.87e-08	-1.3e+09	0.000	-23.37889	-23.37889
C1594	102.3015	1.87e-08	5.5e+09	0.000	102.3015	102.3015
C1598	151.9798	1.87e-08	8.1e+09	0.000	151.9798	151.9798
C1602	-20.10105	1.87e-08	-1.1e+09	0.000	-20.10105	-20.10105
C1606	-12.40737	1.87e-08	-6.6e+08	0.000	-12.40737	-12.40737
C1618	-34.25068	1.87e-08	-1.8e+09	0.000	-34.25068	-34.25068
C1622	-25.814	1.87e-08	-1.4e+09	0.000	-25.814	-25.814
C1630	72.26158	1.87e-08	3.9e+09	0.000	72.26158	72.26158
C1654	-8.713053	1.87e-08	-4.7e+08	0.000	-8.713053	-8.713053
C1658	33.82474	1.87e-08	1.8e+09	0.000	33.82474	33.82474
C1662	50.17579	1.87e-08	2.7e+09	0.000	50.17579	50.17579
C1670	222.601	1.87e-08	1.2e+10	0.000	222.601	222.601
C1674	941.7281	1.87e-08	5.0e+10	0.000	941.7281	941.7281
C1682	23.76814	2.436887	9.75	0.000	18.99193	28.54435
C1686	167.5512	1.87e-08	9.0e+09	0.000	167.5512	167.5512
C1694	-21.01126	1.87e-08	-1.1e+09	0.000	-21.01126	-21.01126
C1698	4096.985	26.96843	151.92	0.000	4044.128	4149.842
C1702	11.62279	1.87e-08	6.2e+08	0.000	11.62279	11.62279
C1714	930.5742	1.87e-08	5.0e+10	0.000	930.5742	930.5742
C1730	16.04974	1.87e-08	8.6e+08	0.000	16.04974	16.04974
C1742	-23.389	1.87e-08	-1.3e+09	0.000	-23.389	-23.389
C1746	952.0483	1.87e-08	5.1e+10	0.000	952.0483	952.0483
C1766	-10.49347	1.87e-08	-5.6e+08	0.000	-10.49347	-10.49347
C1778	32.27784	1.87e-08	1.7e+09	0.000	32.27784	32.27784
C1782	190.3709	1.87e-08	1.0e+10	0.000	190.3709	190.3709
C1786	20.80947	1.87e-08	1.1e+09	0.000	20.80947	20.80947
C1790	278.5511	1.87e-08	1.5e+10	0.000	278.5511	278.5511
C1798	51.64779	1.87e-08	2.8e+09	0.000	51.64779	51.64779
C1802	-18.92837	1.87e-08	-1.0e+09	0.000	-18.92837	-18.92837
C1814	873.4222	1.87e-08	4.7e+10	0.000	873.4222	873.4222
C1858	113.6626	1.87e-08	6.1e+09	0.000	113.6626	113.6626
C1870	-28.65711	1.87e-08	-1.5e+09	0.000	-28.65711	-28.65711
C1888	35.43147	1.87e-08	1.9e+09	0.000	35.43147	35.43147
C1906	-27.06668	1.87e-08	-1.4e+09	0.000	-27.06668	-27.06668
C1910	2938.652	1.87e-08	1.6e+11	0.000	2938.652	2938.652
C1914	4.076579	1.87e-08	2.2e+08	0.000	4.076579	4.076579
C1918	-35.15547	1.87e-08	-1.9e+09	0.000	-35.15547	-35.15547
C1930	-2.412579	1.87e-08	-1.3e+08	0.000	-2.412579	-2.412579
C1934	116.8138	1.87e-08	6.3e+09	0.000	116.8138	116.8138
C1938	305.8018	1.87e-08	1.6e+10	0.000	305.8018	305.8018

C1946	-10.91037	1.87e-08	-5.8e+08	0.000	-10.91037	-10.91037
C1950	-13.15658	1.87e-08	-7.0e+08	0.000	-13.15658	-13.15658
C1966	113.0801	1.87e-08	6.1e+09	0.000	113.0801	113.0801
C1974	1162.182	8.251761	140.84	0.000	1146.009	1178.356
C1978	260.3355	1.87e-08	1.4e+10	0.000	260.3355	260.3355
C1982	1794.967	1.87e-08	9.6e+10	0.000	1794.967	1794.967
C2002	-7.382105	1.87e-08	-4.0e+08	0.000	-7.382105	-7.382105
C2010	-2.388421	1.87e-08	-1.3e+08	0.000	-2.388421	-2.388421
C2022	-9.408632	1.87e-08	-5.0e+08	0.000	-9.408632	-9.408632
C2026	59.97642	1.87e-08	3.2e+09	0.000	59.97642	59.97642
C2050	207.8684	1.87e-08	1.1e+10	0.000	207.8684	207.8684
C2070	-8.877632	1.87e-08	-4.8e+08	0.000	-8.877632	-8.877632
C2074	13.50989	1.87e-08	7.2e+08	0.000	13.50989	13.50989
C2094	-5.886947	1.87e-08	-3.2e+08	0.000	-5.886947	-5.886947
C2106	-13.33537	1.87e-08	-7.1e+08	0.000	-13.33537	-13.33537
C2114	54.78937	1.87e-08	2.9e+09	0.000	54.78937	54.78937
C2130	-26.36789	1.87e-08	-1.4e+09	0.000	-26.36789	-26.36789
C2134	211.8314	1.87e-08	1.1e+10	0.000	211.8314	211.8314
C2150	60.90674	1.87e-08	3.3e+09	0.000	60.90674	60.90674
C2166	80.00874	1.87e-08	4.3e+09	0.000	80.00874	80.00874
C2178	86.33705	1.87e-08	4.6e+09	0.000	86.33705	86.33705
C2182	-27.66053	1.87e-08	-1.5e+09	0.000	-27.66053	-27.66053
C2202	56.14716	1.87e-08	3.0e+09	0.000	56.14716	56.14716
C2214	-15.70626	1.87e-08	-8.4e+08	0.000	-15.70626	-15.70626
C2218	60.31095	1.87e-08	3.2e+09	0.000	60.31095	60.31095
C2222	136.8944	1.87e-08	7.3e+09	0.000	136.8944	136.8944
C2238	-6.438789	1.87e-08	-3.4e+08	0.000	-6.438789	-6.438789
C2242	75.20105	1.87e-08	4.0e+09	0.000	75.20105	75.20105
C2250	17.89679	1.87e-08	9.6e+08	0.000	17.89679	17.89679
C2252	-12.09779	1.87e-08	-6.5e+08	0.000	-12.09779	-12.09779
C2254	-18.31605	1.87e-08	-9.8e+08	0.000	-18.31605	-18.31605
C2266	71.81379	1.87e-08	3.8e+09	0.000	71.81379	71.81379
C2290	45.22832	1.87e-08	2.4e+09	0.000	45.22832	45.22832
C2306	138.2133	1.87e-08	7.4e+09	0.000	138.2133	138.2133
C2342	286.8317	1.87e-08	1.5e+10	0.000	286.8317	286.8317
C2346	-28.44	1.87e-08	-1.5e+09	0.000	-28.44	-28.44
C2354	61.51263	1.87e-08	3.3e+09	0.000	61.51263	61.51263
C2358	9.775053	1.87e-08	5.2e+08	0.000	9.775053	9.775053
C2390	-30.37021	1.87e-08	-1.6e+09	0.000	-30.37021	-30.37021
C2402	-11.21184	1.87e-08	-6.0e+08	0.000	-11.21184	-11.21184
C2414	-20.56442	1.87e-08	-1.1e+09	0.000	-20.56442	-20.56442
C2422	-13.17947	1.87e-08	-7.1e+08	0.000	-13.17947	-13.17947
C2426	-23.65589	1.87e-08	-1.3e+09	0.000	-23.65589	-23.65589
C2430	-5.644579	1.87e-08	-3.0e+08	0.000	-5.644579	-5.644579
C2434	425.784	1.87e-08	2.3e+10	0.000	425.784	425.784
C2442	-39.72468	1.87e-08	-2.1e+09	0.000	-39.72468	-39.72468
C2450	-29.32695	1.87e-08	-1.6e+09	0.000	-29.32695	-29.32695
C2454	23.50121	1.87e-08	1.3e+09	0.000	23.50121	23.50121
C2458	100.5674	1.87e-08	5.4e+09	0.000	100.5674	100.5674
C2466	281.7521	1.87e-08	1.5e+10	0.000	281.7521	281.7521
C2478	7.017947	1.87e-08	3.8e+08	0.000	7.017947	7.017947
C2486	291.3842	1.87e-08	1.6e+10	0.000	291.3842	291.3842
C2502	-47.79353	1.87e-08	-2.6e+09	0.000	-47.79353	-47.79353
C2506	82.95763	1.87e-08	4.4e+09	0.000	82.95763	82.95763
C2518	31.80989	1.87e-08	1.7e+09	0.000	31.80989	31.80989
C2522	-23.49121	1.87e-08	-1.3e+09	0.000	-23.49121	-23.49121
C2526	-21.74505	1.87e-08	-1.2e+09	0.000	-21.74505	-21.74505
C2542	248.7456	1.87e-08	1.3e+10	0.000	248.7456	248.7456
C2550	-4.049632	1.87e-08	-2.2e+08	0.000	-4.049632	-4.049632
C2554	539.6216	1.87e-08	2.9e+10	0.000	539.6216	539.6216
C2562	-7.940579	1.87e-08	-4.3e+08	0.000	-7.940579	-7.940579
C2586	87.98295	1.87e-08	4.7e+09	0.000	87.98295	87.98295
C2594	3.778684	1.87e-08	2.0e+08	0.000	3.778684	3.778684
C2598	-45.78016	1.87e-08	-2.5e+09	0.000	-45.78016	-45.78016
C2614	-32.37258	1.87e-08	-1.7e+09	0.000	-32.37258	-32.37258
C2630	-27.74237	1.87e-08	-1.5e+09	0.000	-27.74237	-27.74237
C2638	24.613	1.87e-08	1.3e+09	0.000	24.613	24.613
C2642	2516.802	1.87e-08	1.3e+11	0.000	2516.802	2516.802
C2658	65.65442	1.87e-08	3.5e+09	0.000	65.65442	65.65442
C2662	136.4979	1.87e-08	7.3e+09	0.000	136.4979	136.4979
C2682	-59.31546	10.3375	-5.74	0.000	-79.57659	-39.05433
C2690	851.7349	1.87e-08	4.6e+10	0.000	851.7349	851.7349

C2698	19.89011	1.87e-08	1.1e+09	0.000	19.89011	19.89011
C2706	-15.70453	.2271062	-69.15	0.000	-16.14965	-15.25941
C2710	-7.549053	1.87e-08	-4.0e+08	0.000	-7.549053	-7.549053
C2714	181.9108	1.87e-08	9.7e+09	0.000	181.9108	181.9108
C2718	-2.142263	1.87e-08	-1.1e+08	0.000	-2.142263	-2.142263
C2726	523.2941	1.87e-08	2.8e+10	0.000	523.2941	523.2941
C2734	-18.82463	1.87e-08	-1.0e+09	0.000	-18.82463	-18.82463
C2750	.3699474	1.87e-08	2.0e+07	0.000	.3699474	.3699474
C2762	10.52474	1.87e-08	5.6e+08	0.000	10.52474	10.52474
C2774	10.68363	1.87e-08	5.7e+08	0.000	10.68363	10.68363
C2778	-8.512211	1.87e-08	-4.6e+08	0.000	-8.512211	-8.51221
C2786	-14.39821	1.87e-08	-7.7e+08	0.000	-14.39821	-14.39821
C2790	12.52005	1.87e-08	6.7e+08	0.000	12.52005	12.52005
C2798	6.935	1.87e-08	3.7e+08	0.000	6.935	6.935
C2802	72.51032	1.87e-08	3.9e+09	0.000	72.51032	72.51032
C2810	-21.15505	1.87e-08	-1.1e+09	0.000	-21.15505	-21.15505
C2814	903.0753	1.87e-08	4.8e+10	0.000	903.0753	903.0753
C2842	-89.13564	25.1182	-3.55	0.000	-138.3664	-39.90486
C2866	59.80726	1.87e-08	3.2e+09	0.000	59.80726	59.80726
C2870	52.23726	1.87e-08	2.8e+09	0.000	52.23726	52.23726
C2874	-3.849368	1.87e-08	-2.1e+08	0.000	-3.849368	-3.849368
C2894	117.2377	32.96129	3.56	0.000	52.63481	181.8407
C2902	-24.71589	1.87e-08	-1.3e+09	0.000	-24.71589	-24.71589
C2910	7.584158	1.87e-08	4.1e+08	0.000	7.584158	7.584158
C2918	136.8529	1.87e-08	7.3e+09	0.000	136.8529	136.8529
C2920	21.38168	1.87e-08	1.1e+09	0.000	21.38168	21.38168
C2934	28.92658	1.87e-08	1.5e+09	0.000	28.92658	28.92658
C2942	-16.34111	1.87e-08	-8.8e+08	0.000	-16.34111	-16.34111
C2946	135.7547	1.87e-08	7.3e+09	0.000	135.7547	135.7547
C2954	162.5988	1.87e-08	8.7e+09	0.000	162.5988	162.5988
C2962	142.5228	1.87e-08	7.6e+09	0.000	142.5228	142.5228
C2970	24.46953	1.87e-08	1.3e+09	0.000	24.46953	24.46953
C2974	3.764947	1.87e-08	2.0e+08	0.000	3.764947	3.764947
C2982	798.8328	1.87e-08	4.3e+10	0.000	798.8328	798.8328
C2994	-16.40716	1.87e-08	-8.8e+08	0.000	-16.40716	-16.40716
C3002	-21.40484	1.87e-08	-1.1e+09	0.000	-21.40484	-21.40484
C3014	-16.38253	1.87e-08	-8.8e+08	0.000	-16.38253	-16.38253
C3030	-37.64811	1.87e-08	-2.0e+09	0.000	-37.64811	-37.64811
C3034	-15.77726	1.87e-08	-8.5e+08	0.000	-15.77726	-15.77726
C3046	182.5527	1.87e-08	9.8e+09	0.000	182.5527	182.5527
C3062	-11.60579	1.87e-08	-6.2e+08	0.000	-11.60579	-11.60579
C3070	100.3039	1.87e-08	5.4e+09	0.000	100.3039	100.3039
C3078	258.3331	1.87e-08	1.4e+10	0.000	258.3331	258.3331
C3086	-13.17279	1.87e-08	-7.1e+08	0.000	-13.17279	-13.17279
C3098	28.50421	1.87e-08	1.5e+09	0.000	28.50421	28.50421
C3102	-27.078	1.87e-08	-1.5e+09	0.000	-27.078	-27.078
C3108	5199.223	67.61247	76.90	0.000	5066.705	5331.741
C3114	522.6599	1.87e-08	2.8e+10	0.000	522.6599	522.6599
C3118	65.44016	1.87e-08	3.5e+09	0.000	65.44016	65.44016
C3134	34.71721	1.87e-08	1.9e+09	0.000	34.71721	34.71721
C3142	31.90458	1.87e-08	1.7e+09	0.000	31.90458	31.90458
C3146	-18.71247	1.87e-08	-1.0e+09	0.000	-18.71247	-18.71247
C3154	288.5816	1.87e-08	1.5e+10	0.000	288.5816	288.5816
C3170	130.2742	1.87e-08	7.0e+09	0.000	130.2742	130.2742
C3174	-27.40521	1.87e-08	-1.5e+09	0.000	-27.40521	-27.40521
C3186	-12.81974	1.87e-08	-6.9e+08	0.000	-12.81974	-12.81974
C3190	-10.09247	1.87e-08	-5.4e+08	0.000	-10.09247	-10.09247
C3242	-26.96953	1.87e-08	-1.4e+09	0.000	-26.96953	-26.96953
C3258	156.4162	1.87e-08	8.4e+09	0.000	156.4162	156.4162
C3278	16.69558	1.87e-08	8.9e+08	0.000	16.69558	16.69558
C3282	531.3224	1.87e-08	2.8e+10	0.000	531.3224	531.3224
C3290	7.655368	1.87e-08	4.1e+08	0.000	7.655368	7.655368
C3310	2231.299	1.87e-08	1.2e+11	0.000	2231.299	2231.299
C3314	-21.30763	1.87e-08	-1.1e+09	0.000	-21.30763	-21.30763
C3322	-28.42674	1.87e-08	-1.5e+09	0.000	-28.42674	-28.42674
C3326	11.70168	1.87e-08	6.3e+08	0.000	11.70168	11.70168
C3334	745.4393	1.87e-08	4.0e+10	0.000	745.4393	745.4393
C3346	1707.685	1.87e-08	9.1e+10	0.000	1707.685	1707.685
C3354	-8.724053	1.87e-08	-4.7e+08	0.000	-8.724053	-8.724053
C3366	103.4567	1.87e-08	5.5e+09	0.000	103.4567	103.4567
C3370	109.0326	1.87e-08	5.8e+09	0.000	109.0326	109.0326
C3374	11.68147	1.87e-08	6.3e+08	0.000	11.68147	11.68147

C3378	-23.27205	1.87e-08	-1.2e+09	0.000	-23.27205	-23.27205
C3386	98.52595	1.87e-08	5.3e+09	0.000	98.52595	98.52595
C3406	-6.230526	1.87e-08	-3.3e+08	0.000	-6.230526	-6.230526
C3410	-21.18868	1.87e-08	-1.1e+09	0.000	-21.18868	-21.18868
C3458	-16.49511	1.87e-08	-8.8e+08	0.000	-16.49511	-16.49511
C3462	-17.28968	1.87e-08	-9.3e+08	0.000	-17.28968	-17.28968
C3474	-2.274211	1.87e-08	-1.2e+08	0.000	-2.274211	-2.27421
C3482	76.87	1.87e-08	4.1e+09	0.000	76.87	76.87
C3490	5.234895	1.87e-08	2.8e+08	0.000	5.234895	5.234895
C3494	62.89174	1.87e-08	3.4e+09	0.000	62.89174	62.89174
C3498	747.2991	1.87e-08	4.0e+10	0.000	747.2991	747.2991
C3510	-19.82789	1.87e-08	-1.1e+09	0.000	-19.82789	-19.82789
C3530	295.8254	1.87e-08	1.6e+10	0.000	295.8254	295.8254
C3538	478.5798	1.87e-08	2.6e+10	0.000	478.5798	478.5798
C3562	8444.185	14.69342	574.69	0.000	8415.386	8472.983
C3566	-2.672368	1.87e-08	-1.4e+08	0.000	-2.672368	-2.672368
C3584	203.6205	1.87e-08	1.1e+10	0.000	203.6205	203.6205
C3598	61.38816	1.87e-08	3.3e+09	0.000	61.38816	61.38816
C3610	30.95016	1.87e-08	1.7e+09	0.000	30.95016	30.95016
C3614	-22.89737	1.87e-08	-1.2e+09	0.000	-22.89737	-22.89737
C3622	-.6656316	1.87e-08	-3.6e+07	0.000	-.6656316	-.6656315
C3626	156.9956	1.87e-08	8.4e+09	0.000	156.9956	156.9956
C3642	498.7889	1.87e-08	2.7e+10	0.000	498.7889	498.7889
C3650	35.96063	1.87e-08	1.9e+09	0.000	35.96063	35.96063
C3654	381.8925	1.87e-08	2.0e+10	0.000	381.8925	381.8925
C3674	961.2488	1.87e-08	5.1e+10	0.000	961.2488	961.2488
C3678	25.87137	1.87e-08	1.4e+09	0.000	25.87137	25.87137
C3698	-14.23421	1.87e-08	-7.6e+08	0.000	-14.23421	-14.23421
C3710	246.3986	1.87e-08	1.3e+10	0.000	246.3986	246.3986
C3734	132.6268	1.87e-08	7.1e+09	0.000	132.6268	132.6268
C3746	10.86689	1.87e-08	5.8e+08	0.000	10.86689	10.86689
C3762	-24.53368	1.87e-08	-1.3e+09	0.000	-24.53368	-24.53368
C3786	94.00237	1.87e-08	5.0e+09	0.000	94.00237	94.00237
C3790	109.1832	1.87e-08	5.8e+09	0.000	109.1832	109.1832
C3798	2595.517	1.87e-08	1.4e+11	0.000	2595.517	2595.517
C3806	1728.72	1.87e-08	9.3e+10	0.000	1728.72	1728.72
C3822	-28.60942	1.87e-08	-1.5e+09	0.000	-28.60942	-28.60942
C3830	1016.249	2.671775	380.36	0.000	1011.013	1021.486
C3834	-2.405947	1.87e-08	-1.3e+08	0.000	-2.405947	-2.405947
C3854	-31.46137	1.87e-08	-1.7e+09	0.000	-31.46137	-31.46137
C3866	11.07505	1.87e-08	5.9e+08	0.000	11.07505	11.07505
C3886	192.7905	1.87e-08	1.0e+10	0.000	192.7905	192.7905
C3890	966.8713	1.87e-08	5.2e+10	0.000	966.8713	966.8713
C3894	61.82989	1.87e-08	3.3e+09	0.000	61.82989	61.82989
C3914	-6.048474	1.87e-08	-3.2e+08	0.000	-6.048474	-6.048474
C3930	613.0109	1.87e-08	3.3e+10	0.000	613.0109	613.0109
C3934	121.1853	1.87e-08	6.5e+09	0.000	121.1853	121.1853
C3938	-7.130316	1.87e-08	-3.8e+08	0.000	-7.130316	-7.130316
C3946	-20.91979	1.87e-08	-1.1e+09	0.000	-20.91979	-20.91979
C3954	10.50874	1.87e-08	5.6e+08	0.000	10.50874	10.50874
C3958	448.9616	1.87e-08	2.4e+10	0.000	448.9616	448.9616
C3966	-1.424	1.87e-08	-7.6e+07	0.000	-1.424	-1.424
C3974	102.306	1.87e-08	5.5e+09	0.000	102.306	102.306
C3982	.2091053	1.87e-08	1.1e+07	0.000	.2091052	.2091053
C3990	143.0827	1.87e-08	7.7e+09	0.000	143.0827	143.0827
C4006	528.6889	1.87e-08	2.8e+10	0.000	528.6889	528.6889
C4014	1191.608	1.87e-08	6.4e+10	0.000	1191.608	1191.608
C4022	86.18942	1.87e-08	4.6e+09	0.000	86.18942	86.18942
C4034	45.67758	1.87e-08	2.4e+09	0.000	45.67758	45.67758
C4038	434.1923	1.87e-08	2.3e+10	0.000	434.1923	434.1923
C4042	81.31321	1.87e-08	4.4e+09	0.000	81.31321	81.31321
C4058	-3.916947	1.87e-08	-2.1e+08	0.000	-3.916947	-3.916947
C4066	-24.81726	1.87e-08	-1.3e+09	0.000	-24.81726	-24.81726
C4090	839.0358	1.87e-08	4.5e+10	0.000	839.0358	839.0358
C4098	21.35737	1.87e-08	1.1e+09	0.000	21.35737	21.35737
C4106	33.11716	1.87e-08	1.8e+09	0.000	33.11716	33.11716
C4110	-13.39779	1.87e-08	-7.2e+08	0.000	-13.39779	-13.39779
C4114	-10.05011	1.87e-08	-5.4e+08	0.000	-10.05011	-10.05011
C4118	1217.905	1.87e-08	6.5e+10	0.000	1217.905	1217.905
C4142	92.46805	1.87e-08	5.0e+09	0.000	92.46805	92.46805
C4150	111.4069	1.87e-08	6.0e+09	0.000	111.4069	111.4069
C4154	82.58479	1.87e-08	4.4e+09	0.000	82.58479	82.58479

C4162	545.0836	1.87e-08	2.9e+10	0.000	545.0836	545.0836
C4166	-17.95826	1.87e-08	-9.6e+08	0.000	-17.95826	-17.95826
C4170	793.6426	.3906666	2031.51	0.000	792.8769	794.4083
C4174	1253.115	1.87e-08	6.7e+10	0.000	1253.115	1253.115
C4186	1712.407	63.20075	27.09	0.000	1588.536	1836.278
C4190	-42.70805	1.87e-08	-2.3e+09	0.000	-42.70805	-42.70805
C4194	892.1745	1.87e-08	4.8e+10	0.000	892.1745	892.1745
C4198	623.9958	1.87e-08	3.3e+10	0.000	623.9958	623.9958
C4202	42.69547	1.87e-08	2.3e+09	0.000	42.69547	42.69547
C4210	34.43916	1.87e-08	1.8e+09	0.000	34.43916	34.43916
C4214	-2.509737	1.87e-08	-1.3e+08	0.000	-2.509737	-2.509737
C4220	122.5739	1.87e-08	6.6e+09	0.000	122.5739	122.5739
C4222	127.4965	1.87e-08	6.8e+09	0.000	127.4965	127.4965
C4234	87.84584	1.87e-08	4.7e+09	0.000	87.84584	87.84584
C4254	185.1996	1.87e-08	9.9e+09	0.000	185.1996	185.1996
C4266	1656.888	1.87e-08	8.9e+10	0.000	1656.888	1656.888
C4268	-16.25279	1.87e-08	-8.7e+08	0.000	-16.25279	-16.25279
C4270	-36.77695	1.87e-08	-2.0e+09	0.000	-36.77695	-36.77695
C4310	-4.440105	1.87e-08	-2.4e+08	0.000	-4.440105	-4.440105
C4330	-20.60284	1.87e-08	-1.1e+09	0.000	-20.60284	-20.60284
C4334	115.1464	1.87e-08	6.2e+09	0.000	115.1464	115.1464
C4342	-28.567	1.87e-08	-1.5e+09	0.000	-28.567	-28.567
C4358	20.79858	1.87e-08	1.1e+09	0.000	20.79858	20.79858
C4362	70.10042	1.87e-08	3.8e+09	0.000	70.10042	70.10042
C4378	65.99274	1.87e-08	3.5e+09	0.000	65.99274	65.99274
C4390	65.20547	1.87e-08	3.5e+09	0.000	65.20547	65.20547
C4406	153.2179	1.87e-08	8.2e+09	0.000	153.2179	153.2179
C4410	68.98574	1.87e-08	3.7e+09	0.000	68.98574	68.98574
C4414	196.8922	1.87e-08	1.1e+10	0.000	196.8922	196.8922
C4418	121.8614	1.87e-08	6.5e+09	0.000	121.8614	121.8614
C4422	-14.12389	1.87e-08	-7.6e+08	0.000	-14.12389	-14.12389
C4430	2.095526	1.87e-08	1.1e+08	0.000	2.095526	2.095526
C4442	-16.97195	1.87e-08	-9.1e+08	0.000	-16.97195	-16.97195
C4470	157.2271	1.87e-08	8.4e+09	0.000	157.2271	157.2271
C4494	-26.92847	1.87e-08	-1.4e+09	0.000	-26.92847	-26.92847
C4506	235.7908	1.87e-08	1.3e+10	0.000	235.7908	235.7908
C4522	101.0914	1.87e-08	5.4e+09	0.000	101.0914	101.0914
C4530	1111.53	1.87e-08	6.0e+10	0.000	1111.53	1111.53
C4546	3.610789	1.87e-08	1.9e+08	0.000	3.610789	3.61079
C4550	-5.711684	1.87e-08	-3.1e+08	0.000	-5.711684	-5.711684
C4554	-43.68574	1.87e-08	-2.3e+09	0.000	-43.68574	-43.68574
C4578	228.2209	1.87e-08	1.2e+10	0.000	228.2209	228.2209
C4582	44.15126	1.87e-08	2.4e+09	0.000	44.15126	44.15126
C4594	154.5611	2.368354	65.26	0.000	149.9192	159.203
C4606	282.5573	1.090687	259.06	0.000	280.4196	284.695
C4614	345.4824	1.87e-08	1.9e+10	0.000	345.4824	345.4824
C4622	28.26579	1.87e-08	1.5e+09	0.000	28.26579	28.26579
C4634	29.79663	1.87e-08	1.6e+09	0.000	29.79663	29.79663
C4652	381.3083	1.87e-08	2.0e+10	0.000	381.3083	381.3083
C4654	59.66532	1.87e-08	3.2e+09	0.000	59.66532	59.66532
C4666	-10.98211	1.87e-08	-5.9e+08	0.000	-10.98211	-10.98211
C4670	64.383	1.87e-08	3.4e+09	0.000	64.383	64.383
C4702	-24.18916	1.87e-08	-1.3e+09	0.000	-24.18916	-24.18916
C4722	-4.501158	1.87e-08	-2.4e+08	0.000	-4.501158	-4.501158
C4726	644.3703	3.00496	214.44	0.000	638.4807	650.2599
C4730	83.77279	1.87e-08	4.5e+09	0.000	83.77279	83.77279
C4738	43.13505	1.87e-08	2.3e+09	0.000	43.13505	43.13505
C4746	-36.425	1.87e-08	-2.0e+09	0.000	-36.425	-36.425
C4758	2.786421	1.87e-08	1.5e+08	0.000	2.786421	2.786421
C4790	2613.171	46.95297	55.66	0.000	2521.144	2705.197
C4794	22.10268	1.87e-08	1.2e+09	0.000	22.10268	22.10268
C4806	-23.16489	1.87e-08	-1.2e+09	0.000	-23.16489	-23.16489
C4814	4.497684	1.87e-08	2.4e+08	0.000	4.497684	4.497684
C4826	-21.45632	1.87e-08	-1.1e+09	0.000	-21.45632	-21.45632
C4830	-13.53779	1.87e-08	-7.3e+08	0.000	-13.53779	-13.53779
C4854	-.7100526	1.87e-08	-3.8e+07	0.000	-.7100526	-.7100526
C4862	223.4353	1.87e-08	1.2e+10	0.000	223.4353	223.4353
C4866	-5.874105	1.87e-08	-3.1e+08	0.000	-5.874105	-5.874105
C4870	-11.97258	1.87e-08	-6.4e+08	0.000	-11.97258	-11.97258
C4890	46.84295	1.87e-08	2.5e+09	0.000	46.84295	46.84295
C4902	-8.554947	1.87e-08	-4.6e+08	0.000	-8.554947	-8.554947
C4918	186.3368	1.87e-08	1.0e+10	0.000	186.3368	186.3368

C4934	299.1468	1.87e-08	1.6e+10	0.000	299.1468	299.1468
C4942	38.48684	1.87e-08	2.1e+09	0.000	38.48684	38.48684
C4962	108.1326	1.87e-08	5.8e+09	0.000	108.1326	108.1326
C4966	159.0706	1.87e-08	8.5e+09	0.000	159.0706	159.0706
C4970	-19.11137	1.87e-08	-1.0e+09	0.000	-19.11137	-19.11137
C4974	-.6013684	1.87e-08	-3.2e+07	0.000	-.6013684	-.6013684
_cons	63.94447	1.87e-08	3.4e+09	0.000	63.94447	63.94447

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defense_funding_instrument
```

```
413 outreg2 using output/results_slides.doc, append ctitle("IV defense instrument, Avera
  > ge employment (thousands)") keep(federal_funding) addtext(MSA FE, Yes, Year FE, No,
  > FFRDC count FE, No)
  output/results_slides.doc
  dir : seeout

414
415
416
417 //presidential vote instrument--------------
418
419 //process presidential voting data by county
420 import delimited data/raw/countypres_2000-2016.csv, clear
  (11 vars, 50,524 obs)

421
422 replace fips = "0" + fips if strlen(fips) == 4
  (5,244 real changes made)

423
424 ren county county_name

425 ren fips COUNTY

426
427 replace candidatevotes = "" if candidatevotes == "NA"
  (404 real changes made)

428 destring candidatevotes, replace
  candidatevotes: all characters numeric; replaced as long
  (404 missing values generated)

429
430 drop candidate

431 reshape wide candidatevotes, i(year state state_po county_name COUNTY) j(party) stri
  > ng
  (note: j = NA democrat green republican)

  Data                              long   ->   wide
  ─────────────────────────────────────────────────────────────────
  Number of obs.                   50524   ->   15789
  Number of variables                 10   ->      12
  j variable (4 values)            party   ->   (dropped)
  xij variables:
                          candidatevotes   ->   candidatevotesNA candidatevotesdemocrat
  >  ... candidatevotesrepublican
  ─────────────────────────────────────────────────────────────────

432
433 merge m:1 COUNTY using data/intermediate/county-to-msa

      Result                    # of obs.
      ───────────────────────────────────────
      not matched                     327
          from master                 195  (_merge==1)
          from using                  132  (_merge==2)

      matched                      15,594  (_merge==3)
      ───────────────────────────────────────
```

```
434 drop if _merge != 3
  (327 observations deleted)

435 drop if msacode == ""
  (6,580 observations deleted)

436 drop csa* _merge

437
438 collapse (sum) candidatevotes*, by(msacode msatitle year)

439 gen totalvotes = candidatevotesdem + candidatevotesrep + candidatevotesgreen + candi
  > datevotesNA

440
441 gen votes_for_winner = .
  (4,570 missing values generated)

442 replace votes_for_winner = candidatevotesrep if inlist(year, 2000, 2004, 2016)
  (2,742 real changes made)

443 replace votes_for_winner = candidatevotesdem if inlist(year, 2008, 2012)
  (1,828 real changes made)

444
445 gen voteshare_for_winner = votes_for_winner/totalvotes

446 gen max_votes_for_candidate = max(candidatevotesdem, candidatevotesrep)

447 gen voted_for_winner = votes_for_winner == max_votes_for_candidate

448 gen election_gap = abs((candidatevotesdem - candidatevotesrep)/totalvotes)

449
450 ren year election_year

451
452 save data/intermediate/msa_presidential_voting, replace
  file data/intermediate/msa_presidential_voting.dta saved

453
454
455
456 //attach instrument to panel
457 use data/intermediate/merged_MetroMSAs_allind_post01, clear

458
459 gen election_year = year - mod(year,4)

460 replace election_year = year - 4 if mod(year,4) == 0
  (1,552 real changes made)

461
462 merge m:1 msacode msatitle election_year using data/intermediate/msa_presidential_vo
  > ting

        Result                      # of obs.
    ─────────────────────────────────────────
        not matched                     2,822
            from master                   152  (_merge==1)
            from using                  2,670  (_merge==2)

        matched                         7,220  (_merge==3)
    ─────────────────────────────────────────
```

```
463 keep if _merge == 3
   (2,822 observations deleted)

464 encode msacode, gen(msa_factor)

465 drop _merge

466
467 //take logs
468 gen log_avg_annual_pay = asinh(avg_annual_pay)

469 gen log_annual_avg_emplvl = asinh(annual_avg_emplvl)

470 gen log_federal_funding = asinh(federal_funding * 1000)

471 recode log_* (. = 0)
   (log_avg_annual_pay: 0 changes made)
   (log_annual_avg_emplvl: 0 changes made)
   (log_federal_funding: 0 changes made)

472
473 gen product_winner_gap = voted_for_winner * election_gap

474
475
476 //first stage
477 reg log_federal_funding voted_for_winner election_gap product_winner_gap, robust clu
   > ster(msa_factor)
```

Linear regression

Number of obs	=	7,220
F(3, 379)	=	3.77
Prob > F	=	0.0109
R-squared	=	0.0072
Root MSE	=	4.5092

(Std. Err. adjusted for **380** clusters in msa_factor)

log_federal_fund~g	Coef.	Robust Std. Err.	t	P>|t|	[95% Conf. Interval]	
voted_for_winner	-.4220624	.2659937	-1.59	0.113	-.9450706	.1009459
election_gap	2.414963	2.110054	1.14	0.253	-1.733915	6.563841
product_winner_gap	-.3229531	1.047435	-0.31	0.758	-2.382464	1.736558
_cons	.8776313	.4228776	2.08	0.039	.0461512	1.709111

```
478 outreg2 using output/pres_firststage.doc, replace ctitle("No MSA FE") addstat("F sta
   > t", e(F))
   output/pres_firststage.doc
   dir : seeout

479
480 reg log_federal_funding i.msa_factor, robust cluster(msa_factor)
```

Linear regression

Number of obs	=	7,220
F(0, 379)	=	.
Prob > F	=	.
R-squared	=	0.9794
Root MSE	=	.66772

(Std. Err. adjusted for **380** clusters in msa_factor)

log_federa~g	Coef.	Robust Std. Err.	t	P>|t|	[95% Conf. Interval]	
msa_factor						
C1042	9.12e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C1050	9.11e-14	9.39e-14	0.97	0.333	-9.35e-14	2.76e-13
C1054	9.11e-14	9.39e-14	0.97	0.332	-9.35e-14	2.76e-13
C1058	9.12e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C1074	22.35426	9.41e-14	2.4e+14	0.000	22.35426	22.35426
C1078	9.13e-14	9.39e-14	0.97	0.332	-9.33e-14	2.76e-13

C1090	9.12e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C1102	9.13e-14	9.39e-14	0.97	0.332	-9.33e-14	2.76e-13
C1110	9.11e-14	9.39e-14	0.97	0.333	-9.35e-14	2.76e-13
C1118	18.1292	9.39e-14	1.9e+14	0.000	18.1292	18.1292
C1126	9.12e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C1146	9.11e-14	9.39e-14	0.97	0.332	-9.35e-14	2.76e-13
C1150	9.12e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C1154	9.11e-14	9.39e-14	0.97	0.333	-9.35e-14	2.76e-13
C1170	9.12e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C1202	9.11e-14	9.39e-14	0.97	0.332	-9.35e-14	2.76e-13
C1206	9.12e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C1210	9.13e-14	9.39e-14	0.97	0.331	-9.33e-14	2.76e-13
C1222	9.12e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C1226	9.12e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C1242	9.13e-14	9.39e-14	0.97	0.332	-9.33e-14	2.76e-13
C1254	9.11e-14	9.39e-14	0.97	0.332	-9.35e-14	2.76e-13
C1258	7.09397	9.39e-14	7.6e+13	0.000	7.09397	7.09397
C1262	9.12e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C1270	9.12e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C1294	9.12e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C1298	9.12e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C1302	9.12e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C1314	9.12e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C1322	9.13e-14	9.39e-14	0.97	0.332	-9.33e-14	2.76e-13
C1338	9.11e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C1346	9.13e-14	9.39e-14	0.97	0.331	-9.33e-14	2.76e-13
C1374	9.13e-14	9.39e-14	0.97	0.332	-9.33e-14	2.76e-13
C1378	9.11e-14	9.39e-14	0.97	0.332	-9.35e-14	2.76e-13
C1382	9.11e-14	9.39e-14	0.97	0.332	-9.35e-14	2.76e-13
C1390	9.12e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C1398	9.12e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C1401	9.11e-14	9.39e-14	0.97	0.332	-9.35e-14	2.76e-13
C1402	9.12e-14	9.39e-14	0.97	0.332	-9.33e-14	2.76e-13
C1410	9.12e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C1426	9.13e-14	9.39e-14	0.97	0.331	-9.33e-14	2.76e-13
C1446	21.25448	9.41e-14	2.3e+14	0.000	21.25448	21.25448
C1450	19.69514	9.40e-14	2.1e+14	0.000	19.69514	19.69514
C1454	9.11e-14	9.39e-14	0.97	0.332	-9.35e-14	2.76e-13
C1474	9.13e-14	9.39e-14	0.97	0.332	-9.33e-14	2.76e-13
C1486	9.13e-14	9.39e-14	0.97	0.331	-9.33e-14	2.76e-13
C1518	9.11e-14	9.39e-14	0.97	0.333	-9.35e-14	2.76e-13
C1526	9.10e-14	9.39e-14	0.97	0.333	-9.36e-14	2.76e-13
C1538	9.11e-14	9.39e-14	0.97	0.333	-9.35e-14	2.76e-13
C1550	9.11e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C1554	9.10e-14	9.39e-14	0.97	0.333	-9.36e-14	2.76e-13
C1568	9.12e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C1594	9.13e-14	9.39e-14	0.97	0.331	-9.33e-14	2.76e-13
C1598	9.11e-14	9.39e-14	0.97	0.333	-9.35e-14	2.76e-13
C1602	9.12e-14	9.39e-14	0.97	0.332	-9.33e-14	2.76e-13
C1606	9.12e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C1618	9.11e-14	9.39e-14	0.97	0.332	-9.35e-14	2.76e-13
C1622	9.12e-14	9.39e-14	0.97	0.332	-9.33e-14	2.76e-13
C1630	9.13e-14	9.39e-14	0.97	0.331	-9.32e-14	2.76e-13
C1654	9.11e-14	9.39e-14	0.97	0.333	-9.35e-14	2.76e-13
C1658	9.12e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C1662	9.12e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C1670	9.12e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C1674	9.12e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C1682	19.01221	9.39e-14	2.0e+14	0.000	19.01221	19.01221
C1686	9.13e-14	9.39e-14	0.97	0.331	-9.33e-14	2.76e-13
C1694	9.13e-14	9.39e-14	0.97	0.332	-9.33e-14	2.76e-13
C1698	21.49204	9.39e-14	2.3e+14	0.000	21.49204	21.49204
C1702	9.13e-14	9.39e-14	0.97	0.332	-9.33e-14	2.76e-13
C1714	9.12e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C1730	9.12e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C1742	9.11e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C1746	9.13e-14	9.39e-14	0.97	0.331	-9.33e-14	2.76e-13
C1766	9.11e-14	9.39e-14	0.97	0.332	-9.35e-14	2.76e-13
C1778	9.11e-14	9.39e-14	0.97	0.332	-9.35e-14	2.76e-13
C1782	9.12e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C1786	9.11e-14	9.39e-14	0.97	0.332	-9.35e-14	2.76e-13
C1790	9.12e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13

C1798	9.11e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C1802	9.13e-14	9.39e-14	0.97	0.332	-9.33e-14	2.76e-13
C1814	9.13e-14	9.39e-14	0.97	0.331	-9.33e-14	2.76e-13
C1858	9.13e-14	9.39e-14	0.97	0.331	-9.33e-14	2.76e-13
C1870	9.11e-14	9.39e-14	0.97	0.332	-9.35e-14	2.76e-13
C1888	9.12e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C1906	9.12e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C1910	9.12e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C1914	9.13e-14	9.39e-14	0.97	0.331	-9.33e-14	2.76e-13
C1918	9.11e-14	9.39e-14	0.97	0.332	-9.35e-14	2.76e-13
C1930	9.13e-14	9.39e-14	0.97	0.332	-9.33e-14	2.76e-13
C1934	9.10e-14	9.39e-14	0.97	0.333	-9.35e-14	2.76e-13
C1938	9.12e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C1946	9.11e-14	9.39e-14	0.97	0.333	-9.35e-14	2.76e-13
C1950	9.11e-14	9.39e-14	0.97	0.332	-9.35e-14	2.76e-13
C1966	9.12e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C1974	20.29388	9.43e-14	2.2e+14	0.000	20.29388	20.29388
C1978	9.12e-14	9.39e-14	0.97	0.332	-9.33e-14	2.76e-13
C1982	9.12e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C2002	9.12e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C2010	9.11e-14	9.39e-14	0.97	0.332	-9.35e-14	2.76e-13
C2022	9.12e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C2026	9.12e-14	9.39e-14	0.97	0.332	-9.33e-14	2.76e-13
C2050	9.13e-14	9.39e-14	0.97	0.331	-9.33e-14	2.76e-13
C2070	9.12e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C2074	9.11e-14	9.39e-14	0.97	0.332	-9.35e-14	2.76e-13
C2094	9.13e-14	9.39e-14	0.97	0.332	-9.33e-14	2.76e-13
C2106	9.11e-14	9.39e-14	0.97	0.332	-9.35e-14	2.76e-13
C2114	9.12e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C2130	9.11e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C2134	9.13e-14	9.39e-14	0.97	0.332	-9.33e-14	2.76e-13
C2150	9.12e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C2166	9.11e-14	9.39e-14	0.97	0.333	-9.35e-14	2.76e-13
C2178	9.13e-14	9.39e-14	0.97	0.332	-9.33e-14	2.76e-13
C2202	9.11e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C2214	9.13e-14	9.39e-14	0.97	0.332	-9.33e-14	2.76e-13
C2218	9.12e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C2222	9.12e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C2238	9.12e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C2242	9.12e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C2250	9.12e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C2252	9.12e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C2254	9.13e-14	9.39e-14	0.97	0.332	-9.33e-14	2.76e-13
C2266	9.12e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C2290	9.13e-14	9.39e-14	0.97	0.332	-9.33e-14	2.76e-13
C2306	9.12e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C2342	9.11e-14	9.39e-14	0.97	0.333	-9.35e-14	2.76e-13
C2346	9.14e-14	9.39e-14	0.97	0.331	-9.32e-14	2.76e-13
C2354	9.10e-14	9.39e-14	0.97	0.333	-9.36e-14	2.76e-13
C2358	9.09e-14	9.39e-14	0.97	0.333	-9.37e-14	2.76e-13
C2390	9.13e-14	9.39e-14	0.97	0.332	-9.33e-14	2.76e-13
C2402	9.13e-14	9.39e-14	0.97	0.331	-9.33e-14	2.76e-13
C2414	9.10e-14	9.39e-14	0.97	0.333	-9.36e-14	2.76e-13
C2422	9.12e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C2426	9.09e-14	9.39e-14	0.97	0.333	-9.37e-14	2.76e-13
C2430	9.10e-14	9.39e-14	0.97	0.333	-9.36e-14	2.76e-13
C2434	9.12e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C2442	9.13e-14	9.39e-14	0.97	0.331	-9.33e-14	2.76e-13
C2450	9.12e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C2454	9.11e-14	9.39e-14	0.97	0.333	-9.35e-14	2.76e-13
C2458	9.13e-14	9.39e-14	0.97	0.331	-9.33e-14	2.76e-13
C2466	9.11e-14	9.39e-14	0.97	0.332	-9.35e-14	2.76e-13
C2478	9.14e-14	9.39e-14	0.97	0.331	-9.32e-14	2.76e-13
C2486	9.10e-14	9.39e-14	0.97	0.333	-9.36e-14	2.76e-13
C2506	9.11e-14	9.39e-14	0.97	0.332	-9.35e-14	2.76e-13
C2518	9.13e-14	9.39e-14	0.97	0.332	-9.33e-14	2.76e-13
C2522	9.12e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C2526	9.12e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C2542	9.11e-14	9.39e-14	0.97	0.333	-9.35e-14	2.76e-13
C2550	9.11e-14	9.39e-14	0.97	0.332	-9.35e-14	2.76e-13
C2554	9.12e-14	9.39e-14	0.97	0.332	-9.33e-14	2.76e-13
C2562	9.12e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13

C2586	9.13e-14	9.39e-14	0.97	0.332	-9.33e-14	2.76e-13
C2594	9.11e-14	9.39e-14	0.97	0.332	-9.35e-14	2.76e-13
C2598	9.12e-14	9.39e-14	0.97	0.332	-9.33e-14	2.76e-13
C2614	9.12e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C2630	9.12e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C2638	9.12e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C2642	9.12e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C2658	9.11e-14	9.39e-14	0.97	0.332	-9.35e-14	2.76e-13
C2662	9.12e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C2682	20.49089	9.40e-14	2.2e+14	0.000	20.49089	20.49089
C2690	9.12e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C2698	9.10e-14	9.39e-14	0.97	0.333	-9.36e-14	2.76e-13
C2706	9.994283	9.39e-14	1.1e+14	0.000	9.994283	9.994283
C2710	9.14e-14	9.39e-14	0.97	0.331	-9.32e-14	2.76e-13
C2714	9.12e-14	9.39e-14	0.97	0.332	-9.33e-14	2.76e-13
C2718	9.14e-14	9.39e-14	0.97	0.331	-9.32e-14	2.76e-13
C2726	9.11e-14	9.39e-14	0.97	0.333	-9.35e-14	2.76e-13
C2734	9.12e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C2750	9.11e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C2762	9.13e-14	9.39e-14	0.97	0.331	-9.33e-14	2.76e-13
C2774	9.12e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C2778	9.12e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C2786	9.12e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C2790	9.11e-14	9.39e-14	0.97	0.333	-9.35e-14	2.76e-13
C2798	9.13e-14	9.39e-14	0.97	0.332	-9.33e-14	2.76e-13
C2802	9.12e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C2810	9.14e-14	9.39e-14	0.97	0.331	-9.32e-14	2.76e-13
C2814	9.11e-14	9.39e-14	0.97	0.333	-9.35e-14	2.76e-13
C2842	21.41362	9.42e-14	2.3e+14	0.000	21.41362	21.41362
C2866	9.09e-14	9.39e-14	0.97	0.333	-9.36e-14	2.76e-13
C2870	9.12e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C2874	9.10e-14	9.39e-14	0.97	0.333	-9.36e-14	2.76e-13
C2894	21.67092	9.40e-14	2.3e+14	0.000	21.67092	21.67092
C2902	9.12e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C2910	9.12e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C2918	9.12e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C2920	9.12e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C2934	9.12e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C2942	9.12e-14	9.39e-14	0.97	0.332	-9.33e-14	2.76e-13
C2946	9.13e-14	9.39e-14	0.97	0.331	-9.33e-14	2.76e-13
C2954	9.10e-14	9.39e-14	0.97	0.333	-9.36e-14	2.76e-13
C2962	9.12e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C2970	9.12e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C2974	9.13e-14	9.39e-14	0.97	0.332	-9.33e-14	2.76e-13
C2982	9.12e-14	9.39e-14	0.97	0.332	-9.33e-14	2.76e-13
C2994	9.14e-14	9.39e-14	0.97	0.331	-9.32e-14	2.76e-13
C3002	9.11e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C3014	9.11e-14	9.39e-14	0.97	0.332	-9.35e-14	2.76e-13
C3030	9.13e-14	9.39e-14	0.97	0.332	-9.33e-14	2.76e-13
C3034	9.13e-14	9.39e-14	0.97	0.331	-9.33e-14	2.76e-13
C3046	9.12e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C3062	9.12e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C3070	9.12e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C3078	9.12e-14	9.39e-14	0.97	0.332	-9.33e-14	2.76e-13
C3086	9.11e-14	9.39e-14	0.97	0.332	-9.35e-14	2.76e-13
C3098	9.11e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C3102	9.10e-14	9.39e-14	0.97	0.333	-9.36e-14	2.76e-13
C3108	22.39022	9.39e-14	2.4e+14	0.000	22.39022	22.39022
C3114	9.13e-14	9.39e-14	0.97	0.332	-9.33e-14	2.76e-13
C3118	9.13e-14	9.39e-14	0.97	0.332	-9.33e-14	2.76e-13
C3134	9.12e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C3142	9.10e-14	9.39e-14	0.97	0.333	-9.36e-14	2.76e-13
C3146	9.12e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C3154	9.11e-14	9.39e-14	0.97	0.332	-9.35e-14	2.76e-13
C3170	9.12e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C3174	9.12e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C3186	9.12e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C3190	9.12e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C3258	9.13e-14	9.39e-14	0.97	0.332	-9.33e-14	2.76e-13
C3278	9.14e-14	9.39e-14	0.97	0.331	-9.32e-14	2.76e-13
C3282	9.12e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C3290	9.10e-14	9.39e-14	0.97	0.333	-9.36e-14	2.76e-13

C3310	9.14e-14	9.39e-14	0.97	0.331	-9.32e-14	2.76e-13
C3314	9.11e-14	9.39e-14	0.97	0.332	-9.35e-14	2.76e-13
C3322	9.12e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C3326	9.12e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C3334	9.14e-14	9.39e-14	0.97	0.331	-9.32e-14	2.76e-13
C3346	9.12e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C3354	9.11e-14	9.39e-14	0.97	0.332	-9.35e-14	2.76e-13
C3366	9.12e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C3370	9.12e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C3374	9.14e-14	9.39e-14	0.97	0.331	-9.31e-14	2.76e-13
C3378	9.12e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C3386	9.11e-14	9.39e-14	0.97	0.333	-9.35e-14	2.76e-13
C3406	9.10e-14	9.39e-14	0.97	0.333	-9.36e-14	2.76e-13
C3410	9.11e-14	9.39e-14	0.97	0.333	-9.35e-14	2.76e-13
C3458	9.11e-14	9.39e-14	0.97	0.333	-9.35e-14	2.76e-13
C3462	9.11e-14	9.39e-14	0.97	0.333	-9.35e-14	2.76e-13
C3474	9.11e-14	9.39e-14	0.97	0.332	-9.35e-14	2.76e-13
C3482	9.11e-14	9.39e-14	0.97	0.332	-9.35e-14	2.76e-13
C3490	9.11e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C3494	9.12e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C3498	9.12e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C3510	9.12e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C3530	9.14e-14	9.39e-14	0.97	0.331	-9.32e-14	2.76e-13
C3538	9.13e-14	9.39e-14	0.97	0.331	-9.33e-14	2.76e-13
C3562	20.88553	9.42e-14	2.2e+14	0.000	20.88553	20.88553
C3566	9.10e-14	9.39e-14	0.97	0.333	-9.35e-14	2.76e-13
C3584	9.12e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C3598	9.12e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C3610	9.13e-14	9.39e-14	0.97	0.331	-9.33e-14	2.76e-13
C3614	9.12e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C3622	9.14e-14	9.39e-14	0.97	0.331	-9.32e-14	2.76e-13
C3626	9.13e-14	9.39e-14	0.97	0.331	-9.32e-14	2.76e-13
C3642	9.12e-14	9.39e-14	0.97	0.332	-9.33e-14	2.76e-13
C3650	9.10e-14	9.39e-14	0.97	0.333	-9.36e-14	2.76e-13
C3654	9.11e-14	9.39e-14	0.97	0.332	-9.35e-14	2.76e-13
C3674	9.12e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C3678	9.12e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C3698	9.13e-14	9.39e-14	0.97	0.331	-9.33e-14	2.76e-13
C3710	9.09e-14	9.39e-14	0.97	0.334	-9.37e-14	2.75e-13
C3734	9.14e-14	9.39e-14	0.97	0.331	-9.32e-14	2.76e-13
C3746	9.11e-14	9.39e-14	0.97	0.333	-9.35e-14	2.76e-13
C3762	9.12e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C3786	9.12e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C3790	9.10e-14	9.39e-14	0.97	0.333	-9.35e-14	2.76e-13
C3798	9.14e-14	9.39e-14	0.97	0.331	-9.31e-14	2.76e-13
C3806	9.11e-14	9.39e-14	0.97	0.333	-9.35e-14	2.76e-13
C3822	9.11e-14	9.39e-14	0.97	0.332	-9.35e-14	2.76e-13
C3830	19.12853	9.39e-14	2.0e+14	0.000	19.12853	19.12853
C3834	9.10e-14	9.39e-14	0.97	0.333	-9.36e-14	2.76e-13
C3854	9.11e-14	9.39e-14	0.97	0.332	-9.35e-14	2.76e-13
C3886	9.11e-14	9.39e-14	0.97	0.332	-9.35e-14	2.76e-13
C3890	9.11e-14	9.39e-14	0.97	0.333	-9.35e-14	2.76e-13
C3894	9.14e-14	9.39e-14	0.97	0.331	-9.32e-14	2.76e-13
C3914	9.13e-14	9.39e-14	0.97	0.331	-9.33e-14	2.76e-13
C3930	9.12e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C3934	9.11e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C3938	9.12e-14	9.39e-14	0.97	0.332	-9.33e-14	2.76e-13
C3946	9.11e-14	9.39e-14	0.97	0.333	-9.35e-14	2.76e-13
C3954	9.13e-14	9.39e-14	0.97	0.331	-9.32e-14	2.76e-13
C3958	9.13e-14	9.39e-14	0.97	0.331	-9.33e-14	2.76e-13
C3966	9.10e-14	9.39e-14	0.97	0.333	-9.36e-14	2.76e-13
C3974	9.13e-14	9.39e-14	0.97	0.332	-9.33e-14	2.76e-13
C3982	9.12e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C3990	9.12e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C4006	9.14e-14	9.39e-14	0.97	0.331	-9.32e-14	2.76e-13
C4014	9.11e-14	9.39e-14	0.97	0.333	-9.35e-14	2.76e-13
C4022	9.12e-14	9.39e-14	0.97	0.332	-9.33e-14	2.76e-13
C4034	9.12e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C4038	9.14e-14	9.39e-14	0.97	0.331	-9.31e-14	2.76e-13
C4042	9.13e-14	9.39e-14	0.97	0.331	-9.33e-14	2.76e-13
C4058	9.12e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C4066	9.13e-14	9.39e-14	0.97	0.332	-9.33e-14	2.76e-13

C4090	9.11e-14	9.39e-14	0.97	0.333	-9.35e-14	2.76e-13
C4098	9.11e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C4106	9.11e-14	9.39e-14	0.97	0.333	-9.35e-14	2.76e-13
C4110	9.10e-14	9.39e-14	0.97	0.333	-9.35e-14	2.76e-13
C4114	9.12e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C4118	9.14e-14	9.39e-14	0.97	0.331	-9.32e-14	2.76e-13
C4142	9.12e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C4150	9.13e-14	9.39e-14	0.97	0.332	-9.33e-14	2.76e-13
C4154	9.12e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C4162	9.12e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C4166	9.12e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C4170	17.15917	9.39e-14	1.8e+14	0.000	17.15917	17.15917
C4174	9.10e-14	9.39e-14	0.97	0.333	-9.36e-14	2.76e-13
C4186	22.34408	9.40e-14	2.4e+14	0.000	22.34408	22.34408
C4194	9.13e-14	9.39e-14	0.97	0.331	-9.33e-14	2.76e-13
C4202	9.12e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C4210	9.13e-14	9.39e-14	0.97	0.331	-9.33e-14	2.76e-13
C4214	9.12e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C4220	9.13e-14	9.39e-14	0.97	0.331	-9.33e-14	2.76e-13
C4222	9.12e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C4234	9.13e-14	9.39e-14	0.97	0.332	-9.33e-14	2.76e-13
C4254	9.13e-14	9.39e-14	0.97	0.331	-9.33e-14	2.76e-13
C4266	9.14e-14	9.39e-14	0.97	0.331	-9.32e-14	2.76e-13
C4268	9.11e-14	9.39e-14	0.97	0.333	-9.35e-14	2.76e-13
C4270	9.09e-14	9.39e-14	0.97	0.333	-9.37e-14	2.76e-13
C4310	9.13e-14	9.39e-14	0.97	0.332	-9.33e-14	2.76e-13
C4330	9.10e-14	9.39e-14	0.97	0.333	-9.36e-14	2.76e-13
C4334	9.11e-14	9.39e-14	0.97	0.333	-9.35e-14	2.76e-13
C4342	9.12e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C4358	9.13e-14	9.39e-14	0.97	0.331	-9.33e-14	2.76e-13
C4362	9.11e-14	9.39e-14	0.97	0.332	-9.35e-14	2.76e-13
C4378	9.11e-14	9.39e-14	0.97	0.332	-9.35e-14	2.76e-13
C4390	9.12e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C4406	9.12e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C4410	9.12e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C4414	9.12e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C4418	9.14e-14	9.39e-14	0.97	0.331	-9.32e-14	2.76e-13
C4422	9.14e-14	9.39e-14	0.97	0.331	-9.32e-14	2.76e-13
C4430	9.12e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C4442	9.10e-14	9.39e-14	0.97	0.333	-9.36e-14	2.76e-13
C4470	9.12e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C4494	9.13e-14	9.39e-14	0.97	0.332	-9.33e-14	2.76e-13
C4506	9.12e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C4522	9.16e-14	9.39e-14	0.98	0.330	-9.30e-14	2.76e-13
C4530	9.12e-14	9.39e-14	0.97	0.332	-9.33e-14	2.76e-13
C4546	9.15e-14	9.39e-14	0.97	0.330	-9.31e-14	2.76e-13
C4550	9.08e-14	9.39e-14	0.97	0.334	-9.37e-14	2.75e-13
C4554	9.14e-14	9.39e-14	0.97	0.331	-9.32e-14	2.76e-13
C4578	9.12e-14	9.39e-14	0.97	0.332	-9.33e-14	2.76e-13
C4582	9.11e-14	9.39e-14	0.97	0.332	-9.35e-14	2.76e-13
C4594	19.0588	9.39e-14	2.0e+14	0.000	19.0588	19.0588
C4606	18.20885	9.40e-14	1.9e+14	0.000	18.20885	18.20885
C4614	9.13e-14	9.39e-14	0.97	0.332	-9.33e-14	2.76e-13
C4622	9.11e-14	9.39e-14	0.97	0.332	-9.35e-14	2.76e-13
C4634	9.15e-14	9.39e-14	0.97	0.330	-9.31e-14	2.76e-13
C4652	9.13e-14	9.39e-14	0.97	0.331	-9.33e-14	2.76e-13
C4654	9.13e-14	9.39e-14	0.97	0.331	-9.33e-14	2.76e-13
C4666	9.13e-14	9.39e-14	0.97	0.332	-9.33e-14	2.76e-13
C4670	9.11e-14	9.39e-14	0.97	0.332	-9.35e-14	2.76e-13
C4702	9.12e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C4722	9.12e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C4726	19.28864	9.39e-14	2.1e+14	0.000	19.28864	19.28864
C4730	9.13e-14	9.39e-14	0.97	0.331	-9.33e-14	2.76e-13
C4738	9.14e-14	9.39e-14	0.97	0.331	-9.32e-14	2.76e-13
C4746	9.12e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C4758	9.12e-14	9.39e-14	0.97	0.332	-9.34e-14	2.76e-13
C4790	21.91143	9.41e-14	2.3e+14	0.000	21.91143	21.91143
C4794	9.13e-14	9.39e-14	0.97	0.331	-9.32e-14	2.76e-13
C4806	9.13e-14	9.39e-14	0.97	0.331	-9.32e-14	2.76e-13
C4814	9.13e-14	9.39e-14	0.97	0.331	-9.32e-14	2.76e-13
C4826	9.13e-14	9.39e-14	0.97	0.331	-9.32e-14	2.76e-13
C4830	9.13e-14	9.39e-14	0.97	0.331	-9.32e-14	2.76e-13

C4854	9.13e-14	9.39e-14	0.97	0.331	-9.32e-14	2.76e-13
C4862	9.13e-14	9.39e-14	0.97	0.331	-9.32e-14	2.76e-13
C4866	9.13e-14	9.39e-14	0.97	0.331	-9.32e-14	2.76e-13
C4870	9.13e-14	9.39e-14	0.97	0.331	-9.32e-14	2.76e-13
C4890	9.13e-14	9.39e-14	0.97	0.331	-9.32e-14	2.76e-13
C4902	9.13e-14	9.39e-14	0.97	0.331	-9.32e-14	2.76e-13
C4918	9.13e-14	9.39e-14	0.97	0.331	-9.32e-14	2.76e-13
C4934	9.13e-14	9.39e-14	0.97	0.331	-9.32e-14	2.76e-13
C4942	9.13e-14	9.39e-14	0.97	0.331	-9.32e-14	2.76e-13
C4962	9.13e-14	9.39e-14	0.97	0.331	-9.32e-14	2.76e-13
C4966	9.13e-14	9.39e-14	0.97	0.331	-9.32e-14	2.76e-13
C4970	9.13e-14	9.39e-14	0.97	0.331	-9.32e-14	2.76e-13
C4974	9.13e-14	9.39e-14	0.97	0.331	-9.32e-14	2.76e-13
_cons	-9.13e-14	9.39e-14	-0.97	0.332	-2.76e-13	9.33e-14

481 predict resid_log_federal_funding, residuals

482 reg voted_for_winner i.msa_factor, robust cluster(msa_factor)

Linear regression		Number of obs	=	7,220
		$F_{(0, 379)}$	=	.
		Prob > F	=	.
		R-squared	=	0.0870
		Root MSE	=	.48234

(Std. Err. adjusted for **380** clusters in msa_factor)

voted_for_~r	Coef.	Robust Std. Err.	t	P>|t|	[95% Conf. Interval]	
msa_factor						
C1042	-.1578947	5.25e-14	-3.0e+12	0.000	-.1578947	-.1578947
C1050	.2631579	5.25e-14	5.0e+12	0.000	.2631579	.2631579
C1054	-5.10e-14	5.25e-14	-0.97	0.331	-1.54e-13	5.22e-14
C1058	-.1578947	5.25e-14	-3.0e+12	0.000	-.1578947	-.1578947
C1074	-.1578947	5.25e-14	-3.0e+12	0.000	-.1578947	-.1578947
C1078	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C1090	.2105263	5.25e-14	4.0e+12	0.000	.2105263	.2105263
C1102	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C1110	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C1118	-.1578947	5.25e-14	-3.0e+12	0.000	-.1578947	-.1578947
C1126	-.1578947	5.25e-14	-3.0e+12	0.000	-.1578947	-.1578947
C1146	-.1578947	5.25e-14	-3.0e+12	0.000	-.1578947	-.1578947
C1150	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C1154	.2105263	5.25e-14	4.0e+12	0.000	.2105263	.2105263
C1170	.2105263	5.25e-14	4.0e+12	0.000	.2105263	.2105263
C1202	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C1206	.2631579	5.25e-14	5.0e+12	0.000	.2631579	.2631579
C1210	-.1578947	5.25e-14	-3.0e+12	0.000	-.1578947	-.1578947
C1222	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C1226	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C1242	.2631579	5.25e-14	5.0e+12	0.000	.2631579	.2631579
C1254	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C1258	-.1578947	5.25e-14	-3.0e+12	0.000	-.1578947	-.1578947
C1262	.2105263	5.25e-14	4.0e+12	0.000	.2105263	.2105263
C1270	-.1578947	5.25e-14	-3.0e+12	0.000	-.1578947	-.1578947
C1294	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C1298	.2105263	5.25e-14	4.0e+12	0.000	.2105263	.2105263
C1302	-5.11e-14	5.25e-14	-0.97	0.331	-1.54e-13	5.21e-14
C1314	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C1322	-.2105263	5.25e-14	-4.0e+12	0.000	-.2105263	-.2105263
C1338	.0526316	5.25e-14	1.0e+12	0.000	.0526316	.0526316
C1346	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C1374	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C1378	.2105263	5.25e-14	4.0e+12	0.000	.2105263	.2105263
C1382	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C1390	-5.10e-14	5.25e-14	-0.97	0.331	-1.54e-13	5.22e-14
C1398	-5.10e-14	5.25e-14	-0.97	0.331	-1.54e-13	5.22e-14
C1401	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C1402	.0526316	5.25e-14	1.0e+12	0.000	.0526316	.0526316

C1410	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C1426	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C1446	-.1578947	5.25e-14	-3.0e+12	0.000	-.1578947	-.1578947
C1450	-.1578947	5.25e-14	-3.0e+12	0.000	-.1578947	-.1578947
C1454	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C1474	-.1578947	5.25e-14	-3.0e+12	0.000	-.1578947	-.1578947
C1486	-.1578947	5.25e-14	-3.0e+12	0.000	-.1578947	-.1578947
C1518	.0526316	5.25e-14	1.0e+12	0.000	.0526316	.0526316
C1526	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C1538	-.1578947	5.25e-14	-3.0e+12	0.000	-.1578947	-.1578947
C1550	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C1554	-.1578947	5.25e-14	-3.0e+12	0.000	-.1578947	-.1578947
C1568	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C1594	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C1598	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C1602	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C1606	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C1618	.2105263	5.25e-14	4.0e+12	0.000	.2105263	.2105263
C1622	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C1630	-.1578947	5.25e-14	-3.0e+12	0.000	-.1578947	-.1578947
C1654	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C1658	.2631579	5.25e-14	5.0e+12	0.000	.2631579	.2631579
C1662	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C1670	-5.10e-14	5.25e-14	-0.97	0.331	-1.54e-13	5.22e-14
C1674	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C1682	.0526316	5.25e-14	1.0e+12	0.000	.0526316	.0526316
C1686	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C1694	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C1698	-.1578947	5.25e-14	-3.0e+12	0.000	-.1578947	-.1578947
C1702	.2105263	5.25e-14	4.0e+12	0.000	.2105263	.2105263
C1714	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C1730	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C1742	-5.10e-14	5.25e-14	-0.97	0.331	-1.54e-13	5.22e-14
C1746	-.1578947	5.25e-14	-3.0e+12	0.000	-.1578947	-.1578947
C1766	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C1778	-5.10e-14	5.25e-14	-0.97	0.331	-1.54e-13	5.22e-14
C1782	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C1786	.0526316	5.25e-14	1.0e+12	0.000	.0526316	.0526316
C1790	.2631579	5.25e-14	5.0e+12	0.000	.2631579	.2631579
C1798	.0526316	5.25e-14	1.0e+12	0.000	.0526316	.0526316
C1802	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C1814	.2631579	5.25e-14	5.0e+12	0.000	.2631579	.2631579
C1858	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C1870	-.1578947	5.25e-14	-3.0e+12	0.000	-.1578947	-.1578947
C1888	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C1906	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C1910	-5.10e-14	5.25e-14	-0.97	0.331	-1.54e-13	5.22e-14
C1914	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C1918	.2105263	5.25e-14	4.0e+12	0.000	.2105263	.2105263
C1930	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C1934	-5.11e-14	5.25e-14	-0.97	0.331	-1.54e-13	5.21e-14
C1938	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C1946	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C1950	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C1966	-.2105263	5.25e-14	-4.0e+12	0.000	-.2105263	-.2105263
C1974	.0526316	5.25e-14	1.0e+12	0.000	.0526316	.0526316
C1978	-.1578947	5.25e-14	-3.0e+12	0.000	-.1578947	-.1578947
C1982	-.1578947	5.25e-14	-3.0e+12	0.000	-.1578947	-.1578947
C2002	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C2010	.4210526	5.25e-14	8.0e+12	0.000	.4210526	.4210526
C2022	-5.11e-14	5.25e-14	-0.97	0.331	-1.54e-13	5.21e-14
C2026	-.1578947	5.25e-14	-3.0e+12	0.000	-.1578947	-.1578947
C2050	-.1578947	5.25e-14	-3.0e+12	0.000	-.1578947	-.1578947
C2070	.2631579	5.25e-14	5.0e+12	0.000	.2631579	.2631579
C2074	-5.11e-14	5.25e-14	-0.97	0.331	-1.54e-13	5.21e-14
C2094	-.1578947	5.25e-14	-3.0e+12	0.000	-.1578947	-.1578947
C2106	-5.10e-14	5.25e-14	-0.97	0.331	-1.54e-13	5.22e-14
C2114	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C2130	.2105263	5.25e-14	4.0e+12	0.000	.2105263	.2105263
C2134	-.1578947	5.25e-14	-3.0e+12	0.000	-.1578947	-.1578947
C2150	-5.11e-14	5.25e-14	-0.97	0.331	-1.54e-13	5.21e-14
C2166	-.1578947	5.25e-14	-3.0e+12	0.000	-.1578947	-.1578947

C2178	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C2202	.4210526	5.25e-14	8.0e+12	0.000	.4210526	.4210526
C2214	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C2218	.0526316	5.25e-14	1.0e+12	0.000	.0526316	.0526316
C2222	-5.10e-14	5.25e-14	-0.97	0.331	-1.54e-13	5.22e-14
C2238	-.1578947	5.25e-14	-3.0e+12	0.000	-.1578947	-.1578947
C2242	-.1578947	5.25e-14	-3.0e+12	0.000	-.1578947	-.1578947
C2250	.2105263	5.25e-14	4.0e+12	0.000	.2105263	.2105263
C2252	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C2254	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C2266	.2631579	5.25e-14	5.0e+12	0.000	.2631579	.2631579
C2290	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C2306	-5.10e-14	5.25e-14	-0.97	0.331	-1.54e-13	5.22e-14
C2342	.2631579	5.25e-14	5.0e+12	0.000	.2631579	.2631579
C2346	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C2354	-.1578947	5.25e-14	-3.0e+12	0.000	-.1578947	-.1578947
C2358	-5.10e-14	5.25e-14	-0.97	0.331	-1.54e-13	5.22e-14
C2390	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C2402	.4210526	5.25e-14	8.0e+12	0.000	.4210526	.4210526
C2414	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C2422	.2105263	5.25e-14	4.0e+12	0.000	.2105263	.2105263
C2426	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C2430	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C2434	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C2442	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C2450	.2105263	5.25e-14	4.0e+12	0.000	.2105263	.2105263
C2454	-5.10e-14	5.25e-14	-0.97	0.331	-1.54e-13	5.22e-14
C2458	.2105263	5.25e-14	4.0e+12	0.000	.2105263	.2105263
C2466	.2631579	5.25e-14	5.0e+12	0.000	.2631579	.2631579
C2478	.2631579	5.25e-14	5.0e+12	0.000	.2631579	.2631579
C2486	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C2506	-5.10e-14	5.25e-14	-0.97	0.331	-1.54e-13	5.22e-14
C2518	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C2522	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C2526	-5.10e-14	5.25e-14	-0.97	0.331	-1.54e-13	5.22e-14
C2542	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C2550	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C2554	-.1578947	5.25e-14	-3.0e+12	0.000	-.1578947	-.1578947
C2562	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C2586	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C2594	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C2598	.0526316	5.25e-14	1.0e+12	0.000	.0526316	.0526316
C2614	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C2630	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C2638	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C2642	-5.10e-14	5.25e-14	-0.97	0.331	-1.54e-13	5.22e-14
C2658	-5.10e-14	5.25e-14	-0.97	0.331	-1.54e-13	5.22e-14
C2662	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C2682	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C2690	.2105263	5.25e-14	4.0e+12	0.000	.2105263	.2105263
C2698	-.1578947	5.25e-14	-3.0e+12	0.000	-.1578947	-.1578947
C2706	-.1578947	5.25e-14	-3.0e+12	0.000	-.1578947	-.1578947
C2710	.2105263	5.25e-14	4.0e+12	0.000	.2105263	.2105263
C2714	.4210526	5.25e-14	8.0e+12	0.000	.4210526	.4210526
C2718	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C2726	-5.10e-14	5.25e-14	-0.97	0.331	-1.54e-13	5.22e-14
C2734	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C2750	-.1578947	5.25e-14	-3.0e+12	0.000	-.1578947	-.1578947
C2762	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C2774	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C2778	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C2786	-.2105263	5.25e-14	-4.0e+12	0.000	-.2105263	-.2105263
C2790	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C2798	-.1578947	5.25e-14	-3.0e+12	0.000	-.1578947	-.1578947
C2802	.0526316	5.25e-14	1.0e+12	0.000	.0526316	.0526316
C2810	.2105263	5.25e-14	4.0e+12	0.000	.2105263	.2105263
C2814	-.2105263	5.25e-14	-4.0e+12	0.000	-.2105263	-.2105263
C2842	-5.10e-14	5.25e-14	-0.97	0.331	-1.54e-13	5.22e-14
C2866	-5.10e-14	5.25e-14	-0.97	0.331	-1.54e-13	5.22e-14
C2870	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C2874	-.1578947	5.25e-14	-3.0e+12	0.000	-.1578947	-.1578947
C2894	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14

C2902	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C2910	-.1578947	5.25e-14	-3.0e+12	0.000	-.1578947	-.1578947
C2918	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C2920	.2105263	5.25e-14	4.0e+12	0.000	.2105263	.2105263
C2934	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C2942	-5.10e-14	5.25e-14	-0.97	0.331	-1.54e-13	5.22e-14
C2946	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C2954	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C2962	-.1578947	5.25e-14	-3.0e+12	0.000	-.1578947	-.1578947
C2970	-.1578947	5.25e-14	-3.0e+12	0.000	-.1578947	-.1578947
C2974	-.1578947	5.25e-14	-3.0e+12	0.000	-.1578947	-.1578947
C2982	-.1578947	5.25e-14	-3.0e+12	0.000	-.1578947	-.1578947
C2994	-.1578947	5.25e-14	-3.0e+12	0.000	-.1578947	-.1578947
C3002	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C3014	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C3030	-5.10e-14	5.25e-14	-0.97	0.331	-1.54e-13	5.22e-14
C3034	-5.11e-14	5.25e-14	-0.97	0.331	-1.54e-13	5.21e-14
C3046	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C3062	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C3070	.2105263	5.25e-14	4.0e+12	0.000	.2105263	.2105263
C3078	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C3086	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C3098	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C3102	-5.11e-14	5.25e-14	-0.97	0.331	-1.54e-13	5.21e-14
C3108	-.1578947	5.25e-14	-3.0e+12	0.000	-.1578947	-.1578947
C3114	.2105263	5.25e-14	4.0e+12	0.000	.2105263	.2105263
C3118	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C3134	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C3142	.2631579	5.25e-14	5.0e+12	0.000	.2631579	.2631579
C3146	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C3154	-.1578947	5.25e-14	-3.0e+12	0.000	-.1578947	-.1578947
C3170	.4210526	5.25e-14	8.0e+12	0.000	.4210526	.4210526
C3174	-5.10e-14	5.25e-14	-0.97	0.331	-1.54e-13	5.22e-14
C3186	.2105263	5.25e-14	4.0e+12	0.000	.2105263	.2105263
C3190	-5.10e-14	5.25e-14	-0.97	0.331	-1.54e-13	5.22e-14
C3258	-.1578947	5.25e-14	-3.0e+12	0.000	-.1578947	-.1578947
C3278	.2105263	5.25e-14	4.0e+12	0.000	.2105263	.2105263
C3282	-.1578947	5.25e-14	-3.0e+12	0.000	-.1578947	-.1578947
C3290	.2631579	5.25e-14	5.0e+12	0.000	.2631579	.2631579
C3310	-.1578947	5.25e-14	-3.0e+12	0.000	-.1578947	-.1578947
C3314	-5.11e-14	5.25e-14	-0.97	0.331	-1.54e-13	5.21e-14
C3322	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C3326	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C3334	.2631579	5.25e-14	5.0e+12	0.000	.2631579	.2631579
C3346	-.1578947	5.25e-14	-3.0e+12	0.000	-.1578947	-.1578947
C3354	.0526316	5.25e-14	1.0e+12	0.000	.0526316	.0526316
C3366	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C3370	.2631579	5.25e-14	5.0e+12	0.000	.2631579	.2631579
C3374	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C3378	.2105263	5.25e-14	4.0e+12	0.000	.2105263	.2105263
C3386	.2105263	5.25e-14	4.0e+12	0.000	.2105263	.2105263
C3406	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C3410	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C3458	.2631579	5.25e-14	5.0e+12	0.000	.2631579	.2631579
C3462	.4210526	5.25e-14	8.0e+12	0.000	.4210526	.4210526
C3474	-.1578947	5.25e-14	-3.0e+12	0.000	-.1578947	-.1578947
C3482	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C3490	-.1578947	5.25e-14	-3.0e+12	0.000	-.1578947	-.1578947
C3494	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C3498	-.2105263	5.25e-14	-4.0e+12	0.000	-.2105263	-.2105263
C3510	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C3530	-.1578947	5.25e-14	-3.0e+12	0.000	-.1578947	-.1578947
C3538	-.1578947	5.25e-14	-3.0e+12	0.000	-.1578947	-.1578947
C3562	-.1578947	5.25e-14	-3.0e+12	0.000	-.1578947	-.1578947
C3566	.2105263	5.25e-14	4.0e+12	0.000	.2105263	.2105263
C3584	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C3598	-.1578947	5.25e-14	-3.0e+12	0.000	-.1578947	-.1578947
C3610	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C3614	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C3622	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C3626	-5.10e-14	5.25e-14	-0.97	0.331	-1.54e-13	5.22e-14
C3642	-5.10e-14	5.25e-14	-0.97	0.331	-1.54e-13	5.22e-14

C3650	-.1578947	5.25e-14	-3.0e+12	0.000	-.1578947	-.1578947
C3654	-5.10e-14	5.25e-14	-0.97	0.331	-1.54e-13	5.22e-14
C3674	.2631579	5.25e-14	5.0e+12	0.000	.2631579	.2631579
C3678	.4210526	5.25e-14	8.0e+12	0.000	.4210526	.4210526
C3698	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C3710	.2631579	5.25e-14	5.0e+12	0.000	.2631579	.2631579
C3734	-5.10e-14	5.25e-14	-0.97	0.331	-1.54e-13	5.22e-14
C3746	-5.10e-14	5.25e-14	-0.97	0.331	-1.54e-13	5.22e-14
C3762	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C3786	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C3790	.2105263	5.25e-14	4.0e+12	0.000	.2105263	.2105263
C3798	-.1578947	5.25e-14	-3.0e+12	0.000	-.1578947	-.1578947
C3806	-5.10e-14	5.25e-14	-0.97	0.331	-1.54e-13	5.22e-14
C3822	-.1578947	5.25e-14	-3.0e+12	0.000	-.1578947	-.1578947
C3830	-.2105263	5.25e-14	-4.0e+12	0.000	-.2105263	-.2105263
C3834	-.1578947	5.25e-14	-3.0e+12	0.000	-.1578947	-.1578947
C3854	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C3886	-.1578947	5.25e-14	-3.0e+12	0.000	-.1578947	-.1578947
C3890	-.1578947	5.25e-14	-3.0e+12	0.000	-.1578947	-.1578947
C3894	.2105263	5.25e-14	4.0e+12	0.000	.2105263	.2105263
C3914	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C3930	-.1578947	5.25e-14	-3.0e+12	0.000	-.1578947	-.1578947
C3934	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C3938	-5.11e-14	5.25e-14	-0.97	0.331	-1.54e-13	5.21e-14
C3946	-5.10e-14	5.25e-14	-0.97	0.331	-1.54e-13	5.22e-14
C3954	.4210526	5.25e-14	8.0e+12	0.000	.4210526	.4210526
C3958	.2631579	5.25e-14	5.0e+12	0.000	.2631579	.2631579
C3966	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C3974	.2105263	5.25e-14	4.0e+12	0.000	.2105263	.2105263
C3982	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C3990	.2631579	5.25e-14	5.0e+12	0.000	.2631579	.2631579
C4006	.2631579	5.25e-14	5.0e+12	0.000	.2631579	.2631579
C4014	.2631579	5.25e-14	5.0e+12	0.000	.2631579	.2631579
C4022	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C4034	.4210526	5.25e-14	8.0e+12	0.000	.4210526	.4210526
C4038	.0526316	5.25e-14	1.0e+12	0.000	.0526316	.0526316
C4042	.4210526	5.25e-14	8.0e+12	0.000	.4210526	.4210526
C4058	.2631579	5.25e-14	5.0e+12	0.000	.2631579	.2631579
C4066	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C4090	.2631579	5.25e-14	5.0e+12	0.000	.2631579	.2631579
C4098	-5.11e-14	5.25e-14	-0.97	0.331	-1.54e-13	5.21e-14
C4106	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C4110	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C4114	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C4118	-5.11e-14	5.25e-14	-0.97	0.331	-1.54e-13	5.21e-14
C4142	.2105263	5.25e-14	4.0e+12	0.000	.2105263	.2105263
C4150	-.1578947	5.25e-14	-3.0e+12	0.000	-.1578947	-.1578947
C4154	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C4162	-.1578947	5.25e-14	-3.0e+12	0.000	-.1578947	-.1578947
C4166	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C4170	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C4174	.2631579	5.25e-14	5.0e+12	0.000	.2631579	.2631579
C4186	-.1578947	5.25e-14	-3.0e+12	0.000	-.1578947	-.1578947
C4194	-.1578947	5.25e-14	-3.0e+12	0.000	-.1578947	-.1578947
C4202	.2631579	5.25e-14	5.0e+12	0.000	.2631579	.2631579
C4210	-.1578947	5.25e-14	-3.0e+12	0.000	-.1578947	-.1578947
C4214	-.1578947	5.25e-14	-3.0e+12	0.000	-.1578947	-.1578947
C4220	-.1578947	5.25e-14	-3.0e+12	0.000	-.1578947	-.1578947
C4222	-.1578947	5.25e-14	-3.0e+12	0.000	-.1578947	-.1578947
C4234	.2105263	5.25e-14	4.0e+12	0.000	.2105263	.2105263
C4254	-5.11e-14	5.25e-14	-0.97	0.331	-1.54e-13	5.21e-14
C4266	-.1578947	5.25e-14	-3.0e+12	0.000	-.1578947	-.1578947
C4268	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C4270	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C4310	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C4330	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C4334	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C4342	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C4358	-5.10e-14	5.25e-14	-0.97	0.331	-1.54e-13	5.22e-14
C4362	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C4378	.4210526	5.25e-14	8.0e+12	0.000	.4210526	.4210526
C4390	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14

C4406	-5.10e-14	5.25e-14	-0.97	0.331	-1.54e-13	5.22e-14
C4410	.2105263	5.25e-14	4.0e+12	0.000	.2105263	.2105263
C4414	-.1578947	5.25e-14	-3.0e+12	0.000	-.1578947	-.1578947
C4418	-5.10e-14	5.25e-14	-0.97	0.331	-1.54e-13	5.22e-14
C4422	-.2105263	5.25e-14	-4.0e+12	0.000	-.2105263	-.2105263
C4430	.2631579	5.25e-14	5.0e+12	0.000	.2631579	.2631579
C4442	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C4470	.2631579	5.25e-14	5.0e+12	0.000	.2631579	.2631579
C4494	.0526316	5.25e-14	1.0e+12	0.000	.0526316	.0526316
C4506	-.1578947	5.25e-14	-3.0e+12	0.000	-.1578947	-.1578947
C4522	-.1578947	5.25e-14	-3.0e+12	0.000	-.1578947	-.1578947
C4530	.2105263	5.25e-14	4.0e+12	0.000	.2105263	.2105263
C4546	.2105263	5.25e-14	4.0e+12	0.000	.2105263	.2105263
C4550	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C4554	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C4578	-.1578947	5.25e-14	-3.0e+12	0.000	-.1578947	-.1578947
C4582	-5.10e-14	5.25e-14	-0.97	0.331	-1.54e-13	5.22e-14
C4594	-.1578947	5.25e-14	-3.0e+12	0.000	-.1578947	-.1578947
C4606	-.1578947	5.25e-14	-3.0e+12	0.000	-.1578947	-.1578947
C4614	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C4622	-5.10e-14	5.25e-14	-0.97	0.331	-1.54e-13	5.22e-14
C4634	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C4652	-.1578947	5.25e-14	-3.0e+12	0.000	-.1578947	-.1578947
C4654	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C4666	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C4670	-.1578947	5.25e-14	-3.0e+12	0.000	-.1578947	-.1578947
C4702	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C4722	-.1578947	5.25e-14	-3.0e+12	0.000	-.1578947	-.1578947
C4726	.2631579	5.25e-14	5.0e+12	0.000	.2631579	.2631579
C4730	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C4738	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C4746	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C4758	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C4790	-.1578947	5.25e-14	-3.0e+12	0.000	-.1578947	-.1578947
C4794	-.1578947	5.25e-14	-3.0e+12	0.000	-.1578947	-.1578947
C4806	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C4814	.2105263	5.25e-14	4.0e+12	0.000	.2105263	.2105263
C4826	-.4210526	5.25e-14	-8.0e+12	0.000	-.4210526	-.4210526
C4830	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C4854	-.2105263	5.25e-14	-4.0e+12	0.000	-.2105263	-.2105263
C4862	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C4866	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C4870	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C4890	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C4902	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C4918	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C4934	-.1578947	5.25e-14	-3.0e+12	0.000	-.1578947	-.1578947
C4942	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C4962	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C4966	-5.11e-14	5.25e-14	-0.97	0.331	-1.54e-13	5.21e-14
C4970	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
C4974	-5.10e-14	5.25e-14	-0.97	0.332	-1.54e-13	5.22e-14
_cons	.5789474	5.25e-14	1.1e+13	0.000	.5789474	.5789474

483 predict resid_voted_for_winner, residuals

484 reg election_gap i.msa_factor, robust cluster(msa_factor)

Linear regression

Number of obs	=	7,220
$F_{(0, 379)}$	=	.
Prob > F	=	.
R-squared	=	0.7904
Root MSE	=	.06635

(Std. Err. adjusted for **380** clusters in msa_factor)

election_gap	Coef.	Robust Std. Err.	t	P>|t|	[95% Conf. Interval]	
msa_factor						
C1042	-.406411	9.40e-15	-4.3e+13	0.000	-.406411	-.406411
C1050	-.4711425	9.40e-15	-5.0e+13	0.000	-.4711425	-.4711425
C1054	-.330245	9.40e-15	-3.5e+13	0.000	-.330245	-.330245
C1058	-.3951595	9.40e-15	-4.2e+13	0.000	-.3951595	-.3951595
C1074	-.427579	9.40e-15	-4.5e+13	0.000	-.427579	-.427579
C1078	-.2029817	9.40e-15	-2.2e+13	0.000	-.2029817	-.2029817
C1090	-.4788485	9.40e-15	-5.1e+13	0.000	-.4788485	-.4788485
C1102	-.1955472	9.40e-15	-2.1e+13	0.000	-.1955472	-.1955472
C1110	.0634821	9.40e-15	6.8e+12	0.000	.0634821	.0634821
C1118	-.415977	9.40e-15	-4.4e+13	0.000	-.415977	-.415977
C1126	-.3514652	9.40e-15	-3.7e+13	0.000	-.3514652	-.3514652
C1146	-.1822724	9.40e-15	-1.9e+13	0.000	-.1822724	-.1822724
C1150	-.2135989	9.40e-15	-2.3e+13	0.000	-.2135989	-.2135989
C1154	-.4220521	9.40e-15	-4.5e+13	0.000	-.4220521	-.4220521
C1170	-.4524327	9.40e-15	-4.8e+13	0.000	-.4524327	-.4524327
C1202	-.4592132	9.40e-15	-4.9e+13	0.000	-.4592132	-.4592132
C1206	-.45651	9.40e-15	-4.9e+13	0.000	-.45651	-.45651
C1210	-.3869421	9.40e-15	-4.1e+13	0.000	-.3869421	-.3869421
C1222	-.3000024	9.40e-15	-3.2e+13	0.000	-.3000024	-.3000024
C1226	-.3905314	9.40e-15	-4.2e+13	0.000	-.3905314	-.3905314
C1242	-.4102615	9.40e-15	-4.4e+13	0.000	-.4102615	-.4102615
C1254	-.3019336	9.40e-15	-3.2e+13	0.000	-.3019336	-.3019336
C1258	-.3803255	9.40e-15	-4.0e+13	0.000	-.3803255	-.3803255
C1262	-.4745696	9.40e-15	-5.0e+13	0.000	-.4745696	-.4745696
C1270	-.4065055	9.40e-15	-4.3e+13	0.000	-.4065055	-.4065055
C1294	-.3896343	9.40e-15	-4.1e+13	0.000	-.3896343	-.3896343
C1298	-.463806	9.40e-15	-4.9e+13	0.000	-.463806	-.463806
C1302	-.4084449	9.40e-15	-4.3e+13	0.000	-.4084449	-.4084449
C1314	-.3577585	9.40e-15	-3.8e+13	0.000	-.3577585	-.3577585
C1322	-.2967553	9.40e-15	-3.2e+13	0.000	-.2967553	-.2967553
C1338	-.4029075	9.40e-15	-4.3e+13	0.000	-.4029075	-.4029075
C1346	-.4311523	9.40e-15	-4.6e+13	0.000	-.4311523	-.4311523
C1374	-.309443	9.40e-15	-3.3e+13	0.000	-.309443	-.309443
C1378	-.4795008	9.40e-15	-5.1e+13	0.000	-.4795008	-.4795008
C1382	-.3101559	9.40e-15	-3.3e+13	0.000	-.3101559	-.3101559
C1390	-.1918449	9.40e-15	-2.0e+13	0.000	-.1918449	-.1918449
C1398	-.4100306	9.40e-15	-4.4e+13	0.000	-.4100306	-.4100306
C1401	-.4165068	9.40e-15	-4.4e+13	0.000	-.4165068	-.4165068
C1402	-.3887855	9.40e-15	-4.1e+13	0.000	-.3887855	-.3887855
C1410	-.3418307	9.40e-15	-3.6e+13	0.000	-.3418307	-.3418307
C1426	-.2731744	9.40e-15	-2.9e+13	0.000	-.2731744	-.2731744
C1446	-.2678228	9.40e-15	-2.8e+13	0.000	-.2678228	-.2678228
C1450	-.1561265	9.40e-15	-1.7e+13	0.000	-.1561265	-.1561265
C1454	-.2216851	9.40e-15	-2.4e+13	0.000	-.2216851	-.2216851
C1474	-.4321611	9.40e-15	-4.6e+13	0.000	-.4321611	-.4321611
C1486	-.3979664	9.40e-15	-4.2e+13	0.000	-.3979664	-.3979664
C1518	-.3196579	9.40e-15	-3.4e+13	0.000	-.3196579	-.3196579
C1526	-.219763	9.40e-15	-2.3e+13	0.000	-.219763	-.219763
C1538	-.3878857	9.40e-15	-4.1e+13	0.000	-.3878857	-.3878857
C1550	-.3476239	9.40e-15	-3.7e+13	0.000	-.3476239	-.3476239
C1554	-.2162093	9.40e-15	-2.3e+13	0.000	-.2162093	-.2162093
C1568	-.3339398	9.40e-15	-3.6e+13	0.000	-.3339398	-.3339398
C1594	-.4689328	9.40e-15	-5.0e+13	0.000	-.4689328	-.4689328
C1598	-.3477698	9.40e-15	-3.7e+13	0.000	-.3477698	-.3477698
C1602	-.1542516	9.40e-15	-1.6e+13	0.000	-.1542516	-.1542516
C1606	-.4516312	9.40e-15	-4.8e+13	0.000	-.4516312	-.4516312
C1618	-.4005077	9.40e-15	-4.3e+13	0.000	-.4005077	-.4005077
C1622	-.1308269	9.40e-15	-1.4e+13	0.000	-.1308269	-.1308269
C1630	-.4049165	9.40e-15	-4.3e+13	0.000	-.4049165	-.4049165
C1654	-.1264317	9.40e-15	-1.3e+13	0.000	-.1264317	-.1264317
C1658	-.4639195	9.40e-15	-4.9e+13	0.000	-.4639195	-.4639195
C1662	-.4379785	9.40e-15	-4.7e+13	0.000	-.4379785	-.4379785
C1670	-.4440117	9.40e-15	-4.7e+13	0.000	-.4440117	-.4440117
C1674	-.4206334	9.40e-15	-4.5e+13	0.000	-.4206334	-.4206334
C1682	-.4075513	9.40e-15	-4.3e+13	0.000	-.4075513	-.4075513
C1686	-.2894101	9.40e-15	-3.1e+13	0.000	-.2894101	-.2894101

C1694	-.2479017	9.40e-15	-2.6e+13	0.000	-.2479017	-.2479017
C1698	-.2427529	9.40e-15	-2.6e+13	0.000	-.2427529	-.2427529
C1702	-.4467139	9.40e-15	-4.8e+13	0.000	-.4467139	-.4467139
C1714	-.3316571	9.40e-15	-3.5e+13	0.000	-.3316571	-.3316571
C1730	-.350503	9.40e-15	-3.7e+13	0.000	-.350503	-.350503
C1742	-.0585999	9.40e-15	-6.2e+12	0.000	-.0585999	-.0585999
C1746	-.3092454	9.40e-15	-3.3e+13	0.000	-.3092454	-.3092454
C1766	-.1810035	9.40e-15	-1.9e+13	0.000	-.1810035	-.1810035
C1778	-.1887572	9.40e-15	-2.0e+13	0.000	-.1887572	-.1887572
C1782	-.2532122	9.40e-15	-2.7e+13	0.000	-.2532122	-.2532122
C1786	-.4750819	9.40e-15	-5.1e+13	0.000	-.4750819	-.4750819
C1790	-.4675447	9.40e-15	-5.0e+13	0.000	-.4675447	-.4675447
C1798	-.4558448	9.40e-15	-4.8e+13	0.000	-.4558448	-.4558448
C1802	-.2562848	9.40e-15	-2.7e+13	0.000	-.2562848	-.2562848
C1814	-.4542005	9.40e-15	-4.8e+13	0.000	-.4542005	-.4542005
C1858	-.4108401	9.40e-15	-4.4e+13	0.000	-.4108401	-.4108401
C1870	-.2834585	9.40e-15	-3.0e+13	0.000	-.2834585	-.2834585
C1888	-.0263278	9.40e-15	-2.8e+12	0.000	-.0263278	-.0263278
C1906	-.2049942	9.40e-15	-2.2e+13	0.000	-.2049942	-.2049942
C1910	-.3512682	9.40e-15	-3.7e+13	0.000	-.3512682	-.3512682
C1914	-.0745083	9.40e-15	-7.9e+12	0.000	-.0745083	-.0745083
C1918	-.4145266	9.40e-15	-4.4e+13	0.000	-.4145266	-.4145266
C1930	.0117985	9.40e-15	1.3e+12	0.000	.0117985	.0117985
C1934	-.4154715	9.40e-15	-4.4e+13	0.000	-.4154715	-.4154715
C1938	-.4540257	9.40e-15	-4.8e+13	0.000	-.4540257	-.4540257
C1946	-.1634355	9.40e-15	-1.7e+13	0.000	-.1634355	-.1634355
C1950	-.4554704	9.40e-15	-4.8e+13	0.000	-.4554704	-.4554704
C1966	-.4616302	9.40e-15	-4.9e+13	0.000	-.4616302	-.4616302
C1974	-.4232825	9.40e-15	-4.5e+13	0.000	-.4232825	-.4232825
C1978	-.4643373	9.40e-15	-4.9e+13	0.000	-.4643373	-.4643373
C1982	-.3414574	9.40e-15	-3.6e+13	0.000	-.3414574	-.3414574
C2002	-.0757684	9.40e-15	-8.1e+12	0.000	-.0757684	-.0757684
C2010	-.4444815	9.40e-15	-4.7e+13	0.000	-.4444815	-.4444815
C2022	-.3816005	9.40e-15	-4.1e+13	0.000	-.3816005	-.3816005
C2026	-.2510539	9.40e-15	-2.7e+13	0.000	-.2510539	-.2510539
C2050	-.1759403	9.40e-15	-1.9e+13	0.000	-.1759403	-.1759403
C2070	-.4483637	9.40e-15	-4.8e+13	0.000	-.4483637	-.4483637
C2074	-.4408101	9.40e-15	-4.7e+13	0.000	-.4408101	-.4408101
C2094	-.2892851	9.40e-15	-3.1e+13	0.000	-.2892851	-.2892851
C2106	-.2387998	9.40e-15	-2.5e+13	0.000	-.2387998	-.2387998
C2114	-.2232711	9.40e-15	-2.4e+13	0.000	-.2232711	-.2232711
C2130	-.4574691	9.40e-15	-4.9e+13	0.000	-.4574691	-.4574691
C2134	-.2499588	9.40e-15	-2.7e+13	0.000	-.2499588	-.2499588
C2150	-.4025972	9.40e-15	-4.3e+13	0.000	-.4025972	-.4025972
C2166	-.3209636	9.40e-15	-3.4e+13	0.000	-.3209636	-.3209636
C2178	-.3771396	9.40e-15	-4.0e+13	0.000	-.3771396	-.3771396
C2202	-.4158983	9.40e-15	-4.4e+13	0.000	-.4158983	-.4158983
C2214	-.2363899	9.40e-15	-2.5e+13	0.000	-.2363899	-.2363899
C2218	-.4042735	9.40e-15	-4.3e+13	0.000	-.4042735	-.4042735
C2222	-.2525824	9.40e-15	-2.7e+13	0.000	-.2525824	-.2525824
C2238	-.3784322	9.40e-15	-4.0e+13	0.000	-.3784322	-.3784322
C2242	-.2727065	9.40e-15	-2.9e+13	0.000	-.2727065	-.2727065
C2250	-.4574319	9.40e-15	-4.9e+13	0.000	-.4574319	-.4574319
C2252	-.2926032	9.40e-15	-3.1e+13	0.000	-.2926032	-.2926032
C2254	-.3318096	9.40e-15	-3.5e+13	0.000	-.3318096	-.3318096
C2266	-.4374204	9.40e-15	-4.7e+13	0.000	-.4374204	-.4374204
C2290	-.1857967	9.40e-15	-2.0e+13	0.000	-.1857967	-.1857967
C2306	-.2980347	9.40e-15	-3.2e+13	0.000	-.2980347	-.2980347
C2342	-.4456824	9.40e-15	-4.7e+13	0.000	-.4456824	-.4456824
C2346	-.2011117	9.40e-15	-2.1e+13	0.000	-.2011117	-.2011117
C2354	-.377505	9.40e-15	-4.0e+13	0.000	-.377505	-.377505
C2358	-.0012915	9.40e-15	-1.4e+11	0.000	-.0012915	-.0012915
C2390	-.2315829	9.40e-15	-2.5e+13	0.000	-.2315829	-.2315829
C2402	-.4377968	9.40e-15	-4.7e+13	0.000	-.4377968	-.4377968
C2414	-.3643401	9.40e-15	-3.9e+13	0.000	-.3643401	-.3643401
C2422	-.3989693	9.40e-15	-4.2e+13	0.000	-.3989693	-.3989693
C2426	-.1505501	9.40e-15	-1.6e+13	0.000	-.1505501	-.1505501
C2430	-.1858617	9.40e-15	-2.0e+13	0.000	-.1858617	-.1858617
C2434	-.3370967	9.40e-15	-3.6e+13	0.000	-.3370967	-.3370967
C2442	-.2825807	9.40e-15	-3.0e+13	0.000	-.2825807	-.2825807
C2450	-.394746	9.40e-15	-4.2e+13	0.000	-.394746	-.394746
C2454	-.3356844	9.40e-15	-3.6e+13	0.000	-.3356844	-.3356844

C2458	-.4369792	9.40e-15	-4.6e+13	0.000	-.4369792	-.4369792
C2466	-.4591402	9.40e-15	-4.9e+13	0.000	-.4591402	-.4591402
C2478	-.4407846	9.40e-15	-4.7e+13	0.000	-.4407846	-.4407846
C2486	-.1948851	9.40e-15	-2.1e+13	0.000	-.1948851	-.1948851
C2506	-.1887905	9.40e-15	-2.0e+13	0.000	-.1887905	-.1887905
C2518	-.296701	9.40e-15	-3.2e+13	0.000	-.296701	-.296701
C2522	-.2630791	9.40e-15	-2.8e+13	0.000	-.2630791	-.2630791
C2526	-.3294483	9.40e-15	-3.5e+13	0.000	-.3294483	-.3294483
C2542	-.393885	9.40e-15	-4.2e+13	0.000	-.393885	-.393885
C2550	-.2199754	9.40e-15	-2.3e+13	0.000	-.2199754	-.2199754
C2554	-.295297	9.40e-15	-3.1e+13	0.000	-.295297	-.295297
C2562	-.1588319	9.40e-15	-1.7e+13	0.000	-.1588319	-.1588319
C2586	-.1937388	9.40e-15	-2.1e+13	0.000	-.1937388	-.1937388
C2594	-.3917245	9.40e-15	-4.2e+13	0.000	-.3917245	-.3917245
C2598	-.4024141	9.40e-15	-4.3e+13	0.000	-.4024141	-.4024141
C2614	-.3285324	9.40e-15	-3.5e+13	0.000	-.3285324	-.3285324
C2630	-.310359	9.40e-15	-3.3e+13	0.000	-.310359	-.310359
C2638	-.1614015	9.40e-15	-1.7e+13	0.000	-.1614015	-.1614015
C2642	-.4019514	9.40e-15	-4.3e+13	0.000	-.4019514	-.4019514
C2658	-.3426734	9.40e-15	-3.6e+13	0.000	-.3426734	-.3426734
C2662	-.3156798	9.40e-15	-3.4e+13	0.000	-.3156798	-.3156798
C2682	.0156441	9.40e-15	1.7e+12	0.000	.0156441	.0156441
C2690	-.3921656	9.40e-15	-4.2e+13	0.000	-.3921656	-.3921656
C2698	-.2379171	9.40e-15	-2.5e+13	0.000	-.2379171	-.2379171
C2706	-.1781127	9.40e-15	-1.9e+13	0.000	-.1781127	-.1781127
C2710	-.4292802	9.40e-15	-4.6e+13	0.000	-.4292802	-.4292802
C2714	-.4494488	9.40e-15	-4.8e+13	0.000	-.4494488	-.4494488
C2718	-.367093	9.40e-15	-3.9e+13	0.000	-.367093	-.367093
C2726	-.3073368	9.40e-15	-3.3e+13	0.000	-.3073368	-.3073368
C2734	-.2140737	9.40e-15	-2.3e+13	0.000	-.2140737	-.2140737
C2750	-.3170832	9.40e-15	-3.4e+13	0.000	-.3170832	-.3170832
C2762	-.1936113	9.40e-15	-2.1e+13	0.000	-.1936113	-.1936113
C2774	-.1457845	9.40e-15	-1.6e+13	0.000	-.1457845	-.1457845
C2778	-.4072301	9.40e-15	-4.3e+13	0.000	-.4072301	-.4072301
C2786	-.3224391	9.40e-15	-3.4e+13	0.000	-.3224391	-.3224391
C2790	-.1026694	9.40e-15	-1.1e+13	0.000	-.1026694	-.1026694
C2798	-.13098	9.40e-15	-1.4e+13	0.000	-.13098	-.13098
C2802	-.4432726	9.40e-15	-4.7e+13	0.000	-.4432726	-.4432726
C2810	-.4537262	9.40e-15	-4.8e+13	0.000	-.4537262	-.4537262
C2814	-.4375209	9.40e-15	-4.7e+13	0.000	-.4375209	-.4375209
C2842	-.2333674	9.40e-15	-2.5e+13	0.000	-.2333674	-.2333674
C2866	-.2606397	9.40e-15	-2.8e+13	0.000	-.2606397	-.2606397
C2870	-.1339507	9.40e-15	-1.4e+13	0.000	-.1339507	-.1339507
C2874	-.3669072	9.40e-15	-3.9e+13	0.000	-.3669072	-.3669072
C2894	-.2339704	9.40e-15	-2.5e+13	0.000	-.2339704	-.2339704
C2902	-.3145441	9.40e-15	-3.3e+13	0.000	-.3145441	-.3145441
C2910	-.4061715	9.40e-15	-4.3e+13	0.000	-.4061715	-.4061715
C2918	-.21697	9.40e-15	-2.3e+13	0.000	-.21697	-.21697
C2920	-.3758041	9.40e-15	-4.0e+13	0.000	-.3758041	-.3758041
C2934	-.2898134	9.40e-15	-3.1e+13	0.000	-.2898134	-.2898134
C2942	-.1865206	9.40e-15	-2.0e+13	0.000	-.1865206	-.1865206
C2946	-.4120286	9.40e-15	-4.4e+13	0.000	-.4120286	-.4120286
C2954	-.2813843	9.40e-15	-3.0e+13	0.000	-.2813843	-.2813843
C2962	-.3930285	9.40e-15	-4.2e+13	0.000	-.3930285	-.3930285
C2970	-.1677443	9.40e-15	-1.8e+13	0.000	-.1677443	-.1677443
C2974	-.4020408	9.40e-15	-4.3e+13	0.000	-.4020408	-.4020408
C2982	-.4061543	9.40e-15	-4.3e+13	0.000	-.4061543	-.4061543
C2994	-.3087328	9.40e-15	-3.3e+13	0.000	-.3087328	-.3087328
C3002	-.2998091	9.40e-15	-3.2e+13	0.000	-.2998091	-.2998091
C3014	-.2347042	9.40e-15	-2.5e+13	0.000	-.2347042	-.2347042
C3030	-.2728689	9.40e-15	-2.9e+13	0.000	-.2728689	-.2728689
C3034	-.3949269	9.40e-15	-4.2e+13	0.000	-.3949269	-.3949269
C3046	-.4158592	9.40e-15	-4.4e+13	0.000	-.4158592	-.4158592
C3062	-.2252457	9.40e-15	-2.4e+13	0.000	-.2252457	-.2252457
C3070	-.4462864	9.40e-15	-4.7e+13	0.000	-.4462864	-.4462864
C3078	-.4469269	9.40e-15	-4.8e+13	0.000	-.4469269	-.4469269
C3086	.0573841	9.40e-15	6.1e+12	0.000	.0573841	.0573841
C3098	-.0801213	9.40e-15	-8.5e+12	0.000	-.0801213	-.0801213
C3102	-.4487933	9.40e-15	-4.8e+13	0.000	-.4487933	-.4487933
C3108	-.2623126	9.40e-15	-2.8e+13	0.000	-.2623126	-.2623126
C3114	-.4733528	9.40e-15	-5.0e+13	0.000	-.4733528	-.4733528
C3118	-.0839555	9.40e-15	-8.9e+12	0.000	-.0839555	-.0839555

C3134	-.239106	9.40e-15	-2.5e+13	0.000	-.239106	-.239106
C3142	-.4780544	9.40e-15	-5.1e+13	0.000	-.4780544	-.4780544
C3146	-.3143368	9.40e-15	-3.3e+13	0.000	-.3143368	-.3143368
C3154	-.1722681	9.40e-15	-1.8e+13	0.000	-.1722681	-.1722681
C3170	-.4974328	9.40e-15	-5.3e+13	0.000	-.4974328	-.4974328
C3174	-.2780613	9.40e-15	-3.0e+13	0.000	-.2780613	-.2780613
C3186	-.4590957	9.40e-15	-4.9e+13	0.000	-.4590957	-.4590957
C3190	-.3099841	9.40e-15	-3.3e+13	0.000	-.3099841	-.3099841
C3258	-.2153403	9.40e-15	-2.3e+13	0.000	-.2153403	-.2153403
C3278	-.437212	9.40e-15	-4.7e+13	0.000	-.437212	-.437212
C3282	-.4198547	9.40e-15	-4.5e+13	0.000	-.4198547	-.4198547
C3290	-.4185197	9.40e-15	-4.5e+13	0.000	-.4185197	-.4185197
C3310	-.2830793	9.40e-15	-3.0e+13	0.000	-.2830793	-.2830793
C3314	-.4299828	9.40e-15	-4.6e+13	0.000	-.4299828	-.4299828
C3322	-.3858565	9.40e-15	-4.1e+13	0.000	-.3858565	-.3858565
C3326	.0813975	9.40e-15	8.7e+12	0.000	.0813975	.0813975
C3334	-.4681782	9.40e-15	-5.0e+13	0.000	-.4681782	-.4681782
C3346	-.4177025	9.40e-15	-4.4e+13	0.000	-.4177025	-.4177025
C3354	-.368233	9.40e-15	-3.9e+13	0.000	-.368233	-.368233
C3366	-.3916618	9.40e-15	-4.2e+13	0.000	-.3916618	-.3916618
C3370	-.4494591	9.40e-15	-4.8e+13	0.000	-.4494591	-.4494591
C3374	-.2468906	9.40e-15	-2.6e+13	0.000	-.2468906	-.2468906
C3378	-.4589078	9.40e-15	-4.9e+13	0.000	-.4589078	-.4589078
C3386	-.4540729	9.40e-15	-4.8e+13	0.000	-.4540729	-.4540729
C3406	-.3883145	9.40e-15	-4.1e+13	0.000	-.3883145	-.3883145
C3410	-.1204128	9.40e-15	-1.3e+13	0.000	-.1204128	-.1204128
C3458	-.4662217	9.40e-15	-5.0e+13	0.000	-.4662217	-.4662217
C3462	-.4234006	9.40e-15	-4.5e+13	0.000	-.4234006	-.4234006
C3474	-.3690045	9.40e-15	-3.9e+13	0.000	-.3690045	-.3690045
C3482	-.2800619	9.40e-15	-3.0e+13	0.000	-.2800619	-.2800619
C3490	-.2593821	9.40e-15	-2.8e+13	0.000	-.2593821	-.2593821
C3494	-.2314823	9.40e-15	-2.5e+13	0.000	-.2314823	-.2314823
C3498	-.4045534	9.40e-15	-4.3e+13	0.000	-.4045534	-.4045534
C3510	-.32772	9.40e-15	-3.5e+13	0.000	-.32772	-.32772
C3530	-.3341988	9.40e-15	-3.6e+13	0.000	-.3341988	-.3341988
C3538	-.4922352	9.40e-15	-5.2e+13	0.000	-.4922352	-.4922352
C3562	-.2432872	9.40e-15	-2.6e+13	0.000	-.2432872	-.2432872
C3566	-.4249622	9.40e-15	-4.5e+13	0.000	-.4249622	-.4249622
C3584	-.4318705	9.40e-15	-4.6e+13	0.000	-.4318705	-.4318705
C3598	-.3586505	9.40e-15	-3.8e+13	0.000	-.3586505	-.3586505
C3610	-.3602401	9.40e-15	-3.8e+13	0.000	-.3602401	-.3602401
C3614	-.4123352	9.40e-15	-4.4e+13	0.000	-.4123352	-.4123352
C3622	-.0542401	9.40e-15	-5.8e+12	0.000	-.0542401	-.0542401
C3626	-.0611201	9.40e-15	-6.5e+12	0.000	-.0611201	-.0611201
C3642	-.2409742	9.40e-15	-2.6e+13	0.000	-.2409742	-.2409742
C3650	-.3563615	9.40e-15	-3.8e+13	0.000	-.3563615	-.3563615
C3654	-.3857213	9.40e-15	-4.1e+13	0.000	-.3857213	-.3857213
C3674	-.4397148	9.40e-15	-4.7e+13	0.000	-.4397148	-.4397148
C3678	-.4485322	9.40e-15	-4.8e+13	0.000	-.4485322	-.4485322
C3698	-.3157056	9.40e-15	-3.4e+13	0.000	-.3157056	-.3157056
C3710	-.4394462	9.40e-15	-4.7e+13	0.000	-.4394462	-.4394462
C3734	-.3868423	9.40e-15	-4.1e+13	0.000	-.3868423	-.3868423
C3746	-.1108001	9.40e-15	-1.2e+13	0.000	-.1108001	-.1108001
C3762	-.2037647	9.40e-15	-2.2e+13	0.000	-.2037647	-.2037647
C3786	-.1869451	9.40e-15	-2.0e+13	0.000	-.1869451	-.1869451
C3790	-.4344466	9.40e-15	-4.6e+13	0.000	-.4344466	-.4344466
C3798	-.2491628	9.40e-15	-2.7e+13	0.000	-.2491628	-.2491628
C3806	-.4133101	9.40e-15	-4.4e+13	0.000	-.4133101	-.4133101
C3822	-.328181	9.40e-15	-3.5e+13	0.000	-.328181	-.328181
C3830	-.4759982	9.40e-15	-5.1e+13	0.000	-.4759982	-.4759982
C3834	-.0508567	9.40e-15	-5.4e+12	0.000	-.0508567	-.0508567
C3854	-.3097771	9.40e-15	-3.3e+13	0.000	-.3097771	-.3097771
C3886	-.3488819	9.40e-15	-3.7e+13	0.000	-.3488819	-.3488819
C3890	-.3127161	9.40e-15	-3.3e+13	0.000	-.3127161	-.3127161
C3894	-.4772777	9.40e-15	-5.1e+13	0.000	-.4772777	-.4772777
C3914	-.2544388	9.40e-15	-2.7e+13	0.000	-.2544388	-.2544388
C3930	-.2745668	9.40e-15	-2.9e+13	0.000	-.2745668	-.2745668
C3934	.1278788	9.40e-15	1.4e+13	0.000	.1278788	.1278788
C3938	-.4191324	9.40e-15	-4.5e+13	0.000	-.4191324	-.4191324
C3946	-.3836307	9.40e-15	-4.1e+13	0.000	-.3836307	-.3836307
C3954	-.4733552	9.40e-15	-5.0e+13	0.000	-.4733552	-.4733552
C3958	-.4325043	9.40e-15	-4.6e+13	0.000	-.4325043	-.4325043

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C3966   │  -.1757891    9.40e-15  -1.9e+13   0.000    -.1757891    -.1757891
C3974   │  -.4479983    9.40e-15  -4.8e+13   0.000    -.4479983    -.4479983
C3982   │  -.1950948    9.40e-15  -2.1e+13   0.000    -.1950948    -.1950948
C3990   │  -.4537851    9.40e-15  -4.8e+13   0.000    -.4537851    -.4537851
C4006   │  -.4319104    9.40e-15  -4.6e+13   0.000    -.4319104    -.4319104
C4014   │  -.4487306    9.40e-15  -4.8e+13   0.000    -.4487306    -.4487306
C4022   │  -.3593034    9.40e-15  -3.8e+13   0.000    -.3593034    -.3593034
C4034   │  -.4726611    9.40e-15  -5.0e+13   0.000    -.4726611    -.4726611
C4038   │   -.453239    9.40e-15  -4.8e+13   0.000     -.453239     -.453239
C4042   │   -.469428    9.40e-15  -5.0e+13   0.000     -.469428     -.469428
C4058   │  -.4378592    9.40e-15  -4.7e+13   0.000    -.4378592    -.4378592
C4066   │  -.1670654    9.40e-15  -1.8e+13   0.000    -.1670654    -.1670654
C4090   │  -.4349931    9.40e-15  -4.6e+13   0.000    -.4349931    -.4349931
C4098   │  -.4169815    9.40e-15  -4.4e+13   0.000    -.4169815    -.4169815
C4106   │  -.3796133    9.40e-15  -4.0e+13   0.000    -.3796133    -.3796133
C4110   │    .083225    9.40e-15   8.9e+12   0.000      .083225      .083225
C4114   │  -.3697299    9.40e-15  -3.9e+13   0.000    -.3697299    -.3697299
C4118   │  -.4348903    9.40e-15  -4.6e+13   0.000    -.4348903    -.4348903
C4142   │  -.4628415    9.40e-15  -4.9e+13   0.000    -.4628415    -.4628415
C4150   │  -.2065026    9.40e-15  -2.2e+13   0.000    -.2065026    -.2065026
C4154   │   -.390185    9.40e-15  -4.2e+13   0.000     -.390185     -.390185
C4162   │  -.3646217    9.40e-15  -3.9e+13   0.000    -.3646217    -.3646217
C4166   │  -.0483964    9.40e-15  -5.1e+12   0.000    -.0483964    -.0483964
C4170   │  -.4154959    9.40e-15  -4.4e+13   0.000    -.4154959    -.4154959
C4174   │  -.4280114    9.40e-15  -4.6e+13   0.000    -.4280114    -.4280114
C4186   │  -.0119857    9.40e-15  -1.3e+12   0.000    -.0119857    -.0119857
C4194   │  -.1482869    9.40e-15  -1.6e+13   0.000    -.1482869    -.1482869
C4202   │  -.4525976    9.40e-15  -4.8e+13   0.000    -.4525976    -.4525976
C4210   │  -.0167235    9.40e-15  -1.8e+12   0.000    -.0167235    -.0167235
C4214   │  -.0460549    9.40e-15  -4.9e+12   0.000    -.0460549    -.0460549
C4220   │  -.3668407    9.40e-15  -3.9e+13   0.000    -.3668407    -.3668407
C4222   │  -.1085255    9.40e-15  -1.2e+13   0.000    -.1085255    -.1085255
C4234   │  -.4695858    9.40e-15  -5.0e+13   0.000    -.4695858    -.4695858
C4254   │  -.3996906    9.40e-15  -4.3e+13   0.000    -.3996906    -.3996906
C4266   │  -.2530233    9.40e-15  -2.7e+13   0.000    -.2530233    -.2530233
C4268   │  -.3188681    9.40e-15  -3.4e+13   0.000    -.3188681    -.3188681
C4270   │  -.2912354    9.40e-15  -3.1e+13   0.000    -.2912354    -.2912354
C4310   │  -.4244305    9.40e-15  -4.5e+13   0.000    -.4244305    -.4244305
C4330   │  -.1086889    9.40e-15  -1.2e+13   0.000    -.1086889    -.1086889
C4334   │  -.3963587    9.40e-15  -4.2e+13   0.000    -.3963587    -.3963587
C4342   │   -.320403    9.40e-15  -3.4e+13   0.000     -.320403     -.320403
C4358   │  -.3958236    9.40e-15  -4.2e+13   0.000    -.3958236    -.3958236
C4362   │  -.3829603    9.40e-15  -4.1e+13   0.000    -.3829603    -.3829603
C4378   │  -.4645556    9.40e-15  -4.9e+13   0.000    -.4645556    -.4645556
C4390   │  -.2733168    9.40e-15  -2.9e+13   0.000    -.2733168    -.2733168
C4406   │  -.4221489    9.40e-15  -4.5e+13   0.000    -.4221489    -.4221489
C4410   │  -.4032147    9.40e-15  -4.3e+13   0.000    -.4032147    -.4032147
C4414   │  -.2394249    9.40e-15  -2.5e+13   0.000    -.2394249    -.2394249
C4418   │  -.2376558    9.40e-15  -2.5e+13   0.000    -.2376558    -.2376558
C4422   │  -.4748539    9.40e-15  -5.1e+13   0.000    -.4748539    -.4748539
C4430   │  -.4605512    9.40e-15  -4.9e+13   0.000    -.4605512    -.4605512
C4442   │  -.1941616    9.40e-15  -2.1e+13   0.000    -.1941616    -.1941616
C4470   │  -.4258049    9.40e-15  -4.5e+13   0.000    -.4258049    -.4258049
C4494   │  -.4151739    9.40e-15  -4.4e+13   0.000    -.4151739    -.4151739
C4506   │  -.4053257    9.40e-15  -4.3e+13   0.000    -.4053257    -.4053257
C4522   │  -.3062307    9.40e-15  -3.3e+13   0.000    -.3062307    -.3062307
C4530   │  -.4843629    9.40e-15  -5.2e+13   0.000    -.4843629    -.4843629
C4546   │  -.3979779    9.40e-15  -4.2e+13   0.000    -.3979779    -.3979779
C4550   │  -.2078609    9.40e-15  -2.2e+13   0.000    -.2078609    -.2078609
C4554   │  -.2475637    9.40e-15  -2.6e+13   0.000    -.2475637    -.2475637
C4578   │   -.362768    9.40e-15  -3.9e+13   0.000     -.362768     -.362768
C4582   │  -.4261778    9.40e-15  -4.5e+13   0.000    -.4261778    -.4261778
C4594   │  -.1978654    9.40e-15  -2.1e+13   0.000    -.1978654    -.1978654
C4606   │  -.4395265    9.40e-15  -4.7e+13   0.000    -.4395265    -.4395265
C4614   │  -.2338254    9.40e-15  -2.5e+13   0.000    -.2338254    -.2338254
C4622   │   -.37988     9.40e-15  -4.0e+13   0.000      -.37988      -.37988
C4634   │  -.0827297    9.40e-15  -8.8e+12   0.000    -.0827297    -.0827297
C4652   │  -.2645675    9.40e-15  -2.8e+13   0.000    -.2645675    -.2645675
C4654   │  -.4297331    9.40e-15  -4.6e+13   0.000    -.4297331    -.4297331
C4666   │  -.3619973    9.40e-15  -3.9e+13   0.000    -.3619973    -.3619973
C4670   │  -.2781083    9.40e-15  -3.0e+13   0.000    -.2781083    -.2781083
C4702   │   -.142986    9.40e-15  -1.5e+13   0.000     -.142986     -.142986
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C4722	-.3569936	9.40e-15	-3.8e+13	0.000	-.3569936	-.3569936
C4726	-.4383168	9.40e-15	-4.7e+13	0.000	-.4383168	-.4383168
C4730	-.3193179	9.40e-15	-3.4e+13	0.000	-.3193179	-.3193179
C4738	-.237785	9.40e-15	-2.5e+13	0.000	-.237785	-.237785
C4746	-.2844365	9.40e-15	-3.0e+13	0.000	-.2844365	-.2844365
C4758	-.3108011	9.40e-15	-3.3e+13	0.000	-.3108011	-.3108011
C4790	-.2033975	9.40e-15	-2.2e+13	0.000	-.2033975	-.2033975
C4794	-.4267184	9.40e-15	-4.5e+13	0.000	-.4267184	-.4267184
C4806	-.4434268	9.40e-15	-4.7e+13	0.000	-.4434268	-.4434268
C4814	-.432468	9.40e-15	-4.6e+13	0.000	-.432468	-.432468
C4826	-.4123714	9.40e-15	-4.4e+13	0.000	-.4123714	-.4123714
C4830	-.2792987	9.40e-15	-3.0e+13	0.000	-.2792987	-.2792987
C4854	-.3993286	9.40e-15	-4.2e+13	0.000	-.3993286	-.3993286
C4862	-.2923819	9.40e-15	-3.1e+13	0.000	-.2923819	-.2923819
C4866	-.0661655	9.40e-15	-7.0e+12	0.000	-.0661655	-.0661655
C4870	-.1886867	9.40e-15	-2.0e+13	0.000	-.1886867	-.1886867
C4890	-.4294093	9.40e-15	-4.6e+13	0.000	-.4294093	-.4294093
C4902	-.253543	9.40e-15	-2.7e+13	0.000	-.253543	-.253543
C4918	-.3368307	9.40e-15	-3.6e+13	0.000	-.3368307	-.3368307
C4934	-.3845352	9.40e-15	-4.1e+13	0.000	-.3845352	-.3845352
C4942	-.3630723	9.40e-15	-3.9e+13	0.000	-.3630723	-.3630723
C4962	-.2870896	9.40e-15	-3.1e+13	0.000	-.2870896	-.2870896
C4966	-.338714	9.40e-15	-3.6e+13	0.000	-.338714	-.338714
C4970	-.2763238	9.40e-15	-2.9e+13	0.000	-.2763238	-.2763238
C4974	-.400058	9.40e-15	-4.3e+13	0.000	-.400058	-.400058
_cons	.5178477	9.40e-15	5.5e+13	0.000	.5178477	.5178477

```
485 predict resid_election_gap, residuals

486 reg product_winner_gap i.msa_factor, robust cluster(msa_factor)
```

Linear regression

Number of obs	=	7,220
F(0, 379)	=	.
Prob > F	=	.
R-squared	=	0.2064
Root MSE	=	.13521

(Std. Err. adjusted for **380** clusters in msa_factor)

product_wi~p	Coef.	Robust Std. Err.	t	P>|t|	[95% Conf.	Interval]
msa_factor						
C1042	-.2426868	3.44e-15	-7.0e+13	0.000	-.2426868	-.2426868
C1050	-.2600133	3.44e-15	-7.5e+13	0.000	-.2600133	-.2600133
C1054	-.1736926	3.44e-15	-5.0e+13	0.000	-.1736926	-.1736926
C1058	-.2327908	3.44e-15	-6.8e+13	0.000	-.2327908	-.2327908
C1074	-.2360829	3.45e-15	-6.9e+13	0.000	-.2360829	-.2360829
C1078	-.1292642	3.44e-15	-3.8e+13	0.000	-.1292642	-.1292642
C1090	-.2649364	3.45e-15	-7.7e+13	0.000	-.2649364	-.2649364
C1102	-.1025594	3.44e-15	-3.0e+13	0.000	-.1025594	-.1025594
C1110	.0343092	3.45e-15	1.0e+13	0.000	.0343092	.0343092
C1118	-.2390302	3.44e-15	-6.9e+13	0.000	-.2390302	-.2390302
C1126	-.2205648	3.44e-15	-6.4e+13	0.000	-.2205648	-.2205648
C1146	-.1404967	3.44e-15	-4.1e+13	0.000	-.1404967	-.1404967
C1150	-.1337253	3.44e-15	-3.9e+13	0.000	-.1337253	-.1337253
C1154	-.2147912	3.44e-15	-6.2e+13	0.000	-.2147912	-.2147912
C1170	-.2399235	3.44e-15	-7.0e+13	0.000	-.2399235	-.2399235
C1202	-.2591133	3.44e-15	-7.5e+13	0.000	-.2591133	-.2591133
C1206	-.2536498	3.44e-15	-7.4e+13	0.000	-.2536498	-.2536498
C1210	-.2348476	3.44e-15	-6.8e+13	0.000	-.2348476	-.2348476
C1222	-.1679229	3.44e-15	-4.9e+13	0.000	-.1679229	-.1679229
C1226	-.2084117	3.45e-15	-6.0e+13	0.000	-.2084117	-.2084117
C1242	-.2255257	3.44e-15	-6.5e+13	0.000	-.2255257	-.2255257
C1254	-.1590481	3.44e-15	-4.6e+13	0.000	-.1590481	-.1590481
C1258	-.2289848	3.44e-15	-6.6e+13	0.000	-.2289848	-.2289848
C1262	-.2602239	3.45e-15	-7.6e+13	0.000	-.2602239	-.2602239
C1270	-.2563341	3.44e-15	-7.4e+13	0.000	-.2563341	-.2563341
C1294	-.2300302	3.44e-15	-6.7e+13	0.000	-.2300302	-.2300302
C1298	-.2521615	3.44e-15	-7.3e+13	0.000	-.2521615	-.2521615

C1302	-.2384381	3.44e-15	-6.9e+13	0.000	-.2384381	-.2384381
C1314	-.2266524	3.44e-15	-6.6e+13	0.000	-.2266524	-.2266524
C1322	-.2012964	3.44e-15	-5.8e+13	0.000	-.2012964	-.2012964
C1338	-.2343481	3.44e-15	-6.8e+13	0.000	-.2343481	-.2343481
C1346	-.230395	3.44e-15	-6.7e+13	0.000	-.230395	-.230395
C1374	-.1525911	3.44e-15	-4.4e+13	0.000	-.1525911	-.1525911
C1378	-.2742691	3.44e-15	-8.0e+13	0.000	-.2742691	-.2742691
C1382	-.1770091	3.44e-15	-5.1e+13	0.000	-.1770091	-.1770091
C1390	-.0837276	3.44e-15	-2.4e+13	0.000	-.0837276	-.0837276
C1398	-.2236842	3.44e-15	-6.5e+13	0.000	-.2236842	-.2236842
C1401	-.2274456	3.44e-15	-6.6e+13	0.000	-.2274456	-.2274456
C1402	-.2014708	3.44e-15	-5.8e+13	0.000	-.2014708	-.2014708
C1410	-.1714499	3.44e-15	-5.0e+13	0.000	-.1714499	-.1714499
C1426	-.1318699	3.44e-15	-3.8e+13	0.000	-.1318699	-.1318699
C1446	-.2040751	3.44e-15	-5.9e+13	0.000	-.2040751	-.2040751
C1450	-.1170665	3.44e-15	-3.4e+13	0.000	-.1170665	-.1170665
C1454	-.1187936	3.44e-15	-3.4e+13	0.000	-.1187936	-.1187936
C1474	-.2517227	3.44e-15	-7.3e+13	0.000	-.2517227	-.2517227
C1486	-.2417733	3.44e-15	-7.0e+13	0.000	-.2417733	-.2417733
C1518	-.173801	3.44e-15	-5.0e+13	0.000	-.173801	-.173801
C1526	-.1225153	3.44e-15	-3.6e+13	0.000	-.1225153	-.1225153
C1538	-.2375384	3.44e-15	-6.9e+13	0.000	-.2375384	-.2375384
C1550	-.1803848	3.44e-15	-5.2e+13	0.000	-.1803848	-.1803848
C1554	-.1389457	3.44e-15	-4.0e+13	0.000	-.1389457	-.1389457
C1568	-.1765224	3.44e-15	-5.1e+13	0.000	-.1765224	-.1765224
C1594	-.2561795	3.44e-15	-7.4e+13	0.000	-.2561795	-.2561795
C1598	-.1888482	3.44e-15	-5.5e+13	0.000	-.1888482	-.1888482
C1602	-.0879	3.44e-15	-2.6e+13	0.000	-.0879	-.0879
C1606	-.2517094	3.44e-15	-7.3e+13	0.000	-.2517094	-.2517094
C1618	-.2039469	3.44e-15	-5.9e+13	0.000	-.2039469	-.2039469
C1622	-.0728275	3.44e-15	-2.1e+13	0.000	-.0728275	-.0728275
C1630	-.230316	3.44e-15	-6.7e+13	0.000	-.230316	-.230316
C1654	-.0604757	3.44e-15	-1.8e+13	0.000	-.0604757	-.0604757
C1658	-.264178	3.44e-15	-7.7e+13	0.000	-.264178	-.264178
C1662	-.2618955	3.45e-15	-7.6e+13	0.000	-.2618955	-.2618955
C1670	-.2424609	3.44e-15	-7.0e+13	0.000	-.2424609	-.2424609
C1674	-.2191741	3.44e-15	-6.4e+13	0.000	-.2191741	-.2191741
C1682	-.2304995	3.44e-15	-6.7e+13	0.000	-.2304995	-.2304995
C1686	-.1724751	3.44e-15	-5.0e+13	0.000	-.1724751	-.1724751
C1694	-.1262506	3.44e-15	-3.7e+13	0.000	-.1262506	-.1262506
C1698	-.1662489	3.44e-15	-4.8e+13	0.000	-.1662489	-.1662489
C1702	-.2353659	3.44e-15	-6.8e+13	0.000	-.2353659	-.2353659
C1714	-.1775055	3.44e-15	-5.2e+13	0.000	-.1775055	-.1775055
C1730	-.1958886	3.44e-15	-5.7e+13	0.000	-.1958886	-.1958886
C1742	-.0509356	3.45e-15	-1.5e+13	0.000	-.0509356	-.0509356
C1746	-.1980877	3.44e-15	-5.8e+13	0.000	-.1980877	-.1980877
C1766	-.0929954	3.45e-15	-2.7e+13	0.000	-.0929954	-.0929954
C1778	-.1073268	3.44e-15	-3.1e+13	0.000	-.1073268	-.1073268
C1782	-.1222149	3.44e-15	-3.5e+13	0.000	-.1222149	-.1222149
C1786	-.2701668	3.44e-15	-7.8e+13	0.000	-.2701668	-.2701668
C1790	-.2535959	3.44e-15	-7.4e+13	0.000	-.2535959	-.2535959
C1798	-.2577108	3.44e-15	-7.5e+13	0.000	-.2577108	-.2577108
C1802	-.1180138	3.44e-15	-3.4e+13	0.000	-.1180138	-.1180138
C1814	-.2461135	3.44e-15	-7.1e+13	0.000	-.2461135	-.2461135
C1858	-.2331107	3.44e-15	-6.8e+13	0.000	-.2331107	-.2331107
C1870	-.175924	3.44e-15	-5.1e+13	0.000	-.175924	-.175924
C1888	-.0108938	3.45e-15	-3.2e+12	0.000	-.0108938	-.0108938
C1906	-.1225932	3.44e-15	-3.6e+13	0.000	-.1225932	-.1225932
C1910	-.1893477	3.44e-15	-5.5e+13	0.000	-.1893477	-.1893477
C1914	-.0458278	3.45e-15	-1.3e+13	0.000	-.0458278	-.0458278
C1918	-.2268564	3.44e-15	-6.6e+13	0.000	-.2268564	-.2268564
C1930	.0016267	3.45e-15	4.7e+11	0.000	.0016267	.0016267
C1934	-.234559	3.44e-15	-6.8e+13	0.000	-.234559	-.234559
C1938	-.2574472	3.44e-15	-7.5e+13	0.000	-.2574472	-.2574472
C1946	-.118043	3.44e-15	-3.4e+13	0.000	-.118043	-.118043
C1950	-.2526491	3.44e-15	-7.3e+13	0.000	-.2526491	-.2526491
C1966	-.2690978	3.44e-15	-7.8e+13	0.000	-.2690978	-.2690978
C1974	-.2383184	3.44e-15	-6.9e+13	0.000	-.2383184	-.2383184
C1978	-.2637338	3.44e-15	-7.7e+13	0.000	-.2637338	-.2637338
C1982	-.2064862	3.44e-15	-6.0e+13	0.000	-.2064862	-.2064862
C2002	-.0417037	3.44e-15	-1.2e+13	0.000	-.0417037	-.0417037
C2010	-.2289346	3.44e-15	-6.6e+13	0.000	-.2289346	-.2289346

C2022	-.2256621	3.44e-15	-6.6e+13	0.000	-.2256621	-.2256621
C2026	-.173031	3.44e-15	-5.0e+13	0.000	-.173031	-.173031
C2050	-.1344861	3.44e-15	-3.9e+13	0.000	-.1344861	-.1344861
C2070	-.2340211	3.44e-15	-6.8e+13	0.000	-.2340211	-.2340211
C2074	-.2437049	3.44e-15	-7.1e+13	0.000	-.2437049	-.2437049
C2094	-.1797665	3.44e-15	-5.2e+13	0.000	-.1797665	-.1797665
C2106	-.1185725	3.44e-15	-3.4e+13	0.000	-.1185725	-.1185725
C2114	-.0870715	3.45e-15	-2.5e+13	0.000	-.0870715	-.0870715
C2130	-.244512	3.44e-15	-7.1e+13	0.000	-.244512	-.244512
C2134	-.1665127	3.44e-15	-4.8e+13	0.000	-.1665127	-.1665127
C2150	-.2241284	3.44e-15	-6.5e+13	0.000	-.2241284	-.2241284
C2166	-.1953417	3.44e-15	-5.7e+13	0.000	-.1953417	-.1953417
C2178	-.196773	3.44e-15	-5.7e+13	0.000	-.196773	-.196773
C2202	-.2003514	3.44e-15	-5.8e+13	0.000	-.2003514	-.2003514
C2214	-.1245514	3.44e-15	-3.6e+13	0.000	-.1245514	-.1245514
C2218	-.217989	3.44e-15	-6.3e+13	0.000	-.217989	-.217989
C2222	-.1555316	3.44e-15	-4.5e+13	0.000	-.1555316	-.1555316
C2238	-.2337707	3.44e-15	-6.8e+13	0.000	-.2337707	-.2337707
C2242	-.1745612	3.44e-15	-5.1e+13	0.000	-.1745612	-.1745612
C2250	-.2464169	3.44e-15	-7.2e+13	0.000	-.2464169	-.2464169
C2252	-.186262	3.44e-15	-5.4e+13	0.000	-.186262	-.186262
C2254	-.1666213	3.44e-15	-4.8e+13	0.000	-.1666213	-.1666213
C2266	-.2296748	3.44e-15	-6.7e+13	0.000	-.2296748	-.2296748
C2290	-.1363431	3.44e-15	-4.0e+13	0.000	-.1363431	-.1363431
C2306	-.1424853	3.44e-15	-4.1e+13	0.000	-.1424853	-.1424853
C2342	-.2398065	3.44e-15	-7.0e+13	0.000	-.2398065	-.2398065
C2346	-.1468454	3.44e-15	-4.3e+13	0.000	-.1468454	-.1468454
C2354	-.2376914	3.44e-15	-6.9e+13	0.000	-.2376914	-.2376914
C2358	-.0112084	3.45e-15	-3.3e+12	0.000	-.0112084	-.0112084
C2390	-.1151773	3.44e-15	-3.3e+13	0.000	-.1151773	-.1151773
C2402	-.2222499	3.44e-15	-6.5e+13	0.000	-.2222499	-.2222499
C2414	-.1846004	3.44e-15	-5.4e+13	0.000	-.1846004	-.1846004
C2422	-.1922253	3.44e-15	-5.6e+13	0.000	-.1922253	-.1922253
C2426	-.065592	3.45e-15	-1.9e+13	0.000	-.065592	-.065592
C2430	-.1006924	3.44e-15	-2.9e+13	0.000	-.1006924	-.1006924
C2434	-.1690251	3.44e-15	-4.9e+13	0.000	-.1690251	-.1690251
C2442	-.1404993	3.44e-15	-4.1e+13	0.000	-.1404993	-.1404993
C2450	-.1981601	3.44e-15	-5.8e+13	0.000	-.1981601	-.1981601
C2454	-.1652554	3.44e-15	-4.8e+13	0.000	-.1652554	-.1652554
C2458	-.2277287	3.44e-15	-6.6e+13	0.000	-.2277287	-.2277287
C2466	-.2446111	3.44e-15	-7.1e+13	0.000	-.2446111	-.2446111
C2478	-.2372631	3.44e-15	-6.9e+13	0.000	-.2372631	-.2372631
C2486	-.1060566	3.45e-15	-3.1e+13	0.000	-.1060566	-.1060566
C2506	-.1111127	3.44e-15	-3.2e+13	0.000	-.1111127	-.1111127
C2518	-.1481876	3.44e-15	-4.3e+13	0.000	-.1481876	-.1481876
C2522	-.1707656	3.44e-15	-5.0e+13	0.000	-.1707656	-.1707656
C2526	-.1751024	3.44e-15	-5.1e+13	0.000	-.1751024	-.1751024
C2542	-.2035237	3.44e-15	-5.9e+13	0.000	-.2035237	-.2035237
C2550	-.0968094	3.45e-15	-2.8e+13	0.000	-.0968094	-.0968094
C2554	-.1929844	3.44e-15	-5.6e+13	0.000	-.1929844	-.1929844
C2562	-.0836129	3.45e-15	-2.4e+13	0.000	-.0836129	-.0836129
C2586	-.0984464	3.44e-15	-2.9e+13	0.000	-.0984464	-.0984464
C2594	-.2192358	3.44e-15	-6.4e+13	0.000	-.2192358	-.2192358
C2598	-.2130429	3.44e-15	-6.2e+13	0.000	-.2130429	-.2130429
C2614	-.192972	3.44e-15	-5.6e+13	0.000	-.192972	-.192972
C2630	-.2105401	3.44e-15	-6.1e+13	0.000	-.2105401	-.2105401
C2638	-.1312077	3.44e-15	-3.8e+13	0.000	-.1312077	-.1312077
C2642	-.2275752	3.44e-15	-6.6e+13	0.000	-.2275752	-.2275752
C2658	-.2031303	3.44e-15	-5.9e+13	0.000	-.2031303	-.2031303
C2662	-.1908002	3.44e-15	-5.5e+13	0.000	-.1908002	-.1908002
C2682	.0112766	3.45e-15	3.3e+12	0.000	.0112766	.0112766
C2690	-.1929123	3.44e-15	-5.6e+13	0.000	-.1929123	-.1929123
C2698	-.1620144	3.44e-15	-4.7e+13	0.000	-.1620144	-.1620144
C2706	-.1356946	3.44e-15	-3.9e+13	0.000	-.1356946	-.1356946
C2710	-.2258502	3.44e-15	-6.6e+13	0.000	-.2258502	-.2258502
C2714	-.2339019	3.44e-15	-6.8e+13	0.000	-.2339019	-.2339019
C2718	-.216272	3.44e-15	-6.3e+13	0.000	-.216272	-.216272
C2726	-.165165	3.44e-15	-4.8e+13	0.000	-.165165	-.165165
C2734	-.1000203	3.44e-15	-2.9e+13	0.000	-.1000203	-.1000203
C2750	-.1919055	3.44e-15	-5.6e+13	0.000	-.1919055	-.1919055
C2762	-.1130334	3.44e-15	-3.3e+13	0.000	-.1130334	-.1130334
C2774	-.0999038	3.44e-15	-2.9e+13	0.000	-.0999038	-.0999038

C2778	-.2377015	3.44e-15	-6.9e+13	0.000	-.2377015	-.2377015
C2786	-.2348416	3.44e-15	-6.8e+13	0.000	-.2348416	-.2348416
C2790	-.0527455	3.45e-15	-1.5e+13	0.000	-.0527455	-.0527455
C2798	-.0803518	3.44e-15	-2.3e+13	0.000	-.0803518	-.0803518
C2802	-.2429595	3.44e-15	-7.1e+13	0.000	-.2429595	-.2429595
C2810	-.245308	3.44e-15	-7.1e+13	0.000	-.245308	-.245308
C2814	-.2581466	3.44e-15	-7.5e+13	0.000	-.2581466	-.2581466
C2842	-.1267028	3.44e-15	-3.7e+13	0.000	-.1267028	-.1267028
C2866	-.123222	3.45e-15	-3.6e+13	0.000	-.123222	-.123222
C2870	-.0965171	3.44e-15	-2.8e+13	0.000	-.0965171	-.0965171
C2874	-.2044731	3.44e-15	-5.9e+13	0.000	-.2044731	-.2044731
C2894	-.156035	3.44e-15	-4.5e+13	0.000	-.156035	-.156035
C2902	-.1420734	3.44e-15	-4.1e+13	0.000	-.1420734	-.1420734
C2910	-.2247753	3.44e-15	-6.5e+13	0.000	-.2247753	-.2247753
C2918	-.145138	3.44e-15	-4.2e+13	0.000	-.145138	-.145138
C2920	-.1774609	3.44e-15	-5.2e+13	0.000	-.1774609	-.1774609
C2934	-.1947227	3.44e-15	-5.7e+13	0.000	-.1947227	-.1947227
C2942	-.1293487	3.44e-15	-3.8e+13	0.000	-.1293487	-.1293487
C2946	-.2237445	3.44e-15	-6.5e+13	0.000	-.2237445	-.2237445
C2954	-.1306701	3.44e-15	-3.8e+13	0.000	-.1306701	-.1306701
C2962	-.2232622	3.44e-15	-6.5e+13	0.000	-.2232622	-.2232622
C2970	-.0971929	3.44e-15	-2.8e+13	0.000	-.0971929	-.0971929
C2974	-.2340705	3.44e-15	-6.8e+13	0.000	-.2340705	-.2340705
C2982	-.2315849	3.44e-15	-6.7e+13	0.000	-.2315849	-.2315849
C2994	-.1854833	3.44e-15	-5.4e+13	0.000	-.1854833	-.1854833
C3002	-.1655358	3.44e-15	-4.8e+13	0.000	-.1655358	-.1655358
C3014	-.118356	3.44e-15	-3.4e+13	0.000	-.118356	-.118356
C3030	-.1326606	3.44e-15	-3.9e+13	0.000	-.1326606	-.1326606
C3034	-.2285389	3.44e-15	-6.6e+13	0.000	-.2285389	-.2285389
C3046	-.2351202	3.44e-15	-6.8e+13	0.000	-.2351202	-.2351202
C3062	-.1039242	3.45e-15	-3.0e+13	0.000	-.1039242	-.1039242
C3070	-.2354765	3.44e-15	-6.8e+13	0.000	-.2354765	-.2354765
C3078	-.2747321	3.44e-15	-8.0e+13	0.000	-.2747321	-.2747321
C3086	.0229667	3.44e-15	6.7e+12	0.000	.0229667	.0229667
C3098	-.0506125	3.45e-15	-1.5e+13	0.000	-.0506125	-.0506125
C3102	-.2477943	3.44e-15	-7.2e+13	0.000	-.2477943	-.2477943
C3108	-.1789156	3.44e-15	-5.2e+13	0.000	-.1789156	-.1789156
C3114	-.2623119	3.44e-15	-7.6e+13	0.000	-.2623119	-.2623119
C3118	-.0311769	3.45e-15	-9.0e+12	0.000	-.0311769	-.0311769
C3134	-.1355789	3.44e-15	-3.9e+13	0.000	-.1355789	-.1355789
C3142	-.263908	3.44e-15	-7.7e+13	0.000	-.263908	-.263908
C3146	-.1628682	3.44e-15	-4.7e+13	0.000	-.1628682	-.1628682
C3154	-.1298689	3.44e-15	-3.8e+13	0.000	-.1298689	-.1298689
C3170	-.2818859	3.45e-15	-8.2e+13	0.000	-.2818859	-.2818859
C3174	-.1488234	3.44e-15	-4.3e+13	0.000	-.1488234	-.1488234
C3186	-.248665	3.44e-15	-7.2e+13	0.000	-.248665	-.248665
C3190	-.1638307	3.44e-15	-4.8e+13	0.000	-.1638307	-.1638307
C3258	-.1329575	3.44e-15	-3.9e+13	0.000	-.1329575	-.1329575
C3278	-.2315318	3.44e-15	-6.7e+13	0.000	-.2315318	-.2315318
C3282	-.2482189	3.44e-15	-7.2e+13	0.000	-.2482189	-.2482189
C3290	-.2221372	3.44e-15	-6.4e+13	0.000	-.2221372	-.2221372
C3310	-.1972137	3.44e-15	-5.7e+13	0.000	-.1972137	-.1972137
C3314	-.2193444	3.44e-15	-6.4e+13	0.000	-.2193444	-.2193444
C3322	-.2104505	3.44e-15	-6.1e+13	0.000	-.2104505	-.2104505
C3326	.0460696	3.44e-15	1.3e+13	0.000	.0460696	.0460696
C3334	-.2640081	3.44e-15	-7.7e+13	0.000	-.2640081	-.2640081
C3346	-.2491157	3.44e-15	-7.2e+13	0.000	-.2491157	-.2491157
C3354	-.1894876	3.44e-15	-5.5e+13	0.000	-.1894876	-.1894876
C3366	-.2139515	3.44e-15	-6.2e+13	0.000	-.2139515	-.2139515
C3370	-.2368041	3.44e-15	-6.9e+13	0.000	-.2368041	-.2368041
C3374	-.1390582	3.44e-15	-4.0e+13	0.000	-.1390582	-.1390582
C3378	-.2522698	3.44e-15	-7.3e+13	0.000	-.2522698	-.2522698
C3386	-.2447324	3.44e-15	-7.1e+13	0.000	-.2447324	-.2447324
C3406	-.220644	3.44e-15	-6.4e+13	0.000	-.220644	-.220644
C3410	-.0910986	3.44e-15	-2.6e+13	0.000	-.0910986	-.0910986
C3458	-.2561873	3.44e-15	-7.4e+13	0.000	-.2561873	-.2561873
C3462	-.2078537	3.44e-15	-6.0e+13	0.000	-.2078537	-.2078537
C3474	-.2031953	3.44e-15	-5.9e+13	0.000	-.2031953	-.2031953
C3482	-.1685123	3.44e-15	-4.9e+13	0.000	-.1685123	-.1685123
C3490	-.1735461	3.44e-15	-5.0e+13	0.000	-.1735461	-.1735461
C3494	-.1265594	3.45e-15	-3.7e+13	0.000	-.1265594	-.1265594
C3498	-.2494974	3.44e-15	-7.2e+13	0.000	-.2494974	-.2494974

C3510	-.1745304	3.44e-15	-5.1e+13	0.000	-.1745304	-.1745304
C3530	-.2065644	3.44e-15	-6.0e+13	0.000	-.2065644	-.2065644
C3538	-.3007403	3.44e-15	-8.7e+13	0.000	-.3007403	-.3007403
C3562	-.1770476	3.44e-15	-5.1e+13	0.000	-.1770476	-.1770476
C3566	-.2231916	3.44e-15	-6.5e+13	0.000	-.2231916	-.2231916
C3584	-.2428347	3.44e-15	-7.1e+13	0.000	-.2428347	-.2428347
C3598	-.2194924	3.44e-15	-6.4e+13	0.000	-.2194924	-.2194924
C3610	-.2033005	3.44e-15	-5.9e+13	0.000	-.2033005	-.2033005
C3614	-.2332674	3.44e-15	-6.8e+13	0.000	-.2332674	-.2332674
C3622	-.0425609	3.44e-15	-1.2e+13	0.000	-.0425609	-.0425609
C3626	-.0504956	3.44e-15	-1.5e+13	0.000	-.0504956	-.0504956
C3642	-.136159	3.44e-15	-4.0e+13	0.000	-.136159	-.136159
C3650	-.2155757	3.44e-15	-6.3e+13	0.000	-.2155757	-.2155757
C3654	-.1966414	3.44e-15	-5.7e+13	0.000	-.1966414	-.1966414
C3674	-.2426972	3.44e-15	-7.0e+13	0.000	-.2426972	-.2426972
C3678	-.2329853	3.44e-15	-6.8e+13	0.000	-.2329853	-.2329853
C3698	-.1628116	3.44e-15	-4.7e+13	0.000	-.1628116	-.1628116
C3710	-.2517675	3.44e-15	-7.3e+13	0.000	-.2517675	-.2517675
C3734	-.2199803	3.44e-15	-6.4e+13	0.000	-.2199803	-.2199803
C3746	-.0722398	3.45e-15	-2.1e+13	0.000	-.0722398	-.0722398
C3762	-.1170056	3.44e-15	-3.4e+13	0.000	-.1170056	-.1170056
C3786	-.0982337	3.45e-15	-2.9e+13	0.000	-.0982337	-.0982337
C3790	-.2392388	3.44e-15	-6.9e+13	0.000	-.2392388	-.2392388
C3798	-.1749279	3.44e-15	-5.1e+13	0.000	-.1749279	-.1749279
C3806	-.2440474	3.44e-15	-7.1e+13	0.000	-.2440474	-.2440474
C3822	-.2367325	3.44e-15	-6.9e+13	0.000	-.2367325	-.2367325
C3830	-.2889878	3.45e-15	-8.4e+13	0.000	-.2889878	-.2889878
C3834	-.0789613	3.44e-15	-2.3e+13	0.000	-.0789613	-.0789613
C3854	-.1681481	3.44e-15	-4.9e+13	0.000	-.1681481	-.1681481
C3886	-.2019122	3.44e-15	-5.9e+13	0.000	-.2019122	-.2019122
C3890	-.1947708	3.44e-15	-5.7e+13	0.000	-.1947708	-.1947708
C3894	-.2704991	3.44e-15	-7.9e+13	0.000	-.2704991	-.2704991
C3914	-.1543712	3.44e-15	-4.5e+13	0.000	-.1543712	-.1543712
C3930	-.1945729	3.44e-15	-5.6e+13	0.000	-.1945729	-.1945729
C3934	.0543324	3.44e-15	1.6e+13	0.000	.0543324	.0543324
C3938	-.2405632	3.44e-15	-7.0e+13	0.000	-.2405632	-.2405632
C3946	-.2134038	3.44e-15	-6.2e+13	0.000	-.2134038	-.2134038
C3954	-.2578083	3.44e-15	-7.5e+13	0.000	-.2578083	-.2578083
C3958	-.2358759	3.44e-15	-6.8e+13	0.000	-.2358759	-.2358759
C3966	-.0799688	3.45e-15	-2.3e+13	0.000	-.0799688	-.0799688
C3974	-.2345415	3.44e-15	-6.8e+13	0.000	-.2345415	-.2345415
C3982	-.0951706	3.44e-15	-2.8e+13	0.000	-.0951706	-.0951706
C3990	-.2395439	3.44e-15	-7.0e+13	0.000	-.2395439	-.2395439
C4006	-.2305949	3.44e-15	-6.7e+13	0.000	-.2305949	-.2305949
C4014	-.2455473	3.44e-15	-7.1e+13	0.000	-.2455473	-.2455473
C4022	-.1960803	3.44e-15	-5.7e+13	0.000	-.1960803	-.1960803
C4034	-.2571142	3.44e-15	-7.5e+13	0.000	-.2571142	-.2571142
C4038	-.245111	3.44e-15	-7.1e+13	0.000	-.245111	-.245111
C4042	-.2538811	3.44e-15	-7.4e+13	0.000	-.2538811	-.2538811
C4058	-.2394596	3.44e-15	-7.0e+13	0.000	-.2394596	-.2394596
C4066	-.112036	3.44e-15	-3.3e+13	0.000	-.112036	-.112036
C4090	-.2428031	3.44e-15	-7.0e+13	0.000	-.2428031	-.2428031
C4098	-.2389611	3.44e-15	-6.9e+13	0.000	-.2389611	-.2389611
C4106	-.2059761	3.44e-15	-6.0e+13	0.000	-.2059761	-.2059761
C4110	.0444688	3.44e-15	1.3e+13	0.000	.0444688	.0444688
C4114	-.2085062	3.44e-15	-6.1e+13	0.000	-.2085062	-.2085062
C4118	-.2525088	3.44e-15	-7.3e+13	0.000	-.2525088	-.2525088
C4142	-.2545194	3.44e-15	-7.4e+13	0.000	-.2545194	-.2545194
C4150	-.1441497	3.44e-15	-4.2e+13	0.000	-.1441497	-.1441497
C4154	-.2159376	3.44e-15	-6.3e+13	0.000	-.2159376	-.2159376
C4162	-.208836	3.44e-15	-6.1e+13	0.000	-.208836	-.208836
C4166	-.0231895	3.44e-15	-6.7e+12	0.000	-.0231895	-.0231895
C4170	-.2272664	3.44e-15	-6.6e+13	0.000	-.2272664	-.2272664
C4174	-.243612	3.44e-15	-7.1e+13	0.000	-.243612	-.243612
C4186	-.0743293	3.44e-15	-2.2e+13	0.000	-.0743293	-.0743293
C4194	-.1283019	3.44e-15	-3.7e+13	0.000	-.1283019	-.1283019
C4202	-.2498487	3.44e-15	-7.3e+13	0.000	-.2498487	-.2498487
C4210	-.0638941	3.44e-15	-1.9e+13	0.000	-.0638941	-.0638941
C4214	-.0788606	3.44e-15	-2.3e+13	0.000	-.0788606	-.0788606
C4220	-.2160651	3.44e-15	-6.3e+13	0.000	-.2160651	-.2160651
C4222	-.1014587	3.44e-15	-2.9e+13	0.000	-.1014587	-.1014587
C4234	-.2591365	3.44e-15	-7.5e+13	0.000	-.2591365	-.2591365

C4254	-.2253409	3.44e-15	-6.5e+13	0.000	-.2253409	-.2253409
C4266	-.1744139	3.44e-15	-5.1e+13	0.000	-.1744139	-.1744139
C4268	-.1815451	3.44e-15	-5.3e+13	0.000	-.1815451	-.1815451
C4270	-.1621463	3.44e-15	-4.7e+13	0.000	-.1621463	-.1621463
C4310	-.2309392	3.44e-15	-6.7e+13	0.000	-.2309392	-.2309392
C4330	-.0738819	3.44e-15	-2.1e+13	0.000	-.0738819	-.0738819
C4334	-.2325099	3.44e-15	-6.7e+13	0.000	-.2325099	-.2325099
C4342	-.1953845	3.44e-15	-5.7e+13	0.000	-.1953845	-.1953845
C4358	-.2157381	3.44e-15	-6.3e+13	0.000	-.2157381	-.2157381
C4362	-.2016419	3.44e-15	-5.9e+13	0.000	-.2016419	-.2016419
C4378	-.2490087	3.44e-15	-7.2e+13	0.000	-.2490087	-.2490087
C4390	-.1460335	3.44e-15	-4.2e+13	0.000	-.1460335	-.1460335
C4406	-.2306173	3.44e-15	-6.7e+13	0.000	-.2306173	-.2306173
C4410	-.2085553	3.44e-15	-6.1e+13	0.000	-.2085553	-.2085553
C4414	-.1724887	3.44e-15	-5.0e+13	0.000	-.1724887	-.1724887
C4418	-.1349933	3.44e-15	-3.9e+13	0.000	-.1349933	-.1349933
C4422	-.2674767	3.44e-15	-7.8e+13	0.000	-.2674767	-.2674767
C4430	-.2487657	3.44e-15	-7.2e+13	0.000	-.2487657	-.2487657
C4442	-.091394	3.45e-15	-2.7e+13	0.000	-.091394	-.091394
C4470	-.2329302	3.44e-15	-6.8e+13	0.000	-.2329302	-.2329302
C4494	-.2221494	3.44e-15	-6.4e+13	0.000	-.2221494	-.2221494
C4506	-.2289476	3.44e-15	-6.6e+13	0.000	-.2289476	-.2289476
C4522	-.2132771	3.44e-15	-6.2e+13	0.000	-.2132771	-.2132771
C4530	-.2704671	3.45e-15	-7.8e+13	0.000	-.2704671	-.2704671
C4546	-.1999427	3.44e-15	-5.8e+13	0.000	-.1999427	-.1999427
C4550	-.153207	3.44e-15	-4.4e+13	0.000	-.153207	-.153207
C4554	-.1624559	3.44e-15	-4.7e+13	0.000	-.1624559	-.1624559
C4578	-.2050808	3.44e-15	-6.0e+13	0.000	-.2050808	-.2050808
C4582	-.2404391	3.44e-15	-7.0e+13	0.000	-.2404391	-.2404391
C4594	-.1474805	3.44e-15	-4.3e+13	0.000	-.1474805	-.1474805
C4606	-.27496	3.44e-15	-8.0e+13	0.000	-.27496	-.27496
C4614	-.1469049	3.44e-15	-4.3e+13	0.000	-.1469049	-.1469049
C4622	-.2160562	3.44e-15	-6.3e+13	0.000	-.2160562	-.2160562
C4634	-.0453128	3.44e-15	-1.3e+13	0.000	-.0453128	-.0453128
C4652	-.133574	3.44e-15	-3.9e+13	0.000	-.133574	-.133574
C4654	-.2338776	3.44e-15	-6.8e+13	0.000	-.2338776	-.2338776
C4666	-.1960367	3.44e-15	-5.7e+13	0.000	-.1960367	-.1960367
C4670	-.1803433	3.44e-15	-5.2e+13	0.000	-.1803433	-.1803433
C4702	-.0750431	3.44e-15	-2.2e+13	0.000	-.0750431	-.0750431
C4722	-.2052959	3.44e-15	-6.0e+13	0.000	-.2052959	-.2052959
C4726	-.2354077	3.44e-15	-6.8e+13	0.000	-.2354077	-.2354077
C4730	-.1677107	3.44e-15	-4.9e+13	0.000	-.1677107	-.1677107
C4738	-.1339287	3.44e-15	-3.9e+13	0.000	-.1339287	-.1339287
C4746	-.1519101	3.44e-15	-4.4e+13	0.000	-.1519101	-.1519101
C4758	-.1654001	3.44e-15	-4.8e+13	0.000	-.1654001	-.1654001
C4790	-.1478154	3.44e-15	-4.3e+13	0.000	-.1478154	-.1478154
C4794	-.2362341	3.45e-15	-6.9e+13	0.000	-.2362341	-.2362341
C4806	-.2402086	3.44e-15	-7.0e+13	0.000	-.2402086	-.2402086
C4814	-.2297404	3.44e-15	-6.7e+13	0.000	-.2297404	-.2297404
C4826	-.2410557	3.44e-15	-7.0e+13	0.000	-.2410557	-.2410557
C4830	-.1379247	3.44e-15	-4.0e+13	0.000	-.1379247	-.1379247
C4854	-.2296953	3.44e-15	-6.7e+13	0.000	-.2296953	-.2296953
C4862	-.1596569	3.44e-15	-4.6e+13	0.000	-.1596569	-.1596569
C4866	-.0492542	3.45e-15	-1.4e+13	0.000	-.0492542	-.0492542
C4870	-.0940016	3.45e-15	-2.7e+13	0.000	-.0940016	-.0940016
C4890	-.2384472	3.44e-15	-6.9e+13	0.000	-.2384472	-.2384472
C4902	-.1249001	3.44e-15	-3.6e+13	0.000	-.1249001	-.1249001
C4918	-.1717263	3.44e-15	-5.0e+13	0.000	-.1717263	-.1717263
C4934	-.249959	3.44e-15	-7.3e+13	0.000	-.249959	-.249959
C4942	-.1944771	3.44e-15	-5.6e+13	0.000	-.1944771	-.1944771
C4962	-.1448238	3.44e-15	-4.2e+13	0.000	-.1448238	-.1448238
C4966	-.2079349	3.44e-15	-6.0e+13	0.000	-.2079349	-.2079349
C4970	-.1336517	3.44e-15	-3.9e+13	0.000	-.1336517	-.1336517
C4974	-.2401206	3.44e-15	-7.0e+13	0.000	-.2401206	-.2401206
_cons	.3023009	3.44e-15	8.8e+13	0.000	.3023009	.3023009

```
487 predict resid_product_winner_gap, residuals

488
489 reg resid_log_federal_funding resid_voted_for_winner resid_election_gap resid_produc
  > t_winner_gap, robust cluster(msa_factor)
```

```
Linear regression                              Number of obs   =       7,220
                                               F(3, 379)       =        0.99
                                               Prob > F        =      0.3973
                                               R-squared       =      0.0001
                                               Root MSE        =      .65005
```

                               (Std. Err. adjusted for 380 clusters in msa_fac
  > tor)

resid_log_federal_fund~g > val]	Coef.	Robust Std. Err.	t	P>|t|	[95% Conf. Inter > val]
resid_voted_for_winner > 9115	.016995	.029964	0.57	0.571	-.0419214 .075
resid_election_gap > 1424	.0474956	.3817671	0.12	0.901	-.7031513 .798
resid_product_winner_gap > 7225	-.104035	.1234626	-0.84	0.400	-.3467925 .138
_cons > e-10	4.06e-11	1.80e-10	0.23	0.821	-3.12e-10 3.94

```
490 outreg2 using output/pres_firststage.doc, append ctitle("With MSA FE") addstat("F st
  > at", e(F))
output/pres_firststage.doc
dir : seeout

491
492
493 //IV
494 ivregress 2sls log_avg_annual_pay (log_federal_funding = voted_for_winner resid_elec
  > tion_gap resid_product_winner_gap), robust cluster(msa_factor)
```

```
Instrumental variables (2SLS) regression       Number of obs   =       7,220
                                               Wald chi2(1)    =        5.84
                                               Prob > chi2     =      0.0157
                                               R-squared       =           .
                                               Root MSE        =      .16983
```

                             (Std. Err. adjusted for 380 clusters in msa_factor)

log_avg_annual_pay	Coef.	Robust Std. Err.	z	P>|z|	[95% Conf. Interval]
log_federal_funding	.0293379	.0121403	2.42	0.016	.0055433 .0531326
_cons	11.3925	.0130026	876.17	0.000	11.36701 11.41798

```
Instrumented:   log_federal_funding
Instruments:    voted_for_winner resid_election_gap
                resid_product_winner_gap
```

```
495 outreg2 using output/pres_iv_avg_annual_pay.doc, replace ctitle("No MSA FE") keep(lo
  > g_federal_funding)
  output/pres_iv_avg_annual_pay.doc
  dir : seeout

496 ivregress 2sls log_avg_annual_pay i.msa_factor (log_federal_funding = voted_for_winn
  > er resid_election_gap resid_product_winner_gap i.msa_factor), robust cluster(msa_fac
  > tor)
  note: 1b.msa_factor dropped because of collinearity
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Instrumental variables (2SLS) regression

Number of obs	= 7,220
Wald chi2(**380**)	= 1.54
Prob > chi2	= 1.0000
R-squared	= .
Root MSE	= .33776

(Std. Err. adjusted for **380** clusters in msa_factor)

log_avg_annual_pay	Coef.	Robust Std. Err.	z	P>|z|	[95% Conf. Interval]	
log_federal_funding	.5157509	.3995738	1.29	0.197	-.2673993	1.298901
msa_factor						
C1042	.2166845	5.68e-11	3.8e+09	0.000	.2166845	.2166845
C1050	.0493491	5.68e-11	8.7e+08	0.000	.0493491	.0493491
C1054	.0764216	5.68e-11	1.3e+09	0.000	.0764216	.0764216
C1058	.3118894	5.67e-11	5.5e+09	0.000	.3118894	.3118894
C1074	-11.35253	8.932174	-1.27	0.204	-28.85927	6.15421
C1078	.033	5.68e-11	5.8e+08	0.000	.033	.033
C1090	.2589237	5.68e-11	4.6e+09	0.000	.2589237	.2589237
C1102	.0223425	5.68e-11	3.9e+09	0.000	.0223425	.0223425
C1110	.1238719	5.68e-11	2.2e+09	0.000	.1238719	.1238719
C1118	-9.176204	7.243953	-1.27	0.205	-23.37409	5.021683
C1126	.3615476	5.68e-11	6.4e+09	0.000	.3615476	.3615476
C1146	.4095228	5.68e-11	7.2e+09	0.000	.4095228	.4095228
C1150	.0430921	5.68e-11	7.6e+08	0.000	.0430921	.0430921
C1154	.1476945	5.68e-11	2.6e+09	0.000	.1476945	.1476945
C1170	.0418258	5.68e-11	7.4e+08	0.000	.0418258	.0418258
C1202	.0930833	5.68e-11	1.6e+09	0.000	.0930833	.0930833
C1206	.4032619	5.68e-11	7.1e+09	0.000	.4032619	.4032619
C1210	.1855375	5.68e-11	3.3e+09	0.000	.1855375	.1855375
C1222	-.0129151	5.68e-11	-2.3e+08	0.000	-.0129151	-.0129151
C1226	.1584132	5.68e-11	2.8e+09	0.000	.1584132	.1584132
C1242	.4010153	5.68e-11	7.1e+09	0.000	.4010153	.4010153
C1254	.1709027	5.68e-11	3.0e+09	0.000	.1709027	.1709027
C1258	-3.262609	2.834564	-1.15	0.250	-8.818253	2.293035
C1262	.0421595	5.68e-11	7.4e+08	0.000	.0421595	.0421595
C1270	.1716549	5.68e-11	3.0e+09	0.000	.1716549	.1716549
C1294	.2276011	5.68e-11	4.0e+09	0.000	.2276011	.2276011
C1298	.2585374	5.68e-11	4.6e+09	0.000	.2585374	.2585374
C1302	.1095102	5.67e-11	1.9e+09	0.000	.1095102	.1095102
C1314	.2720066	5.68e-11	4.8e+09	0.000	.2720066	.2720066

C1322	.0297519	5.68e-11	5.2e+08	0.000	.0297519	.0297519
C1338	.1082066	5.68e-11	1.9e+09	0.000	.1082066	.1082066
C1346	.0760447	5.67e-11	1.3e+09	0.000	.0760447	.0760447
C1374	.1170802	5.68e-11	2.1e+09	0.000	.1170802	.1170802
C1378	.1310824	5.68e-11	2.3e+09	0.000	.1310824	.1310824
C1382	.2833285	5.68e-11	5.0e+09	0.000	.2833285	.2833285
C1390	.1473118	5.67e-11	2.6e+09	0.000	.1473118	.1473118
C1398	.0697056	5.67e-11	1.2e+09	0.000	.0697056	.0697056
C1401	.2966344	5.68e-11	5.2e+09	0.000	.2966344	.2966344
C1402	.0534138	5.68e-11	9.4e+08	0.000	.0534138	.0534138
C1410	.1934641	5.67e-11	3.4e+09	0.000	.1934641	.1934641
C1426	.1481158	5.68e-11	2.6e+09	0.000	.1481158	.1481158
C1446	-10.32874	8.492734	-1.22	0.224	-26.97419	6.316711
C1450	-9.654378	7.869661	-1.23	0.220	-25.07863	5.769873
C1454	.036808	5.68e-11	6.5e+08	0.000	.036808	.036808
C1474	.2332954	5.68e-11	4.1e+09	0.000	.2332954	.2332954
C1486	.8463431	5.68e-11	1.5e+10	0.000	.8463431	.8463431
C1518	-.1587772	5.68e-11	-2.8e+09	0.000	-.1587772	-.1587772
C1526	.0430021	5.68e-11	7.6e+08	0.000	.0430021	.0430021
C1538	.1911978	5.68e-11	3.4e+09	0.000	.1911978	.1911978
C1550	.0318365	5.68e-11	5.6e+08	0.000	.0318365	.0318365
C1554	.2811225	5.68e-11	5.0e+09	0.000	.2811225	.2811225
C1568	.5014507	5.68e-11	8.8e+09	0.000	.5014507	.5014507
C1594	.0675612	5.68e-11	1.2e+09	0.000	.0675612	.0675612
C1598	.1265817	5.68e-11	2.2e+09	0.000	.1265817	.1265817
C1602	.0033471	5.68e-11	5.9e+07	0.000	.0033471	.0033471
C1606	.0203362	5.68e-11	3.6e+08	0.000	.0203362	.0203362
C1618	.2483128	5.68e-11	4.4e+09	0.000	.2483128	.2483128
C1622	.2228824	5.68e-11	3.9e+09	0.000	.2228824	.2228824
C1630	.2591339	5.68e-11	4.6e+09	0.000	.2591339	.2591339
C1654	.0755357	5.68e-11	1.3e+09	0.000	.0755357	.0755357
C1658	.1509476	5.68e-11	2.7e+09	0.000	.1509476	.1509476
C1662	.1931875	5.68e-11	3.4e+09	0.000	.1931875	.1931875
C1670	.1598182	5.68e-11	2.8e+09	0.000	.1598182	.1598182
C1674	.344547	5.68e-11	6.1e+09	0.000	.344547	.344547
C1682	-9.562598	7.596782	-1.26	0.208	-24.45202	5.326821
C1686	.1543024	5.68e-11	2.7e+09	0.000	.1543024	.1543024
C1694	.1346126	5.68e-11	2.4e+09	0.000	.1346126	.1346126
C1698	-10.63078	8.587654	-1.24	0.216	-27.46227	6.200716
C1702	.0391187	5.68e-11	6.9e+08	0.000	.0391187	.0391187
C1714	.307783	5.68e-11	5.4e+09	0.000	.307783	.307783
C1730	-.0007618	5.68e-11	-1.3e+07	0.000	-.0007618	-.0007618
C1742	.0577086	5.68e-11	1.0e+09	0.000	.0577086	.0577086
C1746	.2965866	5.68e-11	5.2e+09	0.000	.2965866	.2965866
C1766	-.0399876	5.68e-11	-7.0e+08	0.000	-.0399876	-.0399876
C1778	.0239311	5.68e-11	4.2e+08	0.000	.0239311	.0239311
C1782	.2322649	5.68e-11	4.1e+09	0.000	.2322649	.2322649
C1786	.0826244	5.68e-11	1.5e+09	0.000	.0826244	.0826244
C1790	.1344712	5.68e-11	2.4e+09	0.000	.1344712	.1344712
C1798	.074643	5.68e-11	1.3e+09	0.000	.074643	.074643
C1802	.2823988	5.68e-11	5.0e+09	0.000	.2823988	.2823988
C1814	.2952142	5.68e-11	5.2e+09	0.000	.2952142	.2952142
C1858	.1560992	5.68e-11	2.7e+09	0.000	.1560992	.1560992
C1870	.2655134	5.68e-11	4.7e+09	0.000	.2655134	.2655134
C1888	.0746703	5.68e-11	1.3e+09	0.000	.0746703	.0746703
C1906	-.0057896	5.68e-11	-1.0e+08	0.000	-.0057896	-.0057896
C1910	.4332167	5.68e-11	7.6e+09	0.000	.4332167	.4332167
C1914	.0806531	5.68e-11	1.4e+09	0.000	.0806531	.0806531
C1918	.0753536	5.68e-11	1.3e+09	0.000	.0753536	.0753536
C1930	-.0820786	5.67e-11	-1.4e+09	0.000	-.0820786	-.0820786
C1934	.208952	5.67e-11	3.7e+09	0.000	.208952	.208952
C1938	.227318	5.67e-11	4.0e+09	0.000	.227318	.227318
C1946	.1248838	5.68e-11	2.2e+09	0.000	.1248838	.1248838
C1950	.2483034	5.67e-11	4.4e+09	0.000	.2483034	.2483034
C1966	-.0043503	5.68e-11	-7.7e+07	0.000	-.0043503	-.0043503
C1974	-10.00338	8.108903	-1.23	0.217	-25.89654	5.889775
C1978	.3084287	5.68e-11	5.4e+09	0.000	.3084287	.3084287
C1982	.4254101	5.68e-11	7.5e+09	0.000	.4254101	.4254101
C2002	.0262591	5.68e-11	4.6e+08	0.000	.0262591	.0262591
C2010	.1004494	5.68e-11	1.8e+09	0.000	.1004494	.1004494
C2022	.1049333	5.68e-11	1.8e+09	0.000	.1049333	.1049333
C2026	.1149538	5.68e-11	2.0e+09	0.000	.1149538	.1149538

C2050	.4863665	5.68e-11	8.6e+09	0.000	.4863665	.4863665
C2070	.099252	5.68e-11	1.7e+09	0.000	.099252	.099252
C2074	.0571578	5.68e-11	1.0e+09	0.000	.0571578	.0571578
C2094	.0056486	5.68e-11	1.0e+08	0.000	.0056486	.0056486
C2106	.0511009	5.68e-11	9.0e+08	0.000	.0511009	.0511009
C2114	.1519741	5.68e-11	2.7e+09	0.000	.1519741	.1519741
C2130	.1334544	5.68e-11	2.4e+09	0.000	.1334544	.1334544
C2134	-.0174046	5.68e-11	-3.1e+08	0.000	-.0174046	-.0174046
C2150	.0858557	5.68e-11	1.5e+09	0.000	.0858557	.0858557
C2166	.0847455	5.68e-11	1.5e+09	0.000	.0847455	.0847455
C2178	.1452915	5.68e-11	2.6e+09	0.000	.1452915	.1452915
C2202	.1457939	5.68e-11	2.6e+09	0.000	.1457939	.1457939
C2214	.1659079	5.67e-11	2.9e+09	0.000	.1659079	.1659079
C2218	.0575566	5.68e-11	1.0e+09	0.000	.0575566	.0575566
C2222	.2078244	5.68e-11	3.7e+09	0.000	.2078244	.2078244
C2238	.0637518	5.68e-11	1.1e+09	0.000	.0637518	.0637518
C2242	.1952921	5.68e-11	3.4e+09	0.000	.1952921	.1952921
C2250	.0710881	5.68e-11	1.3e+09	0.000	.0710881	.0710881
C2252	-.0136446	5.68e-11	-2.4e+08	0.000	-.0136446	-.0136446
C2254	.1038633	5.68e-11	1.8e+09	0.000	.1038633	.1038633
C2266	.2248664	5.68e-11	4.0e+09	0.000	.2248664	.2248664
C2290	-.0031856	5.68e-11	-5.6e+07	0.000	-.0031856	-.0031856
C2306	.1407288	5.68e-11	2.5e+09	0.000	.1407288	.1407288
C2342	.089765	5.68e-11	1.6e+09	0.000	.089765	.089765
C2346	-.04144	5.68e-11	-7.3e+08	0.000	-.04144	-.04144
C2354	.1257651	5.68e-11	2.2e+09	0.000	.1257651	.1257651
C2358	.146779	5.68e-11	2.6e+09	0.000	.146779	.146779
C2390	.0309392	5.68e-11	5.4e+08	0.000	.0309392	.0309392
C2402	.0752736	5.68e-11	1.3e+09	0.000	.0752736	.0752736
C2414	-.0517596	5.68e-11	-9.1e+08	0.000	-.0517596	-.0517596
C2422	.0300505	5.68e-11	5.3e+08	0.000	.0300505	.0300505
C2426	-.0310162	5.68e-11	-5.5e+08	0.000	-.0310162	-.0310162
C2430	.1011779	5.68e-11	1.8e+09	0.000	.1011779	.1011779
C2434	.2032243	5.68e-11	3.6e+09	0.000	.2032243	.2032243
C2442	-.0788725	5.68e-11	-1.4e+09	0.000	-.0788725	-.0788725
C2450	-.0121321	5.68e-11	-2.1e+08	0.000	-.0121321	-.0121321
C2454	.1788399	5.68e-11	3.1e+09	0.000	.1788399	.1788399
C2458	.1881875	5.68e-11	3.3e+09	0.000	.1881875	.1881875
C2466	.1566508	5.68e-11	2.8e+09	0.000	.1566508	.1566508
C2478	.0965391	5.68e-11	1.7e+09	0.000	.0965391	.0965391
C2486	.1331346	5.68e-11	2.3e+09	0.000	.1331346	.1331346
C2506	.1140472	5.68e-11	2.0e+09	0.000	.1140472	.1140472
C2518	.0969598	5.68e-11	1.7e+09	0.000	.0969598	.0969598
C2522	-.0799955	5.68e-11	-1.4e+09	0.000	-.0799955	-.0799955
C2526	.0566929	5.68e-11	1.0e+09	0.000	.0566929	.0566929
C2542	.2757251	5.68e-11	4.9e+09	0.000	.2757251	.2757251
C2550	.0338619	5.68e-11	6.0e+08	0.000	.0338619	.0338619
C2554	.511422	5.68e-11	9.0e+09	0.000	.511422	.511422
C2562	-.0336177	5.68e-11	-5.9e+08	0.000	-.0336177	-.0336177
C2586	.0111011	5.68e-11	2.0e+08	0.000	.0111011	.0111011
C2594	-.0083875	5.68e-11	-1.5e+08	0.000	-.0083875	-.0083875
C2598	.0178147	5.68e-11	3.1e+08	0.000	.0178147	.0178147
C2614	-.0151962	5.68e-11	-2.7e+08	0.000	-.0151962	-.0151962
C2630	-.0945319	5.68e-11	-1.7e+09	0.000	-.0945319	-.0945319
C2638	.2482335	5.68e-11	4.4e+09	0.000	.2482335	.2482335
C2642	.5102034	5.68e-11	9.0e+09	0.000	.5102034	.5102034
C2658	.1042495	5.68e-11	1.8e+09	0.000	.1042495	.1042495
C2662	.3808442	5.68e-11	6.7e+09	0.000	.3808442	.3808442
C2682	-10.462	8.187622	-1.28	0.201	-26.50945	5.58544
C2690	.2746736	5.68e-11	4.8e+09	0.000	.2746736	.2746736
C2698	.1889509	5.68e-11	3.3e+09	0.000	.1889509	.1889509
C2706	-4.899677	3.993453	-1.23	0.220	-12.7267	2.927347
C2710	.1855859	5.68e-11	3.3e+09	0.000	.1855859	.1855859
C2714	.1079894	5.68e-11	1.9e+09	0.000	.1079894	.1079894
C2718	.0843138	5.67e-11	1.5e+09	0.000	.0843138	.0843138
C2726	.2410595	5.68e-11	4.2e+09	0.000	.2410595	.2410595
C2734	-.1462344	5.67e-11	-2.6e+09	0.000	-.1462344	-.1462344
C2750	.1450296	5.68e-11	2.6e+09	0.000	.1450296	.1450296
C2762	.0442393	5.68e-11	7.8e+08	0.000	.0442393	.0442393
C2774	.0170371	5.67e-11	3.0e+08	0.000	.0170371	.0170371
C2778	-.0067502	5.67e-11	-1.2e+08	0.000	-.0067502	-.0067502
C2786	-.031105	5.68e-11	-5.5e+08	0.000	-.031105	-.031105

C2790	-.0076097	5.67e-11	-1.3e+08	0.000	-.0076097	-.0076097
C2798	.1212327	5.68e-11	2.1e+09	0.000	.1212327	.1212327
C2802	.220941	5.68e-11	3.9e+09	0.000	.220941	.220941
C2810	.0657074	5.68e-11	1.2e+09	0.000	.0657074	.0657074
C2814	.3015696	5.68e-11	5.3e+09	0.000	.3015696	.3015696
C2842	-10.7865	8.556322	-1.26	0.207	-27.55659	5.983578
C2866	.074669	5.67e-11	1.3e+09	0.000	.074669	.074669
C2870	.1228937	5.68e-11	2.2e+09	0.000	.1228937	.1228937
C2874	.0777582	5.68e-11	1.4e+09	0.000	.0777582	.0777582
C2894	-10.97909	8.65913	-1.27	0.205	-27.95067	5.992492
C2902	.3089332	5.68e-11	5.4e+09	0.000	.3089332	.3089332
C2910	.0646439	5.68e-11	1.1e+09	0.000	.0646439	.0646439
C2918	.1878166	5.68e-11	3.3e+09	0.000	.1878166	.1878166
C2920	.1580437	5.68e-11	2.8e+09	0.000	.1580437	.1580437
C2934	.1947588	5.68e-11	3.4e+09	0.000	.1947588	.1947588
C2942	-.0370094	5.68e-11	-6.5e+08	0.000	-.0370094	-.0370094
C2946	.0716219	5.68e-11	1.3e+09	0.000	.0716219	.0716219
C2954	.157875	5.68e-11	2.8e+09	0.000	.157875	.157875
C2962	.2556262	5.68e-11	4.5e+09	0.000	.2556262	.2556262
C2970	-.080211	5.68e-11	-1.4e+09	0.000	-.080211	-.080211
C2974	-.0234979	5.68e-11	-4.1e+08	0.000	-.0234979	-.0234979
C2982	.2299317	5.68e-11	4.1e+09	0.000	.2299317	.2299317
C2994	-.0182621	5.68e-11	-3.2e+08	0.000	-.0182621	-.0182621
C3002	-.0205926	5.68e-11	-3.6e+08	0.000	-.0205926	-.0205926
C3014	.0518192	5.68e-11	9.1e+08	0.000	.0518192	.0518192
C3030	.0156839	5.68e-11	2.8e+08	0.000	.0156839	.0156839
C3034	.0537636	5.68e-11	9.5e+08	0.000	.0537636	.0537636
C3046	.2045599	5.68e-11	3.6e+09	0.000	.2045599	.2045599
C3062	.1057852	5.68e-11	1.9e+09	0.000	.1057852	.1057852
C3070	.1084575	5.68e-11	1.9e+09	0.000	.1084575	.1084575
C3078	.1715269	5.68e-11	3.0e+09	0.000	.1715269	.1715269
C3086	-.1072827	5.68e-11	-1.9e+09	0.000	-.1072827	-.1072827
C3098	.1386349	5.68e-11	2.4e+09	0.000	.1386349	.1386349
C3102	.1728344	5.68e-11	3.0e+09	0.000	.1728344	.1728344
C3108	-11.09171	8.946543	-1.24	0.215	-28.62661	6.443192
C3114	.2338122	5.68e-11	4.1e+09	0.000	.2338122	.2338122
C3118	.0513368	5.68e-11	9.0e+08	0.000	.0513368	.0513368
C3134	.0743731	5.68e-11	1.3e+09	0.000	.0743731	.0743731
C3142	.0844871	5.68e-11	1.5e+09	0.000	.0844871	.0844871
C3146	.0385783	5.68e-11	6.8e+08	0.000	.0385783	.0385783
C3154	.2684662	5.68e-11	4.7e+09	0.000	.2684662	.2684662
C3170	.4242656	5.68e-11	7.5e+09	0.000	.4242656	.4242656
C3174	-.0142091	5.68e-11	-2.5e+08	0.000	-.0142091	-.0142091
C3186	.0484912	5.68e-11	8.5e+08	0.000	.0484912	.0484912
C3190	.0271666	5.68e-11	4.8e+08	0.000	.0271666	.0271666
C3258	-.1401562	5.68e-11	-2.5e+09	0.000	-.1401562	-.1401562
C3278	.0416435	5.68e-11	7.3e+08	0.000	.0416435	.0416435
C3282	.2791211	5.68e-11	4.9e+09	0.000	.2791211	.2791211
C3290	.0297061	5.68e-11	5.2e+08	0.000	.0297061	.0297061
C3310	.2965066	5.68e-11	5.2e+09	0.000	.2965066	.2965066
C3314	.0262864	5.68e-11	4.6e+08	0.000	.0262864	.0262864
C3322	.4479839	5.68e-11	7.9e+09	0.000	.4479839	.4479839
C3326	.425763	5.67e-11	7.5e+09	0.000	.425763	.425763
C3334	.3031038	5.68e-11	5.3e+09	0.000	.3031038	.3031038
C3346	.4374375	5.68e-11	7.7e+09	0.000	.4374375	.4374375
C3354	.0207826	5.68e-11	3.7e+08	0.000	.0207826	.0207826
C3366	.1601031	5.68e-11	2.8e+09	0.000	.1601031	.1601031
C3370	.1515763	5.68e-11	2.7e+09	0.000	.1515763	.1515763
C3374	.005739	5.68e-11	1.0e+08	0.000	.005739	.005739
C3378	.2483004	5.68e-11	4.4e+09	0.000	.2483004	.2483004
C3386	.130424	5.68e-11	2.3e+09	0.000	.130424	.130424
C3406	.1545865	5.68e-11	2.7e+09	0.000	.1545865	.1545865
C3410	.0407872	5.68e-11	7.2e+08	0.000	.0407872	.0407872
C3458	.1145992	5.68e-11	2.0e+09	0.000	.1145992	.1145992
C3462	.0153834	5.68e-11	2.7e+08	0.000	.0153834	.0153834
C3474	.1016484	5.68e-11	1.8e+09	0.000	.1016484	.1016484
C3482	-.1154151	5.68e-11	-2.0e+09	0.000	-.1154151	-.1154151
C3490	.3057666	5.68e-11	5.4e+09	0.000	.3057666	.3057666
C3494	.1974112	5.68e-11	3.5e+09	0.000	.1974112	.1974112
C3498	.2982562	5.68e-11	5.3e+09	0.000	.2982562	.2982562
C3510	.0740147	5.68e-11	1.3e+09	0.000	.0740147	.0740147
C3530	.3858719	5.68e-11	6.8e+09	0.000	.3858719	.3858719

C3538	.2677887	5.68e-11	4.7e+09	0.000	.2677887	.2677887
C3562	-10.10431	8.345311	-1.21	0.226	-26.46081	6.252202
C3566	.1844804	5.68e-11	3.2e+09	0.000	.1844804	.1844804
C3584	.111273	5.68e-11	2.0e+09	0.000	.111273	.111273
C3598	.3488348	5.68e-11	6.1e+09	0.000	.3488348	.3488348
C3610	-.0160446	5.68e-11	-2.8e+08	0.000	-.0160446	-.0160446
C3614	.0027306	5.68e-11	4.8e+07	0.000	.0027306	.0027306
C3622	.2868689	5.68e-11	5.1e+09	0.000	.2868689	.2868689
C3626	.0780743	5.68e-11	1.4e+09	0.000	.0780743	.0780743
C3642	.1815654	5.68e-11	3.2e+09	0.000	.1815654	.1815654
C3650	.2270088	5.68e-11	4.0e+09	0.000	.2270088	.2270088
C3654	.2106219	5.68e-11	3.7e+09	0.000	.2106219	.2106219
C3674	.1787156	5.68e-11	3.1e+09	0.000	.1787156	.1787156
C3678	.2614613	5.68e-11	4.6e+09	0.000	.2614613	.2614613
C3698	.0772773	5.68e-11	1.4e+09	0.000	.0772773	.0772773
C3710	.3647911	5.68e-11	6.4e+09	0.000	.3647911	.3647911
C3734	.2395644	5.68e-11	4.2e+09	0.000	.2395644	.2395644
C3746	.0352871	5.68e-11	6.2e+08	0.000	.0352871	.0352871
C3762	.0410513	5.68e-11	7.2e+08	0.000	.0410513	.0410513
C3786	.0659017	5.68e-11	1.2e+09	0.000	.0659017	.0659017
C3790	.3032353	5.68e-11	5.3e+09	0.000	.3032353	.3032353
C3798	.4541929	5.68e-11	8.0e+09	0.000	.4541929	.4541929
C3806	.3040095	5.68e-11	5.4e+09	0.000	.3040095	.3040095
C3822	.0341735	5.68e-11	6.0e+08	0.000	.0341735	.0341735
C3830	-9.554588	7.643258	-1.25	0.211	-24.5351	5.425922
C3834	.1665091	5.68e-11	2.9e+09	0.000	.1665091	.1665091
C3854	-.0770118	5.68e-11	-1.4e+09	0.000	-.0770118	-.0770118
C3886	.1996331	5.68e-11	3.5e+09	0.000	.1996331	.1996331
C3890	.3543585	5.68e-11	6.2e+09	0.000	.3543585	.3543585
C3894	.073465	5.68e-11	1.3e+09	0.000	.073465	.073465
C3914	-.0146396	5.68e-11	-2.6e+08	0.000	-.0146396	-.0146396
C3930	.2594404	5.68e-11	4.6e+09	0.000	.2594404	.2594404
C3934	.0870508	5.67e-11	1.5e+09	0.000	.0870508	.0870508
C3938	.0512498	5.68e-11	9.0e+08	0.000	.0512498	.0512498
C3946	-.0161817	5.68e-11	-2.9e+08	0.000	-.0161817	-.0161817
C3954	.2219277	5.68e-11	3.9e+09	0.000	.2219277	.2219277
C3958	.3111016	5.68e-11	5.5e+09	0.000	.3111016	.3111016
C3966	.001508	5.68e-11	2.7e+07	0.000	.001508	.001508
C3974	.2223849	5.68e-11	3.9e+09	0.000	.2223849	.2223849
C3982	.0799489	5.68e-11	1.4e+09	0.000	.0799489	.0799489
C3990	.2420402	5.68e-11	4.3e+09	0.000	.2420402	.2420402
C4006	.3089129	5.68e-11	5.4e+09	0.000	.3089129	.3089129
C4014	.1557646	5.68e-11	2.7e+09	0.000	.1557646	.1557646
C4022	.1144947	5.68e-11	2.0e+09	0.000	.1144947	.1144947
C4034	.3401488	5.68e-11	6.0e+09	0.000	.3401488	.3401488
C4038	.2410089	5.68e-11	4.2e+09	0.000	.2410089	.2410089
C4042	.1803082	5.68e-11	3.2e+09	0.000	.1803082	.1803082
C4058	.0206326	5.68e-11	3.6e+08	0.000	.0206326	.0206326
C4066	.0917491	5.68e-11	1.6e+09	0.000	.0917491	.0917491
C4090	.383214	5.68e-11	6.8e+09	0.000	.383214	.383214
C4098	.1657216	5.68e-11	2.9e+09	0.000	.1657216	.1657216
C4106	.1001855	5.68e-11	1.8e+09	0.000	.1001855	.1001855
C4110	-.1217747	5.68e-11	-2.1e+09	0.000	-.1217747	-.1217747
C4114	.0428994	5.68e-11	7.6e+08	0.000	.0428994	.0428994
C4118	.2994834	5.68e-11	5.3e+09	0.000	.2994834	.2994834
C4142	.0825778	5.68e-11	1.5e+09	0.000	.0825778	.0825778
C4150	.1878526	5.68e-11	3.3e+09	0.000	.1878526	.1878526
C4154	.0107388	5.68e-11	1.9e+08	0.000	.0107388	.0107388
C4162	.2657913	5.68e-11	4.7e+09	0.000	.2657913	.2657913
C4166	.028703	5.68e-11	5.1e+08	0.000	.028703	.028703
C4170	-8.658961	6.856353	-1.26	0.207	-22.09717	4.779243
C4174	.4152027	5.68e-11	7.3e+09	0.000	.4152027	.4152027
C4186	-10.7836	8.928107	-1.21	0.227	-28.28236	6.715171
C4194	.9944586	5.68e-11	1.8e+10	0.000	.9944586	.9944586
C4202	.1457735	5.68e-11	2.6e+09	0.000	.1457735	.1457735
C4210	.2478261	5.68e-11	4.4e+09	0.000	.2478261	.2478261
C4214	.1433414	5.68e-11	2.5e+09	0.000	.1433414	.1433414
C4220	.2778951	5.68e-11	4.9e+09	0.000	.2778951	.2778951
C4222	.2896005	5.68e-11	5.1e+09	0.000	.2896005	.2896005
C4234	.1453107	5.68e-11	2.6e+09	0.000	.1453107	.1453107
C4254	.0791807	5.68e-11	1.4e+09	0.000	.0791807	.0791807
C4266	.5409253	5.68e-11	9.5e+09	0.000	.5409253	.5409253

C4268	.0742422	5.68e-11	1.3e+09	0.000	.0742422	.0742422
C4270	-.142764	5.68e-11	-2.5e+09	0.000	-.142764	-.142764
C4310	.1722952	5.68e-11	3.0e+09	0.000	.1722952	.1722952
C4330	.101805	5.68e-11	1.8e+09	0.000	.101805	.101805
C4334	.0891687	5.68e-11	1.6e+09	0.000	.0891687	.0891687
C4342	.1374697	5.68e-11	2.4e+09	0.000	.1374697	.1374697
C4358	.0742422	5.68e-11	1.3e+09	0.000	.0742422	.0742422
C4362	.1463204	5.68e-11	2.6e+09	0.000	.1463204	.1463204
C4378	.1278525	5.68e-11	2.3e+09	0.000	.1278525	.1278525
C4390	.1634392	5.68e-11	2.9e+09	0.000	.1634392	.1634392
C4406	.1334975	5.68e-11	2.4e+09	0.000	.1334975	.1334975
C4410	.3166625	5.68e-11	5.6e+09	0.000	.3166625	.3166625
C4414	.226777	5.68e-11	4.0e+09	0.000	.226777	.226777
C4418	.019805	5.68e-11	3.5e+08	0.000	.019805	.019805
C4422	.0285219	5.68e-11	5.0e+08	0.000	.0285219	.0285219
C4430	.1813098	5.68e-11	3.2e+09	0.000	.1813098	.1813098
C4442	.0356687	5.68e-11	6.3e+08	0.000	.0356687	.0356687
C4470	.1654542	5.68e-11	2.9e+09	0.000	.1654542	.1654542
C4494	-.0499449	5.68e-11	-8.8e+08	0.000	-.0499449	-.0499449
C4506	.2244166	5.68e-11	4.0e+09	0.000	.2244166	.2244166
C4522	.1179417	5.68e-11	2.1e+09	0.000	.1179417	.1179417
C4530	.2208131	5.67e-11	3.9e+09	0.000	.2208131	.2208131
C4546	.025543	5.67e-11	4.5e+08	0.000	.025543	.025543
C4550	.0573223	5.68e-11	1.0e+09	0.000	.0573223	.0573223
C4554	.0236511	5.68e-11	4.2e+08	0.000	.0236511	.0236511
C4578	.1867202	5.68e-11	3.3e+09	0.000	.1867202	.1867202
C4582	.1154606	5.68e-11	2.0e+09	0.000	.1154606	.1154606
C4594	-9.233962	7.615397	-1.21	0.225	-24.15987	5.691943
C4606	-9.215075	7.275779	-1.27	0.205	-23.47534	5.04519
C4614	.2067273	5.68e-11	3.6e+09	0.000	.2067273	.2067273
C4622	.135879	5.68e-11	2.4e+09	0.000	.135879	.135879
C4634	.1526344	5.68e-11	2.7e+09	0.000	.1526344	.1526344
C4652	.2569152	5.68e-11	4.5e+09	0.000	.2569152	.2569152
C4654	.0671838	5.68e-11	1.2e+09	0.000	.0671838	.0671838
C4666	-.1110911	5.68e-11	-2.0e+09	0.000	-.1110911	-.1110911
C4670	.3210919	5.68e-11	5.7e+09	0.000	.3210919	.3210919
C4702	.1268795	5.68e-11	2.2e+09	0.000	.1268795	.1268795
C4722	.1961789	5.68e-11	3.5e+09	0.000	.1961789	.1961789
C4726	-9.779599	7.707233	-1.27	0.204	-24.8855	5.3263
C4730	-.0248259	5.68e-11	-4.4e+08	0.000	-.0248259	-.0248259
C4738	.1014421	5.68e-11	1.8e+09	0.000	.1014421	.1014421
C4746	.057745	5.68e-11	1.0e+09	0.000	.057745	.057745
C4758	.1594181	5.68e-11	2.8e+09	0.000	.1594181	.1594181
C4790	-10.65806	8.755234	-1.22	0.223	-27.818	6.501886
C4794	.1333863	5.68e-11	2.3e+09	0.000	.1333863	.1333863
C4806	.0467011	5.68e-11	8.2e+08	0.000	.0467011	.0467011
C4814	.1193102	5.68e-11	2.1e+09	0.000	.1193102	.1193102
C4826	.0335144	5.68e-11	5.9e+08	0.000	.0335144	.0335144
C4830	-.0470937	5.68e-11	-8.3e+08	0.000	-.0470937	-.0470937
C4854	.0512418	5.68e-11	9.0e+08	0.000	.0512418	.0512418
C4862	.1887257	5.68e-11	3.3e+09	0.000	.1887257	.1887257
C4866	.0084296	5.68e-11	1.5e+08	0.000	.0084296	.0084296
C4870	.0700377	5.68e-11	1.2e+09	0.000	.0700377	.0700377
C4890	.0971766	5.68e-11	1.7e+09	0.000	.0971766	.0971766
C4902	.1344184	5.68e-11	2.4e+09	0.000	.1344184	.1344184
C4918	.178512	5.68e-11	3.1e+09	0.000	.178512	.178512
C4934	.3172888	5.68e-11	5.6e+09	0.000	.3172888	.3172888
C4942	-.0519192	5.68e-11	-9.1e+08	0.000	-.0519192	-.0519192
C4962	.1951662	5.68e-11	3.4e+09	0.000	.1951662	.1951662
C4966	.0544985	5.68e-11	9.6e+08	0.000	.0544985	.0544985
C4970	.1002079	5.68e-11	1.8e+09	0.000	.1002079	.1002079
C4974	-.0597813	5.68e-11	-1.1e+09	0.000	-.0597813	-.0597813
_cons	11.2713	5.68e-11	2.0e+11	0.000	11.2713	11.2713

Instrumented: log_federal_funding
Instruments: 2.msa_factor 3.msa_factor 4.msa_factor
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              8.msa_factor 9.msa_factor 10.msa_factor
              11.msa_factor 12.msa_factor 13.msa_factor
              14.msa_factor 15.msa_factor 16.msa_factor
              17.msa_factor 18.msa_factor 19.msa_factor

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23.msa_factor 24.msa_factor 25.msa_factor
26.msa_factor 27.msa_factor 28.msa_factor
29.msa_factor 30.msa_factor 31.msa_factor
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                    voted_for_winner resid_election_gap
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497 outreg2 using output/pres_iv_avg_annual_pay.doc, append ctitle("With MSA FE") keep(l
  > og_federal_funding)
  output/pres_iv_avg_annual_pay.doc
  dir : seeout

498
499 ivregress 2sls log_annual_avg_emplvl (log_federal_funding = voted_for_winner resid_e
  > lection_gap resid_product_winner_gap), robust cluster(msa_factor)

```
Instrumental variables (2SLS) regression          Number of obs   =      7,220
                                                  Wald chi2(1)    =       3.92
                                                  Prob > chi2     =     0.0478
                                                  R-squared       =     0.0168
                                                  Root MSE        =     1.1074
```

                              (Std. Err. adjusted for **380** clusters in msa_factor)

log_annual_avg_em~l	Coef.	Robust Std. Err.	z	P>|z|	[95% Conf. Interval]	
log_federal_funding	.1569481	.079297	1.98	0.048	.0015289	.3123673
_cons	12.29006	.0943273	130.29	0.000	12.10518	12.47494

```
Instrumented:  log_federal_funding
Instruments:   voted_for_winner resid_election_gap
               resid_product_winner_gap
```

500 outreg2 using output/pres_iv_annual_avg_emplvl.doc, replace ctitle("No MSA FE") keep
  > (log_federal_funding)
  output/pres_iv_annual_avg_emplvl.doc
  dir : seeout

501 ivregress 2sls log_annual_avg_emplvl i.msa_factor (log_federal_funding = voted_for_w
  > inner resid_election_gap resid_product_winner_gap i.msa_factor), robust cluster(msa_
  > factor)
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note: 372.msa_factor dropped because of collinearity
note: 373.msa_factor dropped because of collinearity
note: 374.msa_factor dropped because of collinearity
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note: 377.msa_factor dropped because of collinearity
note: 378.msa_factor dropped because of collinearity
note: 379.msa_factor dropped because of collinearity
note: 380.msa_factor dropped because of collinearity

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Instrumental variables (2SLS) regression        Number of obs   =      7,220
                                                 Wald chi2(380)  =       0.68
                                                 Prob > chi2     =     1.0000
                                                 R-squared       =     0.8785
                                                 Root MSE        =      .3893
```

(Std. Err. adjusted for **380** clusters in msa_factor)

log_annual_avg_em~l	Coef.	Robust Std. Err.	z	P>|z|	[95% Conf. Interval]	
log_federal_funding	.5919956	.476851	1.24	0.214	-.3426151	1.526606
msa_factor						
C1042	1.598843	4.91e-11	3.3e+10	0.000	1.598843	1.598843
C1050	-.0527424	4.91e-11	-1.1e+09	0.000	-.0527424	-.0527424
C1054	-.4176549	4.91e-11	-8.5e+09	0.000	-.4176549	-.4176549
C1058	1.900301	4.90e-11	3.9e+10	0.000	1.900301	1.900301
C1074	-11.49059	10.65965	-1.08	0.281	-32.38312	9.401938
C1078	-.0404502	4.90e-11	-8.2e+08	0.000	-.0404502	-.0404502
C1090	1.646502	4.90e-11	3.4e+10	0.000	1.646502	1.646502
C1102	-.0851516	4.91e-11	-1.7e+09	0.000	-.0851516	-.0851516
C1110	.5392121	4.89e-11	1.1e+10	0.000	.5392121	.5392121
C1118	-11.12674	8.644927	-1.29	0.198	-28.07048	5.81701
C1126	.9534633	4.90e-11	1.9e+10	0.000	.9534633	.9534633
C1146	1.12477	4.90e-11	2.3e+10	0.000	1.12477	1.12477
C1150	-.3214098	4.92e-11	-6.5e+09	0.000	-.3214098	-.3214098
C1154	.5913284	4.92e-11	1.2e+10	0.000	.5913284	.5913284
C1170	.9913567	4.91e-11	2.0e+10	0.000	.9913567	.9913567
C1202	.2177449	4.91e-11	4.4e+09	0.000	.2177449	.2177449
C1206	3.587937	4.92e-11	7.3e+10	0.000	3.587937	3.587937
C1210	.7523179	4.91e-11	1.5e+10	0.000	.7523179	.7523179
C1222	-.2493473	4.91e-11	-5.1e+09	0.000	-.2493473	-.2493473
C1226	1.192321	4.91e-11	2.4e+10	0.000	1.192321	1.192321
C1242	2.523324	4.90e-11	5.1e+10	0.000	2.523324	2.523324
C1254	1.491161	4.89e-11	3.0e+10	0.000	1.491161	1.491161
C1258	-1.223364	3.382766	-0.36	0.718	-7.853465	5.406736
C1262	.0878989	4.91e-11	1.8e+09	0.000	.0878989	.0878989
C1270	.3717389	4.91e-11	7.6e+09	0.000	.3717389	.3717389
C1294	1.729443	4.91e-11	3.5e+10	0.000	1.729443	1.729443
C1298	-.1201835	4.93e-11	-2.4e+09	0.000	-.1201835	-.1201835
C1302	-.5694083	4.91e-11	-1.2e+10	0.000	-.5694083	-.5694083
C1314	.902232	4.91e-11	1.8e+10	0.000	.902232	.902232
C1322	-.3851193	4.90e-11	-7.9e+09	0.000	-.3851193	-.3851193
C1338	.2352391	4.92e-11	4.8e+09	0.000	.2352391	.2352391
C1346	.0207459	4.88e-11	4.3e+08	0.000	.0207459	.0207459
C1374	.206685	4.90e-11	4.2e+09	0.000	.206685	.206685
C1378	.4919571	4.92e-11	1.0e+10	0.000	.4919571	.4919571
C1382	2.016216	4.91e-11	4.1e+10	0.000	2.016216	2.016216
C1390	-.0133653	4.88e-11	-2.7e+08	0.000	-.0133653	-.0133653
C1398	.0515284	4.90e-11	1.1e+09	0.000	.0515284	.0515284
C1401	.3413415	4.91e-11	6.9e+09	0.000	.3413415	.3413415
C1402	.0339085	4.91e-11	6.9e+08	0.000	.0339085	.0339085
C1410	-.4822284	4.91e-11	-9.8e+09	0.000	-.4822284	-.4822284
C1426	1.43531	4.89e-11	2.9e+10	0.000	1.43531	1.43531
C1446	-8.940895	10.13522	-0.88	0.378	-28.80556	10.92377
C1450	-10.71367	9.391646	-1.14	0.254	-29.12095	7.693621
C1454	.0313583	4.91e-11	6.4e+08	0.000	.0313583	.0313583
C1474	.255118	4.91e-11	5.2e+09	0.000	.255118	.255118
C1486	1.869919	4.91e-11	3.8e+10	0.000	1.869919	1.869919
C1518	.6813686	4.91e-11	1.4e+10	0.000	.6813686	.6813686
C1526	-.4417857	4.93e-11	-9.0e+09	0.000	-.4417857	-.4417857

C1538	2.113909	4.91e-11	4.3e+10	0.000	2.113909	2.113909
C1550	-.0812934	4.92e-11	-1.7e+09	0.000	-.0812934	-.0812934
C1554	.5847571	4.91e-11	1.2e+10	0.000	.5847571	.5847571
C1568	-.4571407	4.92e-11	-9.3e+09	0.000	-.4571407	-.4571407
C1594	.9555489	4.91e-11	1.9e+10	0.000	.9555489	.9555489
C1598	1.20959	4.91e-11	2.5e+10	0.000	1.20959	1.20959
C1602	-.3766399	4.92e-11	-7.7e+09	0.000	-.3766399	-.3766399
C1606	-.2150362	4.91e-11	-4.4e+09	0.000	-.2150362	-.2150362
C1618	-.7678165	4.92e-11	-1.6e+10	0.000	-.7678165	-.7678165
C1622	-.5191554	4.88e-11	-1.1e+10	0.000	-.5191554	-.5191554
C1630	.7563112	4.91e-11	1.5e+10	0.000	.7563112	.7563112
C1654	-.1478437	4.91e-11	-3.0e+09	0.000	-.1478437	-.1478437
C1658	.4253509	4.92e-11	8.7e+09	0.000	.4253509	.4253509
C1662	.5789356	4.90e-11	1.2e+10	0.000	.5789356	.5789356
C1670	1.494764	4.91e-11	3.0e+10	0.000	1.494764	1.494764
C1674	2.751424	4.90e-11	5.6e+10	0.000	2.751424	2.751424
C1682	-10.80558	9.065992	-1.19	0.233	-28.57459	6.963443
C1686	1.286637	4.92e-11	2.6e+10	0.000	1.286637	1.286637
C1694	-.3999036	4.91e-11	-8.1e+09	0.000	-.3999036	-.3999036
C1698	-8.514126	10.2485	-0.83	0.406	-28.60081	11.57256
C1702	.1664572	4.91e-11	3.4e+09	0.000	.1664572	.1664572
C1714	2.744598	4.91e-11	5.6e+10	0.000	2.744598	2.744598
C1730	.2225617	4.92e-11	4.5e+09	0.000	.2225617	.2225617
C1742	-.4571936	4.93e-11	-9.3e+09	0.000	-.4571936	-.4571936
C1746	2.76591	4.90e-11	5.6e+10	0.000	2.76591	2.76591
C1766	-.1836833	4.92e-11	-3.7e+09	0.000	-.1836833	-.1836833
C1778	.4038435	4.88e-11	8.3e+09	0.000	.4038435	.4038435
C1782	1.379696	4.91e-11	2.8e+10	0.000	1.379696	1.379696
C1786	.2799164	4.90e-11	5.7e+09	0.000	.2799164	.2799164
C1790	1.677458	4.92e-11	3.4e+10	0.000	1.677458	1.677458
C1798	.5928419	4.91e-11	1.2e+10	0.000	.5928419	.5928419
C1802	-.3543558	4.91e-11	-7.2e+09	0.000	-.3543558	-.3543558
C1814	2.684481	4.92e-11	5.5e+10	0.000	2.684481	2.684481
C1858	1.021177	4.92e-11	2.1e+10	0.000	1.021177	1.021177
C1870	-.5943215	4.90e-11	-1.2e+10	0.000	-.5943215	-.5943215
C1888	.4394683	4.92e-11	8.9e+09	0.000	.4394683	.4394683
C1906	-.5495389	4.91e-11	-1.1e+10	0.000	-.5495389	-.5495389
C1910	3.845133	4.88e-11	7.9e+10	0.000	3.845133	3.845133
C1914	.0596721	4.96e-11	1.2e+09	0.000	.0596721	.0596721
C1918	-.7986335	4.89e-11	-1.6e+10	0.000	-.7986335	-.7986335
C1930	-.0454798	4.89e-11	-9.3e+08	0.000	-.0454798	-.0454798
C1934	1.039921	4.90e-11	2.1e+10	0.000	1.039921	1.039921
C1938	1.754556	4.88e-11	3.6e+10	0.000	1.754556	1.754556
C1946	-.1867073	4.92e-11	-3.8e+09	0.000	-.1867073	-.1867073
C1950	-.2299742	4.90e-11	-4.7e+09	0.000	-.2299742	-.2299742
C1966	1.016737	4.91e-11	2.1e+10	0.000	1.016737	1.016737
C1974	-9.029034	9.677157	-0.93	0.351	-27.99591	9.937845
C1978	1.621527	4.90e-11	3.3e+10	0.000	1.621527	1.621527
C1982	3.368765	4.90e-11	6.9e+10	0.000	3.368765	3.368765
C2002	-.1223154	4.94e-11	-2.5e+09	0.000	-.1223154	-.1223154
C2010	-.0399469	4.92e-11	-8.1e+08	0.000	-.0399469	-.0399469
C2022	-.1600175	4.90e-11	-3.3e+09	0.000	-.1600175	-.1600175
C2026	.6623413	4.91e-11	1.3e+10	0.000	.6623413	.6623413
C2050	1.446021	4.90e-11	3.0e+10	0.000	1.446021	1.446021
C2070	-.1494813	4.91e-11	-3.0e+09	0.000	-.1494813	-.1494813
C2074	.1915526	4.90e-11	3.9e+09	0.000	.1915526	.1915526
C2094	-.0986222	4.90e-11	-2.0e+09	0.000	-.0986222	-.0986222
C2106	-.2348005	4.91e-11	-4.8e+09	0.000	-.2348005	-.2348005
C2114	.6150931	4.92e-11	1.3e+10	0.000	.6150931	.6150931
C2130	-.5316398	4.91e-11	-1.1e+10	0.000	-.5316398	-.5316398
C2134	1.460057	4.90e-11	3.0e+10	0.000	1.460057	1.460057
C2150	.6697987	4.91e-11	1.4e+10	0.000	.6697987	.6697987
C2166	.8109934	4.90e-11	1.7e+10	0.000	.8109934	.8109934
C2178	.8552358	4.91e-11	1.7e+10	0.000	.8552358	.8552358
C2202	.6251874	4.89e-11	1.3e+10	0.000	.6251874	.6251874
C2214	-.2818802	4.90e-11	-5.8e+09	0.000	-.2818802	-.2818802
C2218	.6645222	4.91e-11	1.4e+10	0.000	.6645222	.6645222
C2222	1.139492	4.90e-11	2.3e+10	0.000	1.139492	1.139492
C2238	-.1071614	4.90e-11	-2.2e+09	0.000	-.1071614	-.1071614
C2242	.7755613	4.88e-11	1.6e+10	0.000	.7755613	.7755613
C2250	.2470617	4.90e-11	5.0e+09	0.000	.2470617	.2470617
C2252	-.209282	4.92e-11	-4.3e+09	0.000	-.209282	-.209282

C2254	-.337052	4.91e-11	-6.9e+09	0.000	-.337052	-.337052
C2266	.748512	4.93e-11	1.5e+10	0.000	.748512	.748512
C2290	.5353	4.92e-11	1.1e+10	0.000	.5353	.5353
C2306	1.151438	4.91e-11	2.3e+10	0.000	1.151438	1.151438
C2342	1.701109	4.92e-11	3.5e+10	0.000	1.701109	1.701109
C2346	-.587829	4.92e-11	-1.2e+10	0.000	-.587829	-.587829
C2354	.6739185	4.91e-11	1.4e+10	0.000	.6739185	.6739185
C2358	.1378566	4.91e-11	2.8e+09	0.000	.1378566	.1378566
C2390	-.6440474	4.92e-11	-1.3e+10	0.000	-.6440474	-.6440474
C2402	-.1922228	4.91e-11	-3.9e+09	0.000	-.1922228	-.1922228
C2414	-.3875071	4.92e-11	-7.9e+09	0.000	-.3875071	-.3875071
C2422	-.2307249	4.92e-11	-4.7e+09	0.000	-.2307249	-.2307249
C2426	-.4623901	4.90e-11	-9.4e+09	0.000	-.4623901	-.4623901
C2430	-.0936842	4.91e-11	-1.9e+09	0.000	-.0936842	-.0936842
C2434	2.03376	4.90e-11	4.1e+10	0.000	2.03376	2.03376
C2442	-.9730903	4.92e-11	-2.0e+10	0.000	-.9730903	-.9730903
C2450	-.6132597	4.91e-11	-1.2e+10	0.000	-.6132597	-.6132597
C2454	.3030802	4.91e-11	6.2e+09	0.000	.3030802	.3030802
C2458	.9453624	4.92e-11	1.9e+10	0.000	.9453624	.9453624
C2466	1.68806	4.92e-11	3.4e+10	0.000	1.68806	1.68806
C2478	.103313	4.92e-11	2.1e+09	0.000	.103313	.103313
C2486	1.713874	4.92e-11	3.5e+10	0.000	1.713874	1.713874
C2506	.8324794	4.92e-11	1.7e+10	0.000	.8324794	.8324794
C2518	.403929	4.92e-11	8.2e+09	0.000	.403929	.403929
C2522	-.4599147	4.92e-11	-9.3e+09	0.000	-.4599147	-.4599147
C2526	-.4182354	4.91e-11	-8.5e+09	0.000	-.4182354	-.4182354
C2542	1.587784	4.91e-11	3.2e+10	0.000	1.587784	1.587784
C2550	-.0655507	4.90e-11	-1.3e+09	0.000	-.0655507	-.0655507
C2554	2.245517	4.91e-11	4.6e+10	0.000	2.245517	2.245517
C2562	-.1341346	4.90e-11	-2.7e+09	0.000	-.1341346	-.1341346
C2586	.8639744	4.94e-11	1.7e+10	0.000	.8639744	.8639744
C2594	.0553808	4.91e-11	1.1e+09	0.000	.0553808	.0553808
C2598	-1.2611	4.91e-11	-2.6e+10	0.000	-1.2611	-1.2611
C2614	-.7061057	4.92e-11	-1.4e+10	0.000	-.7061057	-.7061057
C2630	-.5682459	4.91e-11	-1.2e+10	0.000	-.5682459	-.5682459
C2638	.3243366	4.88e-11	6.6e+09	0.000	.3243366	.3243366
C2642	3.693299	4.89e-11	7.6e+10	0.000	3.693299	3.693299
C2658	.7071794	4.90e-11	1.4e+10	0.000	.7071794	.7071794
C2662	1.140712	4.91e-11	2.3e+10	0.000	1.140712	1.140712
C2682	-12.22243	9.7711	-1.25	0.211	-31.37343	6.928579
C2690	2.660786	4.90e-11	5.4e+10	0.000	2.660786	2.660786
C2698	.2690469	4.92e-11	5.5e+09	0.000	.2690469	.2690469
C2706	-6.173466	4.765783	-1.30	0.195	-15.51423	3.167298
C2710	-.1256699	4.91e-11	-2.6e+09	0.000	-.1256699	-.1256699
C2714	1.346931	4.90e-11	2.7e+10	0.000	1.346931	1.346931
C2718	-.0341195	4.91e-11	-6.9e+08	0.000	-.0341195	-.0341195
C2726	2.215346	4.90e-11	4.5e+10	0.000	2.215346	2.215346
C2734	-.3509634	4.89e-11	-7.2e+09	0.000	-.3509634	-.3509634
C2750	.0054346	4.90e-11	1.1e+08	0.000	.0054346	.0054346
C2762	.1531347	4.91e-11	3.1e+09	0.000	.1531347	.1531347
C2774	.1549291	4.91e-11	3.2e+09	0.000	.1549291	.1549291
C2778	-.1430452	4.89e-11	-2.9e+09	0.000	-.1430452	-.1430452
C2786	-.2568664	4.92e-11	-5.2e+09	0.000	-.2568664	-.2568664
C2790	.1795377	4.91e-11	3.7e+09	0.000	.1795377	.1795377
C2798	.101511	4.90e-11	2.1e+09	0.000	.101511	.101511
C2802	.7583881	4.91e-11	1.5e+10	0.000	.7583881	.7583881
C2810	-.401213	4.91e-11	-8.2e+09	0.000	-.401213	-.401213
C2814	2.716208	4.90e-11	5.5e+10	0.000	2.716208	2.716208
C2842	-12.18069	10.21111	-1.19	0.233	-32.19409	7.832715
C2866	.6564623	4.88e-11	1.3e+10	0.000	.6564623	.6564623
C2870	.5978897	4.91e-11	1.2e+10	0.000	.5978897	.5978897
C2874	-.061622	4.91e-11	-1.3e+09	0.000	-.061622	-.061622
C2894	-11.12132	10.3338	-1.08	0.282	-31.37519	9.132555
C2902	-.490569	4.91e-11	-1.0e+10	0.000	-.490569	-.490569
C2910	.1125968	4.91e-11	2.3e+09	0.000	.1125968	.1125968
C2918	1.144021	4.89e-11	2.3e+10	0.000	1.144021	1.144021
C2920	.2881227	4.91e-11	5.9e+09	0.000	.2881227	.2881227
C2934	.3688894	4.94e-11	7.5e+09	0.000	.3688894	.3688894
C2942	-.2968603	4.94e-11	-6.0e+09	0.000	-.2968603	-.2968603
C2946	1.137826	4.91e-11	2.3e+10	0.000	1.137826	1.137826
C2954	1.265171	4.91e-11	2.6e+10	0.000	1.265171	1.265171
C2962	1.172467	4.91e-11	2.4e+10	0.000	1.172467	1.172467

C2970	.3190878	4.91e-11	6.5e+09	0.000	.3190878	.3190878
C2974	.0559722	4.90e-11	1.1e+09	0.000	.0559722	.0559722
C2982	2.598184	4.90e-11	5.3e+10	0.000	2.598184	2.598184
C2994	-.2959296	4.90e-11	-6.0e+09	0.000	-.2959296	-.2959296
C3002	-.4078566	4.91e-11	-8.3e+09	0.000	-.4078566	-.4078566
C3014	-.296168	4.91e-11	-6.0e+09	0.000	-.296168	-.296168
C3030	-.8880511	4.92e-11	-1.8e+10	0.000	-.8880511	-.8880511
C3034	-.2826127	4.91e-11	-5.8e+09	0.000	-.2826127	-.2826126
C3046	1.34874	4.90e-11	2.7e+10	0.000	1.34874	1.34874
C3062	-.2008147	4.93e-11	-4.1e+09	0.000	-.2008147	-.2008147
C3070	.943109	4.91e-11	1.9e+10	0.000	.943109	.943109
C3078	1.617888	4.92e-11	3.3e+10	0.000	1.617888	1.617888
C3086	-.2351406	4.83e-11	-4.9e+09	0.000	-.2351406	-.2351406
C3098	.367639	4.88e-11	7.5e+09	0.000	.367639	.367639
C3102	-.5504133	4.91e-11	-1.1e+10	0.000	-.5504133	-.5504133
C3108	-8.779846	10.6768	-0.82	0.411	-29.70598	12.14629
C3114	2.215894	4.92e-11	4.5e+10	0.000	2.215894	2.215894
C3118	.7037274	4.89e-11	1.4e+10	0.000	.7037274	.7037274
C3134	.4343482	4.92e-11	8.8e+09	0.000	.4343482	.4343482
C3142	.4053025	4.91e-11	8.2e+09	0.000	.4053025	.4053025
C3146	-.3484647	4.90e-11	-7.1e+09	0.000	-.3484647	-.3484647
C3154	1.706437	4.90e-11	3.5e+10	0.000	1.706437	1.706437
C3170	1.111402	4.91e-11	2.3e+10	0.000	1.111402	1.111402
C3174	-.5608451	4.90e-11	-1.1e+10	0.000	-.5608451	-.5608451
C3186	-.2240533	4.91e-11	-4.6e+09	0.000	-.2240533	-.2240533
C3190	-.1734513	4.90e-11	-3.5e+09	0.000	-.1734513	-.1734513
C3258	1.229436	4.92e-11	2.5e+10	0.000	1.229436	1.229436
C3278	.2309505	4.91e-11	4.7e+09	0.000	.2309505	.2309505
C3282	2.23147	4.91e-11	4.5e+10	0.000	2.23147	2.23147
C3290	.111692	4.92e-11	2.3e+09	0.000	.111692	.111692
C3310	3.579406	4.90e-11	7.3e+10	0.000	3.579406	3.579406
C3314	-.4059116	4.92e-11	-8.2e+09	0.000	-.4059116	-.4059116
C3322	-.5876801	4.91e-11	-1.2e+10	0.000	-.5876801	-.5876801
C3326	.1441644	4.78e-11	3.0e+09	0.000	.1441644	.1441644
C3334	2.538876	4.91e-11	5.2e+10	0.000	2.538876	2.538876
C3346	3.321519	4.90e-11	6.8e+10	0.000	3.321519	3.321519
C3354	-.147497	4.92e-11	-3.0e+09	0.000	-.147497	-.147497
C3366	.9630099	4.91e-11	2.0e+10	0.000	.9630099	.9630099
C3370	.9945019	4.92e-11	2.0e+10	0.000	.9945019	.9945019
C3374	.1685052	4.91e-11	3.4e+09	0.000	.1685052	.1685052
C3378	-.4532549	4.92e-11	-9.2e+09	0.000	-.4532549	-.4532549
C3386	.9330346	4.91e-11	1.9e+10	0.000	.9330346	.9330346
C3406	-.1050763	4.92e-11	-2.1e+09	0.000	-.1050763	-.1050763
C3410	-.4028277	4.95e-11	-8.1e+09	0.000	-.4028277	-.4028277
C3458	-.2988824	4.92e-11	-6.1e+09	0.000	-.2988824	-.2988824
C3462	-.3159533	4.90e-11	-6.4e+09	0.000	-.3159533	-.3159533
C3474	-.036093	4.91e-11	-7.4e+08	0.000	-.036093	-.036093
C3482	.7859763	4.93e-11	1.6e+10	0.000	.7859763	.7859763
C3490	.0766478	4.90e-11	1.6e+09	0.000	.0766478	.0766478
C3494	.6811773	4.91e-11	1.4e+10	0.000	.6811773	.6811773
C3498	2.536577	4.90e-11	5.2e+10	0.000	2.536577	2.536577
C3510	-.3706971	4.92e-11	-7.5e+09	0.000	-.3706971	-.3706971
C3530	1.728181	4.91e-11	3.5e+10	0.000	1.728181	1.728181
C3538	2.137006	4.92e-11	4.3e+10	0.000	2.137006	2.137006
C3562	-7.464743	9.959286	-0.75	0.454	-26.98459	12.0551
C3566	-.0423889	4.91e-11	-8.6e+08	0.000	-.0423889	-.0423889
C3584	1.429555	4.90e-11	2.9e+10	0.000	1.429555	1.429555
C3598	.6735449	4.91e-11	1.4e+10	0.000	.6735449	.6735449
C3610	.3928396	4.92e-11	8.0e+09	0.000	.3928396	.3928396
C3614	-.4427413	4.91e-11	-9.0e+09	0.000	-.4427413	-.4427413
C3622	-.0221598	4.84e-11	-4.6e+08	0.000	-.0221598	-.0221598
C3626	1.236127	4.88e-11	2.5e+10	0.000	1.236127	1.236127
C3642	2.174153	4.91e-11	4.4e+10	0.000	2.174153	2.174153
C3650	.4428002	4.90e-11	9.0e+09	0.000	.4428002	.4428002
C3654	1.941855	4.91e-11	4.0e+10	0.000	1.941855	1.941855
C3674	2.769068	4.93e-11	5.6e+10	0.000	2.769068	2.769068
C3678	.3403491	4.91e-11	6.9e+09	0.000	.3403491	.3403491
C3698	-.2515662	4.92e-11	-5.1e+09	0.000	-.2515662	-.2515662
C3710	1.579963	4.91e-11	3.2e+10	0.000	1.579963	1.579963
C3734	1.122434	4.92e-11	2.3e+10	0.000	1.122434	1.122434
C3746	.1555096	4.92e-11	3.2e+09	0.000	.1555096	.1555096
C3762	-.4845573	4.91e-11	-9.9e+09	0.000	-.4845573	-.4845573

C3786	.9035532	4.92e-11	1.8e+10	0.000	.9035532	.9035532
C3790	.9964977	4.91e-11	2.0e+10	0.000	.9964977	.9964977
C3798	3.728411	4.91e-11	7.6e+10	0.000	3.728411	3.728411
C3806	3.330819	4.90e-11	6.8e+10	0.000	3.330819	3.330819
C3822	-.5954487	4.90e-11	-1.2e+10	0.000	-.5954487	-.5954487
C3830	-8.483516	9.121457	-0.93	0.352	-26.36124	9.39421
C3834	-.0375463	4.90e-11	-7.7e+08	0.000	-.0375463	-.0375463
C3854	-.6774673	4.91e-11	-1.4e+10	0.000	-.6774673	-.6774673
C3886	1.390333	4.91e-11	2.8e+10	0.000	1.390333	1.390333
C3890	2.777757	4.90e-11	5.7e+10	0.000	2.777757	2.777757
C3894	.6728136	4.93e-11	1.4e+10	0.000	.6728136	.6728136
C3914	-.1018156	4.92e-11	-2.1e+09	0.000	-.1018156	-.1018156
C3930	2.360136	4.90e-11	4.8e+10	0.000	2.360136	2.360136
C3934	1.048371	4.78e-11	2.2e+10	0.000	1.048371	1.048371
C3938	-.1184046	4.90e-11	-2.4e+09	0.000	-.1184046	-.1184046
C3946	-.3982574	4.91e-11	-8.1e+09	0.000	-.3982574	-.3982574
C3954	.1527769	4.91e-11	3.1e+09	0.000	.1527769	.1527769
C3958	2.075254	4.92e-11	4.2e+10	0.000	2.075254	2.075254
C3966	-.0226929	4.90e-11	-4.6e+08	0.000	-.0226929	-.0226929
C3974	.9560029	4.91e-11	1.9e+10	0.000	.9560029	.9560029
C3982	.0030591	4.93e-11	6.2e+07	0.000	.0030591	.0030591
C3990	1.17241	4.92e-11	2.4e+10	0.000	1.17241	1.17241
C4006	2.226439	4.91e-11	4.5e+10	0.000	2.226439	2.226439
C4014	2.972534	4.93e-11	6.0e+10	0.000	2.972534	2.972534
C4022	.8541874	4.91e-11	1.7e+10	0.000	.8541874	.8541874
C4034	.539012	4.91e-11	1.1e+10	0.000	.539012	.539012
C4038	2.053639	4.91e-11	4.2e+10	0.000	2.053639	2.053639
C4042	.8207277	4.90e-11	1.7e+10	0.000	.8207277	.8207277
C4058	-.0639403	4.90e-11	-1.3e+09	0.000	-.0639403	-.0639403
C4066	-.4913024	4.93e-11	-1.0e+10	0.000	-.4913024	-.4913024
C4090	2.646987	4.91e-11	5.4e+10	0.000	2.646987	2.646987
C4098	.2878865	4.92e-11	5.9e+09	0.000	.2878865	.2878865
C4106	.4170444	4.92e-11	8.5e+09	0.000	.4170444	.4170444
C4110	-.2515625	4.86e-11	-5.2e+09	0.000	-.2515625	-.2515625
C4114	-.1708672	4.92e-11	-3.5e+09	0.000	-.1708672	-.1708672
C4118	2.998615	4.91e-11	6.1e+10	0.000	2.998615	2.998615
C4142	.8929814	4.91e-11	1.8e+10	0.000	.8929814	.8929814
C4150	1.007926	4.90e-11	2.1e+10	0.000	1.007926	1.007926
C4154	.8289856	4.91e-11	1.7e+10	0.000	.8289856	.8289856
C4162	2.249466	4.90e-11	4.6e+10	0.000	2.249466	2.249466
C4166	-.3294677	4.90e-11	-6.7e+09	0.000	-.3294677	-.3294677
C4170	-7.564756	8.182365	-0.92	0.355	-23.6019	8.472384
C4174	3.024288	4.91e-11	6.2e+10	0.000	3.024288	3.024288
C4186	-9.735452	10.65479	-0.91	0.361	-30.61847	11.14756
C4194	2.70143	4.89e-11	5.5e+10	0.000	2.70143	2.70143
C4202	.5103144	4.91e-11	1.0e+10	0.000	.5103144	.5103144
C4210	.4308187	4.88e-11	8.8e+09	0.000	.4308187	.4308187
C4214	-.03966	4.90e-11	-8.1e+08	0.000	-.03966	-.03966
C4220	1.070452	4.90e-11	2.2e+10	0.000	1.070452	1.070452
C4222	1.095988	4.87e-11	2.2e+10	0.000	1.095988	1.095988
C4234	.8618578	4.92e-11	1.8e+10	0.000	.8618578	.8618578
C4254	1.36082	4.91e-11	2.8e+10	0.000	1.36082	1.36082
C4266	3.289771	4.90e-11	6.7e+10	0.000	3.289771	3.289771
C4268	-.2943014	4.92e-11	-6.0e+09	0.000	-.2943014	-.2943014
C4270	-.8562848	4.92e-11	-1.7e+10	0.000	-.8562848	-.8562848
C4310	-.0716208	4.91e-11	-1.5e+09	0.000	-.0716208	-.0716208
C4330	-.3888022	4.93e-11	-7.9e+09	0.000	-.3888022	-.3888022
C4334	1.030413	4.92e-11	2.1e+10	0.000	1.030413	1.030413
C4342	-.5925132	4.91e-11	-1.2e+10	0.000	-.5925132	-.5925132
C4358	.2820979	4.92e-11	5.7e+09	0.000	.2820979	.2820979
C4362	.7367612	4.92e-11	1.5e+10	0.000	.7367612	.7367612
C4378	.7093288	4.90e-11	1.4e+10	0.000	.7093288	.7093288
C4390	.7005456	4.92e-11	1.4e+10	0.000	.7005456	.7005456
C4406	1.22213	4.91e-11	2.5e+10	0.000	1.22213	1.22213
C4410	.7320022	4.91e-11	1.5e+10	0.000	.7320022	.7320022
C4414	1.406298	4.91e-11	2.9e+10	0.000	1.406298	1.406298
C4418	1.065954	4.92e-11	2.2e+10	0.000	1.065954	1.065954
C4422	-.2497039	4.91e-11	-5.1e+09	0.000	-.2497039	-.2497039
C4430	.0327231	4.91e-11	6.7e+08	0.000	.0327231	.0327231
C4442	-.3078718	4.91e-11	-6.3e+09	0.000	-.3078718	-.3078718
C4470	1.239013	4.92e-11	2.5e+10	0.000	1.239013	1.239013
C4494	-.5465253	4.91e-11	-1.1e+10	0.000	-.5465253	-.5465253

C4506	1.545671	4.91e-11	3.1e+10	0.000	1.545671	1.545671
C4522	.948541	4.91e-11	1.9e+10	0.000	.948541	.948541
C4530	2.910721	4.90e-11	5.9e+10	0.000	2.910721	2.910721
C4546	.05563	4.90e-11	1.1e+09	0.000	.05563	.05563
C4550	-.0929365	4.91e-11	-1.9e+09	0.000	-.0929365	-.0929365
C4554	-1.217269	4.95e-11	-2.5e+10	0.000	-1.217269	-1.217269
C4578	1.519233	4.91e-11	3.1e+10	0.000	1.519233	1.519233
C4582	.5257081	4.91e-11	1.1e+10	0.000	.5257081	.5257081
C4594	-9.999516	9.088208	-1.10	0.271	-27.81208	7.813044
C4606	-9.073458	8.682908	-1.04	0.296	-26.09165	7.944729
C4614	1.856927	4.91e-11	3.8e+10	0.000	1.856927	1.856927
C4622	.3649834	4.91e-11	7.4e+09	0.000	.3649834	.3649834
C4634	.3809917	4.89e-11	7.8e+09	0.000	.3809917	.3809917
C4652	1.94048	4.91e-11	4.0e+10	0.000	1.94048	1.94048
C4654	.6597761	4.90e-11	1.3e+10	0.000	.6597761	.6597761
C4666	-.1881165	4.91e-11	-3.8e+09	0.000	-.1881165	-.1881165
C4670	.6961036	4.90e-11	1.4e+10	0.000	.6961036	.6961036
C4702	-.4752122	4.90e-11	-9.7e+09	0.000	-.4752122	-.4752122
C4722	-.0724419	4.91e-11	-1.5e+09	0.000	-.0724419	-.0724419
C4726	-8.991458	9.197804	-0.98	0.328	-27.01882	9.035908
C4730	.8359821	4.90e-11	1.7e+10	0.000	.8359821	.8359821
C4738	.5153805	4.91e-11	1.0e+10	0.000	.5153805	.5153805
C4746	-.8429081	4.90e-11	-1.7e+10	0.000	-.8429081	-.8429081
C4758	.0408601	4.90e-11	8.3e+08	0.000	.0408601	.0408601
C4790	-9.149855	10.44849	-0.88	0.381	-29.62852	11.32881
C4794	.2973999	4.91e-11	6.1e+09	0.000	.2973999	.2973999
C4806	-.4493644	4.92e-11	-9.1e+09	0.000	-.4493644	-.4493644
C4814	.0682955	4.91e-11	1.4e+09	0.000	.0682955	.0682955
C4826	-.4118979	4.90e-11	-8.4e+09	0.000	-.4118979	-.4118979
C4830	-.2405027	4.89e-11	-4.9e+09	0.000	-.2405027	-.2405027
C4854	-.0103447	4.91e-11	-2.1e+08	0.000	-.0103447	-.0103447
C4862	1.503372	4.91e-11	3.1e+10	0.000	1.503372	1.503372
C4866	-.0957628	4.93e-11	-1.9e+09	0.000	-.0957628	-.0957628
C4870	-.2066021	4.91e-11	-4.2e+09	0.000	-.2066021	-.2066021
C4890	.5468322	4.91e-11	1.1e+10	0.000	.5468322	.5468322
C4902	-.1446499	4.91e-11	-2.9e+09	0.000	-.1446499	-.1446499
C4918	1.364948	4.91e-11	2.8e+10	0.000	1.364948	1.364948
C4934	1.73682	4.91e-11	3.5e+10	0.000	1.73682	1.73682
C4942	.4693614	4.90e-11	9.6e+09	0.000	.4693614	.4693614
C4962	.9904048	4.91e-11	2.0e+10	0.000	.9904048	.9904048
C4966	1.248511	4.91e-11	2.5e+10	0.000	1.248511	1.248511
C4970	-.3554547	4.91e-11	-7.2e+09	0.000	-.3554547	-.3554547
C4974	-.0102475	4.91e-11	-2.1e+08	0.000	-.0102475	-.0102475
_cons	11.75803	4.86e-11	2.4e+11	0.000	11.75803	11.75803

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Instruments: 2.msa_factor 3.msa_factor 4.msa_factor
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               53.msa_factor 54.msa_factor 55.msa_factor
               56.msa_factor 57.msa_factor 58.msa_factor
               59.msa_factor 60.msa_factor 61.msa_factor
               62.msa_factor 63.msa_factor 64.msa_factor
               65.msa_factor 66.msa_factor 67.msa_factor
               68.msa_factor 69.msa_factor 70.msa_factor
               71.msa_factor 72.msa_factor 73.msa_factor
               74.msa_factor 75.msa_factor 76.msa_factor

```
77.msa_factor 78.msa_factor 79.msa_factor
80.msa_factor 81.msa_factor 82.msa_factor
83.msa_factor 84.msa_factor 85.msa_factor
86.msa_factor 87.msa_factor 88.msa_factor
89.msa_factor 90.msa_factor 91.msa_factor
92.msa_factor 93.msa_factor 94.msa_factor
95.msa_factor 96.msa_factor 97.msa_factor
98.msa_factor 99.msa_factor 100.msa_factor
101.msa_factor 102.msa_factor
103.msa_factor 104.msa_factor
105.msa_factor 106.msa_factor
107.msa_factor 108.msa_factor
109.msa_factor 110.msa_factor
111.msa_factor 112.msa_factor
113.msa_factor 114.msa_factor
115.msa_factor 116.msa_factor
117.msa_factor 118.msa_factor
119.msa_factor 120.msa_factor
121.msa_factor 122.msa_factor
123.msa_factor 124.msa_factor
125.msa_factor 126.msa_factor
127.msa_factor 128.msa_factor
129.msa_factor 130.msa_factor
131.msa_factor 132.msa_factor
133.msa_factor 134.msa_factor
135.msa_factor 136.msa_factor
137.msa_factor 138.msa_factor
139.msa_factor 140.msa_factor
141.msa_factor 142.msa_factor
143.msa_factor 144.msa_factor
145.msa_factor 146.msa_factor
147.msa_factor 148.msa_factor
149.msa_factor 150.msa_factor
151.msa_factor 152.msa_factor
153.msa_factor 154.msa_factor
155.msa_factor 156.msa_factor
157.msa_factor 158.msa_factor
159.msa_factor 160.msa_factor
161.msa_factor 162.msa_factor
163.msa_factor 164.msa_factor
165.msa_factor 166.msa_factor
167.msa_factor 168.msa_factor
169.msa_factor 170.msa_factor
171.msa_factor 172.msa_factor
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175.msa_factor 176.msa_factor
177.msa_factor 178.msa_factor
179.msa_factor 180.msa_factor
181.msa_factor 182.msa_factor
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185.msa_factor 186.msa_factor
187.msa_factor 188.msa_factor
189.msa_factor 190.msa_factor
191.msa_factor 192.msa_factor
193.msa_factor 194.msa_factor
195.msa_factor 196.msa_factor
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203.msa_factor 204.msa_factor
205.msa_factor 206.msa_factor
207.msa_factor 208.msa_factor
209.msa_factor 210.msa_factor
211.msa_factor 212.msa_factor
213.msa_factor 214.msa_factor
215.msa_factor 216.msa_factor
217.msa_factor 218.msa_factor
219.msa_factor 220.msa_factor
221.msa_factor 222.msa_factor
223.msa_factor 224.msa_factor
225.msa_factor 226.msa_factor
227.msa_factor 228.msa_factor
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229.msa_factor 230.msa_factor
231.msa_factor 232.msa_factor
233.msa_factor 234.msa_factor
235.msa_factor 236.msa_factor
237.msa_factor 238.msa_factor
239.msa_factor 240.msa_factor
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249.msa_factor 250.msa_factor
251.msa_factor 252.msa_factor
253.msa_factor 254.msa_factor
255.msa_factor 256.msa_factor
257.msa_factor 258.msa_factor
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269.msa_factor 270.msa_factor
271.msa_factor 272.msa_factor
273.msa_factor 274.msa_factor
275.msa_factor 276.msa_factor
277.msa_factor 278.msa_factor
279.msa_factor 280.msa_factor
281.msa_factor 282.msa_factor
283.msa_factor 284.msa_factor
285.msa_factor 286.msa_factor
287.msa_factor 288.msa_factor
289.msa_factor 290.msa_factor
291.msa_factor 292.msa_factor
293.msa_factor 294.msa_factor
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321.msa_factor 322.msa_factor
323.msa_factor 324.msa_factor
325.msa_factor 326.msa_factor
327.msa_factor 328.msa_factor
329.msa_factor 330.msa_factor
331.msa_factor 332.msa_factor
333.msa_factor 334.msa_factor
335.msa_factor 336.msa_factor
337.msa_factor 338.msa_factor
339.msa_factor 340.msa_factor
341.msa_factor 342.msa_factor
343.msa_factor 344.msa_factor
345.msa_factor 346.msa_factor
347.msa_factor 348.msa_factor
349.msa_factor 350.msa_factor
351.msa_factor 352.msa_factor
353.msa_factor 354.msa_factor
355.msa_factor 356.msa_factor
357.msa_factor 358.msa_factor
359.msa_factor 360.msa_factor
361.msa_factor 362.msa_factor
363.msa_factor 364.msa_factor
365.msa_factor 366.msa_factor
367.msa_factor 368.msa_factor
369.msa_factor 370.msa_factor
371.msa_factor 372.msa_factor
```

```
                    373.msa_factor 374.msa_factor
                    375.msa_factor 376.msa_factor
                    377.msa_factor 378.msa_factor
                    379.msa_factor 380.msa_factor
                    voted_for_winner resid_election_gap
                    resid_product_winner_gap
502 outreg2 using output/pres_iv_annual_avg_emplvl.doc, append ctitle("With MSA FE") kee
  > p(log_federal_funding)
  output/pres_iv_annual_avg_emplvl.doc
  dir : seeout

503
504
505
506
507
508
509
510
  end of do-file

511 do code/4-clean-industry-data.do

512
513 cd C:\Users\ecsxn\Documents\repo\rd_spillovers_1433
  C:\Users\ecsxn\Documents\repo\rd_spillovers_1433

514
515 import delimited data/raw/Jensen-Kletzer-2005-table-4.csv, clear
  (4 vars, 27 obs)

516 ren ïnaics naics

517
518 gen ratio = nontradable / tradable
  (2 missing values generated)

519 drop if naics == ""
  (1 observation deleted)

520 sort ratio

521
522 drop ratio

523 collapse (sum) *tradable, by(description)

524 gen ratio = nontradable / tradable
  (1 missing value generated)

525 sort ratio

526
527 /*
  > naics    description       nontradable    tradable        ratio
  > 22       Utilities         .76      .18     4.222222
  > 44       Retail Trade      5.9      1.32    4.469697
  > 72       Accommodation     4.52     1       4.52
  > 45       Retail Trade      2.91     .37     7.864865
  > 62       Health Care/Social       10.9     .25     43.6
  > 61       Education         8.75     .1      87.5
  > 4M       Retail Trade      .62      0
  > 23       Construction      6.86     0
  >
  > */
```

```
528
529
530
531
532 //----------------------------construction and retail----------------------------
  > -------------
533 //seed the append loop
534 clear

535 set obs 1
  number of observations (_N) was 0, now 1

536 gen x=.
  (1 missing value generated)

537 save data/intermediate/qcew_allcounties_constructionretail_post01, replace
  file data/intermediate/qcew_allcounties_constructionretail_post01.dta saved

538
539 //read in and append QCEW data
540 forvalues yr = 2001(1)2019 {
  2.      display `yr'
  3.          if `yr' <= 2015{
  4.                  import delimited "data/raw/QCEW/`yr'.annual 23 Construction.csv",
  >  clear
  5.          }
  6.          else {
  7.                  import delimited "data/raw/QCEW/`yr'.annual 23 NAICS 23 Construct
  > ion.csv", clear
  8.          }
  9.
541          //keep only totals (not by ownership)
542          rename area_fips COUNTY
  10.
543          drop oty* //overtime stats, not relevant and not available
  11.          drop lq* //location quotients: only relevant for per-industry stats
  12.
544          tostring(disclosure_code), replace
  13.          tostring(industry_code), replace
  14.
545          append using data/intermediate/qcew_allcounties_constructionretail_post01
  15.          save data/intermediate/qcew_allcounties_constructionretail_post01, replac
  > e
  16.
546
547          if `yr' <= 2015{
  17.                  import delimited "data/raw/QCEW/`yr'.annual 44-45 Retail trade.cs
  > v", clear
  18.          }
  19.          else {
  20.                  import delimited "data/raw/QCEW/`yr'.annual 44-45 NAICS 44-45 Ret
  > ail trade.csv", clear
  21.          }
  22.
548          //keep only totals (not by ownership)
549          rename area_fips COUNTY
  23.
550          drop oty* //overtime stats, not relevant and not available
  24.          drop lq* //location quotients: only relevant for per-industry stats
  25.
```

```
551              tostring(disclosure_code), replace
  26.
552              append using data/intermediate/qcew_allcounties_constructionretail_post01
  27.          save data/intermediate/qcew_allcounties_constructionretail_post01, replac
> e
  28. }
2001
(43 vars, 6,498 obs)
disclosure_code already string; no replace
industry_code was byte now str2
file data/intermediate/qcew_allcounties_constructionretail_post01.dta saved
(43 vars, 4,398 obs)
disclosure_code already string; no replace
(note: variable annual_contributions was long, now double to accommodate using
       data's values)
file data/intermediate/qcew_allcounties_constructionretail_post01.dta saved
2002
(43 vars, 6,482 obs)
disclosure_code already string; no replace
industry_code was byte now str2
(note: variable industry_code was str2, now str5 to accommodate using data's values)
file data/intermediate/qcew_allcounties_constructionretail_post01.dta saved
(43 vars, 4,383 obs)
disclosure_code already string; no replace
(note: variable annual_contributions was long, now double to accommodate using
       data's values)
file data/intermediate/qcew_allcounties_constructionretail_post01.dta saved
2003
(43 vars, 6,450 obs)
disclosure_code already string; no replace
industry_code was byte now str2
(note: variable industry_code was str2, now str5 to accommodate using data's values)
file data/intermediate/qcew_allcounties_constructionretail_post01.dta saved
(43 vars, 4,401 obs)
disclosure_code already string; no replace
file data/intermediate/qcew_allcounties_constructionretail_post01.dta saved
2004
(43 vars, 6,511 obs)
disclosure_code already string; no replace
industry_code was byte now str2
(note: variable industry_code was str2, now str5 to accommodate using data's values)
file data/intermediate/qcew_allcounties_constructionretail_post01.dta saved
(43 vars, 4,409 obs)
disclosure_code already string; no replace
file data/intermediate/qcew_allcounties_constructionretail_post01.dta saved
2005
(43 vars, 6,512 obs)
disclosure_code already string; no replace
industry_code was byte now str2
(note: variable industry_code was str2, now str5 to accommodate using data's values)
file data/intermediate/qcew_allcounties_constructionretail_post01.dta saved
(43 vars, 4,423 obs)
disclosure_code already string; no replace
file data/intermediate/qcew_allcounties_constructionretail_post01.dta saved
2006
(43 vars, 6,505 obs)
disclosure_code already string; no replace
industry_code was byte now str2
(note: variable industry_code was str2, now str5 to accommodate using data's values)
file data/intermediate/qcew_allcounties_constructionretail_post01.dta saved
(43 vars, 4,422 obs)
disclosure_code already string; no replace
file data/intermediate/qcew_allcounties_constructionretail_post01.dta saved
2007
(43 vars, 6,497 obs)
disclosure_code already string; no replace
industry_code was byte now str2
(note: variable industry_code was str2, now str5 to accommodate using data's values)
file data/intermediate/qcew_allcounties_constructionretail_post01.dta saved
(43 vars, 4,450 obs)
disclosure_code already string; no replace
file data/intermediate/qcew_allcounties_constructionretail_post01.dta saved
```

```
2008
(43 vars, 6,489 obs)
disclosure_code already string; no replace
industry_code was byte now str2
(note: variable industry_code was str2, now str5 to accommodate using data's values)
file data/intermediate/qcew_allcounties_constructionretail_post01.dta saved
(43 vars, 4,450 obs)
disclosure_code already string; no replace
file data/intermediate/qcew_allcounties_constructionretail_post01.dta saved
2009
(43 vars, 6,423 obs)
disclosure_code already string; no replace
industry_code was byte now str2
(note: variable industry_code was str2, now str5 to accommodate using data's values)
(note: variable area_title was str50, now str51 to accommodate using data's values)
file data/intermediate/qcew_allcounties_constructionretail_post01.dta saved
(43 vars, 4,460 obs)
disclosure_code already string; no replace
(note: variable area_title was str50, now str51 to accommodate using data's values)
file data/intermediate/qcew_allcounties_constructionretail_post01.dta saved
2010
(43 vars, 6,431 obs)
disclosure_code already string; no replace
industry_code was byte now str2
(note: variable industry_code was str2, now str5 to accommodate using data's values)
(note: variable area_title was str50, now str51 to accommodate using data's values)
file data/intermediate/qcew_allcounties_constructionretail_post01.dta saved
(43 vars, 4,444 obs)
disclosure_code already string; no replace
(note: variable area_title was str50, now str51 to accommodate using data's values)
file data/intermediate/qcew_allcounties_constructionretail_post01.dta saved
2011
(43 vars, 6,472 obs)
disclosure_code already string; no replace
industry_code was byte now str2
(note: variable industry_code was str2, now str5 to accommodate using data's values)
(note: variable area_title was str50, now str51 to accommodate using data's values)
file data/intermediate/qcew_allcounties_constructionretail_post01.dta saved
(43 vars, 4,446 obs)
disclosure_code already string; no replace
(note: variable area_title was str50, now str51 to accommodate using data's values)
file data/intermediate/qcew_allcounties_constructionretail_post01.dta saved
2012
(43 vars, 6,429 obs)
disclosure_code already string; no replace
industry_code was byte now str2
(note: variable industry_code was str2, now str5 to accommodate using data's values)
(note: variable area_title was str50, now str51 to accommodate using data's values)
file data/intermediate/qcew_allcounties_constructionretail_post01.dta saved
(43 vars, 4,446 obs)
disclosure_code already string; no replace
(note: variable area_title was str50, now str51 to accommodate using data's values)
file data/intermediate/qcew_allcounties_constructionretail_post01.dta saved
2013
(43 vars, 6,451 obs)
disclosure_code already string; no replace
industry_code was byte now str2
(note: variable industry_code was str2, now str5 to accommodate using data's values)
(note: variable area_title was str50, now str51 to accommodate using data's values)
file data/intermediate/qcew_allcounties_constructionretail_post01.dta saved
(43 vars, 4,458 obs)
disclosure_code already string; no replace
(note: variable area_title was str50, now str51 to accommodate using data's values)
file data/intermediate/qcew_allcounties_constructionretail_post01.dta saved
2014
(43 vars, 6,453 obs)
disclosure_code already string; no replace
industry_code was byte now str2
(note: variable industry_code was str2, now str5 to accommodate using data's values)
(note: variable area_title was str50, now str51 to accommodate using data's values)
file data/intermediate/qcew_allcounties_constructionretail_post01.dta saved
(43 vars, 4,467 obs)
```

```
disclosure_code already string; no replace
(note: variable area_title was str50, now str51 to accommodate using data's values)
file data/intermediate/qcew_allcounties_constructionretail_post01.dta saved
2015
(43 vars, 6,488 obs)
disclosure_code already string; no replace
industry_code was byte now str2
(note: variable industry_code was str2, now str5 to accommodate using data's values)
(note: variable area_title was str50, now str51 to accommodate using data's values)
file data/intermediate/qcew_allcounties_constructionretail_post01.dta saved
(43 vars, 4,468 obs)
disclosure_code already string; no replace
(note: variable area_title was str50, now str51 to accommodate using data's values)
file data/intermediate/qcew_allcounties_constructionretail_post01.dta saved
2016
(43 vars, 6,459 obs)
disclosure_code already string; no replace
industry_code was byte now str2
(note: variable industry_code was str2, now str5 to accommodate using data's values)
(note: variable area_title was str50, now str51 to accommodate using data's values)
file data/intermediate/qcew_allcounties_constructionretail_post01.dta saved
(43 vars, 4,469 obs)
disclosure_code already string; no replace
(note: variable area_title was str50, now str51 to accommodate using data's values)
file data/intermediate/qcew_allcounties_constructionretail_post01.dta saved
2017
(43 vars, 6,448 obs)
disclosure_code already string; no replace
industry_code was byte now str2
(note: variable industry_code was str2, now str5 to accommodate using data's values)
(note: variable area_title was str50, now str51 to accommodate using data's values)
(note: variable industry_title was str21, now str24 to accommodate using data's
        values)
file data/intermediate/qcew_allcounties_constructionretail_post01.dta saved
(43 vars, 4,469 obs)
disclosure_code already string; no replace
(note: variable area_title was str50, now str51 to accommodate using data's values)
file data/intermediate/qcew_allcounties_constructionretail_post01.dta saved
2018
(43 vars, 6,402 obs)
disclosure_code already string; no replace
industry_code was byte now str2
(note: variable industry_code was str2, now str5 to accommodate using data's values)
(note: variable area_title was str50, now str51 to accommodate using data's values)
(note: variable industry_title was str21, now str24 to accommodate using data's
        values)
file data/intermediate/qcew_allcounties_constructionretail_post01.dta saved
(43 vars, 4,483 obs)
disclosure_code already string; no replace
(note: variable area_title was str50, now str51 to accommodate using data's values)
file data/intermediate/qcew_allcounties_constructionretail_post01.dta saved
2019
(43 vars, 6,398 obs)
disclosure_code already string; no replace
industry_code was byte now str2
(note: variable industry_code was str2, now str5 to accommodate using data's values)
(note: variable area_title was str50, now str51 to accommodate using data's values)
(note: variable industry_title was str21, now str24 to accommodate using data's
        values)
file data/intermediate/qcew_allcounties_constructionretail_post01.dta saved
(43 vars, 4,481 obs)
disclosure_code already string; no replace
(note: variable area_title was str50, now str51 to accommodate using data's values)
file data/intermediate/qcew_allcounties_constructionretail_post01.dta saved
```

```
553
554 //discard statewide observations
555 tab agglvl_title
```

agglvl_title	Freq.	Percent	Cum.
County, NAICS Sector -- by ownership ..	187,528	90.49	90.49
MSA, NAICS Sector -- by ownership sec..	14,288	6.89	97.39
National, NAICS Sector -- by ownershi..	152	0.07	97.46
State, NAICS Sector -- by ownership s..	5,257	2.54	100.00
Total	207,225	100.00	

```
556 keep if agglvl_title == "County, NAICS Sector -- by ownership sector" //not using MS
  > A data, using county data and crosswalking for consistent MSA definition since redra
  > w post census
  (19,698 observations deleted)

557
558 //NOTE: disclosure_code = N means missing data
559 recode annual* avg_annual_pay total_annual_wages taxable (0 = .) if disclosure_code
  > == "N"
  (annual_avg_estabs_count: 9418 changes made)
  (annual_avg_emplvl: 58408 changes made)
  (annual_contributions: 58408 changes made)
  (annual_avg_wkly_wage: 58408 changes made)
  (avg_annual_pay: 58408 changes made)
  (total_annual_wages: 58408 changes made)
  (taxable_annual_wages: 58408 changes made)

560 tab disclosure_code own_title
```

disclosure _code	own_title Local G..	Private	State G..	Total
N	23,502	7,746	27,160	58,408
Total	23,502	7,746	27,160	58,408

```
561
562 /*
  > gen missing = 1 if disclosure_code == "N"
  > drop disclosure_code own_title
  > collapse (sum) annual_avg_estabs_count annual_avg_emplvl total_annual_wages missing,
  >  by(COUNTY year)
  > tab missing
  > */
563 //NOTE: TOO MANY MISSING VALUES SO ONLY LOOK AT PRIVATE ESTABS
564 keep if own_title == "Private"
  (63,481 observations deleted)

565
566
567 //drop seed observation
568 drop if year == .
  (0 observations deleted)

569 drop x

570 save data/intermediate/qcew_allcounties_constructionretail_private_post01, replace
  file data/intermediate/qcew_allcounties_constructionretail_private_post01.dta saved
```

```
571
572
573
574 // -------------- merge qcew with ffrdc data, adjust for inflation-----------------
  > --------
575 use data/intermediate/qcew_allcounties_constructionretail_private_post01, clear

576 merge m:1 year COUNTY using data/intermediate/ffrdcrd_county_summary
```

Result	# of obs.	
not matched	123,335	
from master	122,965	(_merge==1)
from using	370	(_merge==2)
matched	1,082	(_merge==3)

```
577 tab year _merge
```

year	master on	_merge using onl	matched (	Total
1979	0	17	0	17
1980	0	17	0	17
1981	0	17	0	17
1982	0	17	0	17
1983	0	17	0	17
1984	0	16	0	16
1985	0	16	0	16
1986	0	16	0	16
1987	0	17	0	17
1988	0	17	0	17
1989	0	17	0	17
1990	0	17	0	17
1991	0	18	0	18
1992	0	18	0	18
1993	0	18	0	18
1994	0	17	0	17
1995	0	17	0	17
1996	0	17	0	17
1997	0	17	0	17
1998	0	16	0	16
1999	0	16	0	16
2000	0	15	0	15
2001	6,477	0	54	6,531
2002	6,473	0	54	6,527
2003	6,474	0	54	6,528
2004	6,479	0	54	6,533
2005	6,476	0	54	6,530
2006	6,469	0	56	6,525
2007	6,471	0	56	6,527
2008	6,476	0	56	6,532
2009	6,471	0	56	6,527
2010	6,470	0	58	6,528
2011	6,469	0	58	6,527
2012	6,471	0	56	6,527
2013	6,471	0	58	6,529
2014	6,473	0	58	6,531
2015	6,474	0	60	6,534
2016	6,468	0	60	6,528
2017	6,466	0	60	6,526
2018	6,467	0	60	6,527
2019	6,470	0	60	6,530
Total	122,965	370	1,082	124,417

```
578 keep if year >= 2001
  (370 observations deleted)

579 drop _merge

580
581 merge m:1 year using data/intermediate/inflation_adjustment
```

```
        Result                          # of obs.
        ─────────────────────────────────────────
        not matched                         26
            from master                      0  (_merge==1)
            from using                      26  (_merge==2)

        matched                        124,047  (_merge==3)
        ─────────────────────────────────────────
```

```
582 tab year _merge
```

	_merge	
year	using onl	matched (	Total
1975	1	0	1
1976	1	0	1
1977	1	0	1
1978	1	0	1
1979	1	0	1
1980	1	0	1
1981	1	0	1
1982	1	0	1
1983	1	0	1
1984	1	0	1
1985	1	0	1
1986	1	0	1
1987	1	0	1
1988	1	0	1
1989	1	0	1
1990	1	0	1
1991	1	0	1
1992	1	0	1
1993	1	0	1
1994	1	0	1
1995	1	0	1
1996	1	0	1
1997	1	0	1
1998	1	0	1
1999	1	0	1
2000	1	0	1
2001	0	6,531	6,531
2002	0	6,527	6,527
2003	0	6,528	6,528
2004	0	6,533	6,533
2005	0	6,530	6,530
2006	0	6,525	6,525
2007	0	6,527	6,527
2008	0	6,532	6,532
2009	0	6,527	6,527
2010	0	6,528	6,528
2011	0	6,527	6,527
2012	0	6,527	6,527
2013	0	6,529	6,529
2014	0	6,531	6,531
2015	0	6,534	6,534
2016	0	6,528	6,528
2017	0	6,526	6,526
2018	0	6,527	6,527
2019	0	6,530	6,530
Total	26	124,047	124,073

```
583 keep if year >= 2001
  (26 observations deleted)

584 drop _merge

585 foreach dollar_var of varlist total_annual_wages-federal_funding {
    2.     replace `dollar_var' = `dollar_var'/dollarvalue
    3. }
  (110,190 real changes made)
  (110,190 real changes made)
  (110,185 real changes made)
  variable annual_avg_wkly_wage was int now float
  (110,190 real changes made)
  variable avg_annual_pay was long now double
  (110,190 real changes made)
  (1,022 real changes made)
  (1,022 real changes made)

586
587 save data/intermediate/merged_allcounties_constructionretail_private_post01, replace
  file data/intermediate/merged_allcounties_constructionretail_private_post01.dta saved

588
589 //-------------crosswalk to and summarize by MSA-----------------------
590 use data/intermediate/merged_allcounties_constructionretail_private_post01, clear

591 merge m:1 COUNTY using data/intermediate/county-to-msa

    Result                           # of obs.
    ─────────────────────────────────────────────
    not matched                          1,891
        from master                      1,869   (_merge==1)
        from using                          22   (_merge==2)

    matched                            122,178   (_merge==3)
    ─────────────────────────────────────────────

592 drop if _merge == 2
  (22 observations deleted)

593
594 //investigate if all FFRDCs are in MSAs
595 list if ffrdc_count != . & msacode == "" //there is one FFRDC in Barnwell County, SC
  >  that is not in a MSA. TO DO:
```

89444.	COUNTY	own_code	indus~de	agglv~de	size_c~e	year
> qtr	disclo~e					
	45011	5	44-45	74	0	2015
> A						

			area_title		own_ti~e	
> industry_title						
			Barnwell County, South Carolina		Private	
>	Retail trade					

			agglvl_title		size_title	a
> nnual~t	annual~l					
	83	780	County, NAICS Sector -- by ownership sector		All establishment sizes	
>						

	total_a~s	taxable~s	annual_~s	annual~e	avg_annua~y	total_fun~g	f
> ederal_f~g	ffrdc_~t						
	18952310	10664134	128857.19	467.054	24300.8131	131244.2378	1
> 31244.2378	1						

| | dollar~e | count~de | | | countytitle | msacode | msatitle |

msatype	csacode
.9270883	45011	Barnwell County, South Carolina

	csatitle		_mer
> ge			
			matched (
> 3)	

89445.	COUNTY	own_code	indus~de	agglv~de	size_c~e	year
> qtr	disclo~e
	45011	5	44-45	74	0	2014
> A

| | area_title | | own_ti~e |
| > industry_title |
| | Barnwell County, South Carolina | | Private |
| > Retail trade |

	agglvl_title		size_title	a
> nnual~t	annual~l
	County, NAICS Sector -- by ownership sector	All establishment sizes
> 81	777

total_a~s	taxable~s	annual_~s	annual~e	avg_annua~y	total_fun~g	f
> ederal f~g	ffrdc_~t
17920217	9687285.3	172284.82	443.849	23066.12716	130685.0155	1
> 30685.0155	1

dollar~e	count~de		countytitle	msacode	msatitle
msatype	csacode
.9259899	45011	Barnwell County, South Carolina

	csatitle		_mer
> ge			
			matched (
> 3)	

89446.	COUNTY	own_code	indus~de	agglv~de	size_c~e	year
> qtr	disclo~e
	45011	5	23	74	0	2010
> A

| | area_title | | own_ti~e |
| > industry_title |
| | Barnwell County, South Carolina | | Private |
| > Construction |

	agglvl_title		size_title	a
> nnual~t	annual~l
	County, NAICS Sector -- by ownership sector	All establishment sizes
> 31	187

| total_a~s | taxable~s | annual_~s | annual~e | avg_annua~y | total_fun~g | f |

> ederal_f~g | ffrdc_~t |
| 7184307.2 | 2016182.9 | 83303.177 | 738.638 | 38384.57885 | 149087.7256 | 1
> 49087.7256 | 1 |

| | dollar~e | count~de | countytitle | msacode | msatitle
msatype	csacode
	.8529207	45011	Barnwell County, South Carolina	

| | | csatitle | _mer
> ge | |
| | | | matched (
> 3) | |

| 89447. | COUNTY | own_code | indus~de | agglv~de | size_c~e | year |
> qtr | disclo~e |
| | 45011 | 5 | 44-45 | 74 | 0 | 2017 |
> A | |

| | | area_title | own_ti~e |
> industry_title | |
| | | Barnwell County, South Carolina | Private | NAICS 44
> -45 Retail trade | |

| | | agglvl_title | size_title | a
> nnual~t | annual~l |
| | County, NAICS Sector -- by ownership sector | All establishment sizes |
>   81 | 725 |

| | total_a~s | taxable~s | annual_~s | annual~e | avg_annua~y | total_fun~g | f
> ederal_f~g | ffrdc_~t |
| 17509758 | 9346845.1 | 86390.905 | 464.131 | 24154.61757 | 147559.1705 | 1
> 47559.1705 | 1 |

| | dollar~e | count~de | countytitle | msacode | msatitle
msatype	csacode
	.9587815	45011	Barnwell County, South Carolina	

| | | csatitle | _mer
> ge | |
| | | | matched (
> 3) | |

| 89448. | COUNTY | own_code | indus~de | agglv~de | size_c~e | year |
> qtr | disclo~e |
| | 45011 | 5 | 44-45 | 74 | 0 | 2009 |
> A | |

| | | area_title | own_ti~e |
> industry_title | |
| | | Barnwell County, South Carolina | Private |
> Retail trade | |

| | | agglvl_title | size_title | a

```
> nnual~t |   annual~l |
        |  County, NAICS Sector -- by ownership sector  | All establishment sizes  |
>      78 |        783 |
        |_____|_____|_____|
        |  total_a~s | taxable~s |  annual_~s | annual~e | avg_annua~y | total_fun~g | f
> ederal_f~g |  ffrdc_~t
        |   20260847 | 6869646.9 |  99374.597 | 496.927 | 25867.59222 | 155265.1369 | 1
> 55265.1369 |        1 |
        |_____|_____|_____|_____|_____|_____|
        |  dollar~e | count~de |                  countytitle | msacode | msatitle
    | msatype |  csacode |
        |  .8391581 |     45011 |  Barnwell County, South Carolina |        |
    |
        |_____|_____|_____|_____|
        |                         csatitle                 |               _mer
> ge |                                                         |
        |                                                         |          matched (
> 3) |                                                         |
        |_____|_____


        |
  89449. |  COUNTY |  own_code |  indus~de |  agglv~de |  size_c~e |  year |
>   qtr |  disclo~e |
        |   45011 |        5 |    44-45 |        74 |        0 |  2012 |
>    A |        |
        |_____|_____|_____|_____|_____|_____|
        |                         area_title       |   own_ti~e       |
>   industry_title |
        |          Barnwell County, South Carolina  |      Private      |
>    Retail trade |
        |_____|_____|
        |                         agglvl_title  |           size_title | a
> nnual~t |   annual~l |
        |  County, NAICS Sector -- by ownership sector  | All establishment sizes  |
>      78 |        794 |
        |_____|_____|_____|
        |  total_a~s | taxable~s |  annual_~s | annual~e | avg_annua~y | total_fun~g | f
> ederal_f~g |  ffrdc_~t
        |   21559678 | 9753270.6 |  139392.65 | 522.241 | 27158.75012 | 147382.1521 | 1
> 47382.1521 |        1 |
        |_____|_____|_____|_____|_____|_____|
        |  dollar~e | count~de |                  countytitle | msacode | msatitle
    | msatype |  csacode |
        |  .8980531 |     45011 |  Barnwell County, South Carolina |        |
    |
        |_____|_____|_____|_____|
        |                         csatitle                 |               _mer
> ge |                                                         |
        |                                                         |          matched (
> 3) |                                                         |
        |_____|_____
```

89450.	COUNTY	own_code	indus~de	agglv~de	size_c~e	year
> qtr	disclo~e					
A	45011	5	23	74	0	2015

	industry_title		area_title		own_ti~e	
			Barnwell County, South Carolina		Private	
>	Construction					

> nnual~t	annual~l		agglvl_title		size_title	a
			County, NAICS Sector -- by ownership sector		All establishment sizes	
>	24	156				

	total_a~s	taxable~s	annual_~s	annual~e	avg_annua~y	total_fun~g	f
> ederal_f~g	ffrdc_~t						
	5347385.9	2553846.2	82969.441	661.21	34369.97242	131244.2378	1
> 31244.2378	1						

	dollar~e	count~de		countytitle	msacode	msatitle
msatype	csacode					
	.9270883	45011	Barnwell County, South Carolina		

		csatitle		_mer
> ge				
				matched (
> 3)			

89451.	COUNTY	own_code	indus~de	agglv~de	size_c~e	year
> qtr	disclo~e					
A	45011	5	44-45	74	0	2010

	industry_title		area_title		own_ti~e	
			Barnwell County, South Carolina		Private	
>	Retail trade					

> nnual~t	annual~l		agglvl_title		size_title	a
			County, NAICS Sector -- by ownership sector		All establishment sizes	
>	80	787				

	total_a~s	taxable~s	annual_~s	annual~e	avg_annua~y	total_fun~g	f
> ederal_f~g	ffrdc_~t						
	20179732	6888557.6	103768.15	493.598	25647.16889	149087.7256	1
> 49087.7256	1						

	dollar~e	count~de		countytitle	msacode	msatitle
msatype	csacode					
	.8529207	45011	Barnwell County, South Carolina		

| | | csatitle | | _mer |

```
> ge                        |
                            |                                    |
> 3)                        |                                    |                              matched (
                            |_____|
    _____|
```

89452.	COUNTY	own_code	indus~de	agglv~de	size_c~e	year
> qtr	disclo~e					
> A	45011	5	44-45	74	0	2013

| | industry_title | | area_title | own_ti~e | |
| > | Retail trade | Barnwell County, South Carolina | | Private | |

| > nnual~t | annual~l | | agglvl_title | | size_title | a |
| > | 80 | 775 | County, NAICS Sector -- by ownership sector | All establishment sizes | |

	total_a~s	taxable~s	annual_~s	annual~e	avg_annua~y	total_fun~g	f
> ederal_f~g	ffrdc_~t						
> 27146.5963	1	19083015	9938935.6	146748.05	474.096	24634.33066	127146.5963	1

	dollar~e	count~de		countytitle	msacode	msatitle
msatype	csacode					
	.911208	45011	Barnwell County, South Carolina		

```
             |                    |
> ge         |          csatitle  |                                    |                           _mer
             |                    |                                    |                              matched (
> 3)         |                    |                                    |
             |_____|
    _____|
```

89453.	COUNTY	own_code	indus~de	agglv~de	size_c~e	year
> qtr	disclo~e					
> A	45011	5	44-45	74	0	2016

	industry_title		area_title	own_ti~e	
>	Barnwell County, South Carolina		Private	NAICS 44
> -45 Retail trade					

| > nnual~t | annual~l | | agglvl_title | | size_title | a |
| > | 80 | 755 | County, NAICS Sector -- by ownership sector | All establishment sizes | |

	total_a~s	taxable~s	annual_~s	annual~e	avg_annua~y	total_fun~g	f
> ederal_f~g	ffrdc_~t						
> 34089.3748	1	18042287	10028274	106964.93	459.104	23884.08069	134089.3748	1

| | dollar~e | count~de | | countytitle | msacode | msatitle |

	msatype	csacode	
	.9387843	45011	Barnwell County, South Carolina

		csatitle		_mer
> ge				matched (
> 3)				

89454.	COUNTY	own_code	indus~de	agglv~de	size_c~e	year
> qtr	disclo~e					
	45011	5	44-45	74	0	2018
> A						

		area_title		own_ti~e	
> industry_title					
	Barnwell County, South Carolina			Private		NAICS 44
> -45 Retail trade						

		agglvl_title		size_title	a
> nnual~t	annual~l				
	County, NAICS Sector -- by ownership sector		All establishment sizes		
> 78	714				

	total_a~s	taxable~s	annual_~s	annual~e	avg_annua~y	total_fun~g	f
> ederal_f~g	ffrdc_~t						
	16659094	9209870.1	88186.678	448.992	23321.10391	157076.8896	1
> 55768.6027	1						

	dollar~e	count~de		countytitle	msacode	msatitle
	msatype	csacode				
	.9822005	45011	Barnwell County, South Carolina			

		csatitle		_mer
> ge				matched (
> 3)				

89455.	COUNTY	own_code	indus~de	agglv~de	size_c~e	year
> qtr	disclo~e					
	45011	5	23	74	0	2008
> A						

		area_title		own_ti~e	
> industry_title					
	Barnwell County, South Carolina			Private	
> Construction					

		agglvl_title		size_title	a
> nnual~t	annual~l				
	County, NAICS Sector -- by ownership sector		All establishment sizes		
> 37	217				

	total_a~s	taxable~s	annual_~s	annual~e	avg_annua~y	total_fun~g	f

```
> ederal_f~g | ffrdc_~t |
         |  8882452.1 |  2561133.6 |  87971.005 |    788.456 |  41027.0123 | 140592.1176 | 1
> 40592.1176 |          1 |

         | dollar~e | count~de |                         countytitle | msacode | msatitle
 | msatype | csacode |
         |  .8421525 |    45011 | Barnwell County, South Carolina |         |
 |         |

         |                          csatitle                 |                          _mer
> ge      |
         |                                                   |                          matched (
> 3)      |


 89456. | COUNTY | own_code |  indus~de |  agglv~de |  size_c~e |  year  |
>  qtr    | disclo~e |
        |  45011 |        5 |        23 |        74 |         0 |  2004  |
>   A     |        |

        |                          area_title |      own_ti~e |
>  industry_title              |
        |  Barnwell County, South Carolina    |      Private  |
>    Construction               |

        |                          agglvl_title |              size_title | a
> nnual~t | annual~l |
        | County, NAICS Sector -- by ownership sector | All establishment sizes |
>     39  |      245 |

        | total_a~s | taxable~s |  annual_~s |  annual~e |  avg_annua~y | total_fun~g | f
> ederal_f~g | ffrdc_~t |
        |  8387903.5 |  2983752.5 |  113372.2 |    659.164 |  34294.13886 | 127672.1373 | 1
> 27672.1373 |          1 |

        | dollar~e | count~de |                         countytitle | msacode | msatitle
 | msatype | csacode |
        |  .7388143 |    45011 | Barnwell County, South Carolina |         |
 |         |

        |                          csatitle                 |                          _mer
> ge      |
        |                                                   |                          matched (
> 3)      |


 89457. | COUNTY | own_code |  indus~de |  agglv~de |  size_c~e |  year  |
>  qtr    | disclo~e |
        |  45011 |        5 |        23 |        74 |         0 |  2016  |
>   A     |        |

        |                          area_title |      own_ti~e |
>  industry_title              |
        |  Barnwell County, South Carolina    |      Private  |        NAICS
>  23 Construction             |

        |                          agglvl_title |              size_title | a
```

```
> nnual~t │   annual~l │
         │  County, NAICS Sector -- by ownership sector  │ All establishment sizes  │
>      23 │        160 │
```

```
         │ total_a~s │ taxable~s │ annual_~s │ annual~e │ avg_annua~y │ total_fun~g │ f
> ederal_f~g │ ffrdc_~t
         │ 5828729.8 │ 2714692.8 │ 76314.655 │ 698.776 │  36353.3987 │ 134089.3748 │ 1
> 34089.3748 │         1
```

```
         │ dollar~e │ count~de │              countytitle │ msacode │ msatitle
  │ msatype │ csacode │
         │ .9387843 │   45011 │ Barnwell County, South Carolina │         │
  │         │         │
```

```
         │              csatitle                 │                              _mer
> ge      │         │
         │                                       │                      matched (
> 3)      │         │
```

```
 89458. │ COUNTY │  own_code │  indus~de │ agglv~de │ size_c~e │   year │
>   qtr  │ disclo~e │
        │ 45011 │        5 │    44-45 │       74 │        0 │   2004 │
>    A   │         │
```

```
        │                           area_title │   own_ti~e │
>   industry_title │
        │ Barnwell County, South Carolina │   Private │
>    Retail trade │
```

```
        │                           agglvl_title │         size_title │ a
> nnual~t │   annual~l │
        │  County, NAICS Sector -- by ownership sector  │ All establishment sizes  │
>      96 │        944 │
```

```
        │ total_a~s │ taxable~s │ annual_~s │ annual~e │ avg_annua~y │ total_fun~g │ f
> ederal_f~g │ ffrdc_~t
        │ 20740764 │ 8865471.4 │ 134783.53 │ 422.298 │ 21978.45944 │ 127672.1373 │ 1
> 27672.1373 │         1
```

```
        │ dollar~e │ count~de │              countytitle │ msacode │ msatitle
  │ msatype │ csacode │
        │ .7388143 │   45011 │ Barnwell County, South Carolina │         │
  │         │         │
```

```
        │              csatitle                 │                              _mer
> ge      │         │
        │                                       │                      matched (
> 3)      │         │
```

89459.	COUNTY	own_code	indus~de	agglv~de	size_c~e	year
> qtr	disclo~e					
	45011	5	23	74	0	2017
> A						

		area_title		own_ti~e		
> industry_title						
	Barnwell County, South Carolina		Private		NAICS
> 23 Construction						

		agglvl_title		size_title	a
> nnual~t	annual~l				
	County, NAICS Sector -- by ownership sector	All establishment sizes	
> 25	239				

	total_a~s	taxable~s	annual_~s	annual~e	avg_annua~y	total_fun~g	f
> ederal_f~g	ffrdc_~t						
	11098292	4726758	151874.02	892.8	46436.02415	147559.1705	1
> 47559.1705	1						

	dollar~e	count~de		countytitle	msacode	msatitle
msatype	csacode					
	.9587815	45011	Barnwell County, South Carolina		

		csatitle		_mer
> ge				
				matched (
> 3)			

89460.	COUNTY	own_code	indus~de	agglv~de	size_c~e	year
> qtr	disclo~e					
	45011	5	23	74	0	2011
> A						

		area_title		own_ti~e		
> industry_title						
	Barnwell County, South Carolina		Private		
> Construction						

		agglvl_title		size_title	a
> nnual~t	annual~l				
	County, NAICS Sector -- by ownership sector	All establishment sizes	
> 28	161				

	total_a~s	taxable~s	annual_~s	annual~e	avg_annua~y	total_fun~g	f
> ederal_f~g	ffrdc_~t						
	4691497.1	2195170	111582	561.462	29169.87032	152901.7204	1
> 52901.7204	1						

	dollar~e	count~de		countytitle	msacode	msatitle
msatype	csacode					
	.8798462	45011	Barnwell County, South Carolina		

| | | csatitle | | _mer |

```
> ge                  |          |                                              |
                      |          |                                    | matched (
> 3)                  |          |                                    |
                      |_____|
```

```
 89461. |  COUNTY  |  own_code  |  indus~de  |  agglv~de  |  size_c~e  |  year  |
>  qtr   |  disclo~e  |
        |  45011  |        5  |        23  |        74  |        0  |  2001  |
>   A    |          |
```

```
      |                            area_title      |    own_ti~e      |
>  industry_title      |
      |          Barnwell County, South Carolina    |     Private      |
>    Construction      |
```

```
      |                            agglvl_title  |            size_title  |  a
> nnual~t  |  annual~l  |
      |  County, NAICS Sector -- by ownership sector  |  All establishment sizes  |
>     48   |       255  |
```

```
      |  total_a~s  |  taxable~s  |  annual_~s  |  annual~e  |  avg_annua~y  |  total_fun~g  |  f
> ederal_f~g  |  ffrdc_~t  |
      |  10132016  |  3318936.4  |  85641.857  |  762.352  |  39668.28601  |  125851.5863  |  1
> 25851.5863  |        1  |
```

```
      |  dollar~e  |  count~de  |                    countytitle  |  msacode  |  msatitle
  |  msatype  |  csacode  |
      |  .6925936  |     45011  |  Barnwell County, South Carolina  |          |
  |
```

```
      |                            csatitle          |                            _mer
> ge                  |          |                                              |
                      |          |                                    | matched (
> 3)                  |          |                                    |
                      |_____|
```

```
 89462. |  COUNTY  |  own_code  |  indus~de  |  agglv~de  |  size_c~e  |  year  |
>  qtr   |  disclo~e  |
        |  45011  |        5  |     44-45  |        74  |        0  |  2011  |
>   A    |          |
```

```
      |                            area_title      |    own_ti~e      |
>  industry_title      |
      |          Barnwell County, South Carolina    |     Private      |
>    Retail trade      |
```

```
      |                            agglvl_title  |            size_title  |  a
> nnual~t  |  annual~l  |
      |  County, NAICS Sector -- by ownership sector  |  All establishment sizes  |
>     76   |       765  |
```

```
      |  total_a~s  |  taxable~s  |  annual_~s  |  annual~e  |  avg_annua~y  |  total_fun~g  |  f
> ederal_f~g  |  ffrdc_~t  |
      |  19886559  |  8267526.6  |  145345.85  |  500.087  |  25993.17881  |  152901.7204  |  1
> 52901.7204  |        1  |
```

```
      |  dollar~e  |  count~de  |                    countytitle  |  msacode  |  msatitle
```

msatype	csacode
.8798462	45011	Barnwell County, South Carolina

| csatitle | _mer |
| > ge |
| matched (|
| > 3) |

89463.	COUNTY	own_code	indus~de	agglv~de	size_c~e	year
> qtr	disclo~e
45011	5	23	74	0	2005
> A

| industry_title | area_title | own_ti~e |
| Barnwell County, South Carolina | Private |
| > Construction |

agglvl_title	size_title	a
> nnual~t	annual~l
County, NAICS Sector -- by ownership sector	All establishment sizes
> 39	261

total_a~s	taxable~s	annual_~s	annual~e	avg_annua~y	total_fun~g	f
> ederal f~g	ffrdc_~t
10029647	3331630	134806.44	739.645	38489.00794	129143.248
> 129143.248	1

dollar~e	count~de	countytitle	msacode	msatitle
msatype	csacode
.7638804	45011	Barnwell County, South Carolina

| csatitle | _mer |
| > ge |
| matched (|
| > 3) |

89464.	COUNTY	own_code	indus~de	agglv~de	size_c~e	year
> qtr	disclo~e
45011	5	44-45	74	0	2003
> A

| industry_title | area_title | own_ti~e |
| Barnwell County, South Carolina | Private |
| > Retail trade |

agglvl_title	size_title	a
> nnual~t	annual~l
County, NAICS Sector -- by ownership sector	All establishment sizes
> 105	862

| total_a~s | taxable~s | annual_~s | annual~e | avg_annua~y | total_fun~g | f |

```
> ederal_f~g │ ffrdc_~t │
             │  20520696 │ 8681062.2 │ 122104.06 │    457.23 │ 23807.92915 │ 131225.0361 │ 1
> 31225.0361 │         1 │
```

```
            │ dollar~e │ count~de │                         countytitle │ msacode │ msatitle
 │ msatype  │ csacode  │
            │ .7195502 │    45011 │ Barnwell County, South Carolina     │         │
 │          │          │
```

```
            │                        csatitle            │                            _mer
> ge         │          │
            │                                            │                         matched (
> 3)         │          │
```

```
 89465. │ COUNTY  │  own_code │  indus~de │  agglv~de │  size_c~e │   year  │
>   qtr  │ disclo~e │
        │   45011 │         5 │        23 │        74 │         0 │    2013 │
>    A   │          │
```

```
        │                        area_title     │       own_ti~e     │
>  industry_title       │
        │   Barnwell County, South Carolina      │        Private     │
>     Construction       │
```

```
        │                                  agglvl_title  │                size_title  │ a
> nnual~t  │ annual~l  │
        │ County, NAICS Sector -- by ownership sector   │ All establishment sizes    │
>     24   │      146  │
```

```
        │ total_a~s │ taxable~s │ annual_~s │ annual~e │ avg_annua~y │ total_fun~g │ f
> ederal_f~g │ ffrdc_~t │
          │ 4549977.4 │ 2137589.8 │ 70626.024 │   601.399 │ 31271.67337 │ 127146.5963 │ 1
> 27146.5963 │         1 │
```

```
            │ dollar~e │ count~de │                         countytitle │ msacode │ msatitle
 │ msatype  │ csacode  │
            │ .911208  │    45011 │ Barnwell County, South Carolina     │         │
 │          │          │
```

```
            │                        csatitle            │                            _mer
> ge         │          │
            │                                            │                         matched (
> 3)         │          │
```

```
 89466. │ COUNTY  │  own_code │  indus~de │  agglv~de │  size_c~e │   year  │
>   qtr  │ disclo~e │
        │   45011 │         5 │        23 │        74 │         0 │    2009 │
>    A   │          │
```

```
        │                        area_title     │       own_ti~e     │
>  industry_title       │
        │   Barnwell County, South Carolina      │        Private     │
>     Construction       │
```

```
        │                                  agglvl_title  │                size_title  │ a
```

```
> nnual~t  |   annual~l  |
         |  County, NAICS Sector -- by ownership sector  | All establishment sizes  |
>      34  |        200  |
         |_____|_____|_____|_____|_____|_____|_____|_____|
         |  total_a~s |  taxable~s |  annual_~s |  annual~e |  avg_annua~y |  total_fun~g |  f
> ederal_f~g |  ffrdc_~t |
         |  7918977.2 |  2206729.5 |  75717.554 |   763.861 |   39694.5454 |  155265.1369 |  1
> 55265.1369 |         1 |
         |_____|_____|_____|_____|_____|_____|_____|_____|
         |  dollar~e |  count~de |                  countytitle |  msacode |  msatitle
  | msatype  |  csacode  |
         |  .8391581 |     45011 |  Barnwell County, South Carolina |          |
  |          |           |
         |_____|_____|                                  |_____|
         |           |                  csatitle                    |                    _mer
> ge      |           |
         |           |                                              |                 matched (
> 3)      |           |
         |_____|_____|_____
         |_____|


         _____
      89467. |  COUNTY  |  own_code  |  indus~de  |  agglv~de  |  size_c~e  |  year  |
> qtr      |  disclo~e  |
         |    45011 |         5 |        23 |        74 |         0 |  2014 |
>   A       |          |
         |_____|_____|_____|_____|_____|_____|_____|
         |                      area_title       |      own_ti~e      |
>  industry_title  |
         |     Barnwell County, South Carolina   |      Private       |
>    Construction  |
         |_____|_____|_____|_____
         |                      agglvl_title  |              size_title  |  a
> nnual~t  |   annual~l  |
         |  County, NAICS Sector -- by ownership sector  | All establishment sizes  |
>      23  |        158  |
         |_____|_____|_____|_____|_____|_____|_____|
         |  total_a~s |  taxable~s |  annual_~s |  annual~e |  avg_annua~y |  total_fun~g |  f
> ederal_f~g |  ffrdc_~t |
         |  5020405.9 |  2358389.7 |  90684.578 |   611.238 |   31758.4469 |  130685.0155 |  1
> 30685.0155 |         1 |
         |_____|_____|_____|_____|_____|_____|_____|
         |  dollar~e |  count~de |                  countytitle |  msacode |  msatitle
  | msatype  |  csacode  |
         |  .9259899 |     45011 |  Barnwell County, South Carolina |          |
  |          |           |
         |_____|_____|                                  |_____|
         |           |                  csatitle                    |                    _mer
> ge      |           |
         |           |                                              |                 matched (
> 3)      |           |
         |_____|_____|_____
         |_____|
```

89468. | COUNTY | own_code | indus~de | agglv~de | size_c~e | year |
> qtr | disclo~e |
| 45011 | 5 | 23 | 74 | 0 | 2019 |
> A |

| | | area_title | own_ti~e |
> industry_title |
| Barnwell County, South Carolina | Private | NAICS
> 23 Construction |

| | | agglvl_title | size_title | a
> nnual~t | annual~l |
| County, NAICS Sector -- by ownership sector | All establishment sizes |
> 27 | 320 |

| total_a~s | taxable~s | annual_~s | annual~e | avg_annua~y | total_fun~g | f
> ederal_f~g | ffrdc_~t |
| 17577461 | 7119052 | 235472 | 1057 | 54944 | 176379 |
> 173239 | 1 |

| dollar~e | count~de | | countytitle | msacode | msatitle
| msatype | csacode |
| 1 | 45011 | Barnwell County, South Carolina | |

| | csatitle | _mer
> ge |
| | matched (
> 3) |

89469. | COUNTY | own_code | indus~de | agglv~de | size_c~e | year |
> qtr | disclo~e |
| 45011 | 5 | 44-45 | 74 | 0 | 2008 |
> A |

| | area_title | own_ti~e |
> industry_title |
| Barnwell County, South Carolina | Private |
> Retail trade |

| | agglvl_title | size_title | a
> nnual~t | annual~l |
| County, NAICS Sector -- by ownership sector | All establishment sizes |
> 82 | 807 |

| total_a~s | taxable~s | annual_~s | annual~e | avg_annua~y | total_fun~g | f
> ederal_f~g | ffrdc_~t |
| 20505540 | 6985545 | 102272.45 | 489.223 | 25425.32451 | 140592.1176 | 1
> 40592.1176 | 1 |

| dollar~e | count~de | | countytitle | msacode | msatitle
| msatype | csacode |
| .8421525 | 45011 | Barnwell County, South Carolina | |

| | csatitle | _mer

```
> ge                    |                                                                              |
                        |                                                    |                 matched (
> 3)                    |                                                    |
```

```
 89470. |   COUNTY   |  own_code  |   indus~de  |   agglv~de  |  size_c~e  |  year   |
>  qtr   |  disclo~e  |
         |    45011   |      5     |      23     |     74      |     0      |  2018   |
>   A    |            |
```

```
        |                                   area_title     |      own_ti~e      |
>  industry_title      |
        |              Barnwell County, South Carolina      |      Private       |         NAICS
>  23 Construction     |
```

```
        |                                   agglvl_title    |           size_title     |  a
> nnual~t  |  annual~l  |
        |   County, NAICS Sector -- by ownership sector  |  All establishment sizes  |
>    26    |     510    |
```

```
        |  total_a~s |  taxable~s |  annual_~s  |  annual~e  |  avg_annua~y  |  total_fun~g  |  f
> ederal_f~g  |  ffrdc_~t  |
        |  29312025  |  13336977  |  467876.97  |  1104.66   |  57464.84532  |  157076.8896  |  1
> 55768.6027  |      1     |
```

```
        |  dollar~e  |  count~de  |                countytitle  |  msacode  |  msatitle
   |  msatype   |  csacode   |
        |  .9822005  |    45011   |  Barnwell County, South Carolina  |           |
   |
```

```
        |                                   csatitle        |                          _mer
> ge                    |
        |                                                    |                 matched (
> 3)                    |
```

```
 89471. |   COUNTY   |  own_code  |   indus~de  |   agglv~de  |  size_c~e  |  year   |
>  qtr   |  disclo~e  |
         |    45011   |      5     |    44-45    |     74      |     0      |  2007   |
>   A    |            |
```

```
        |                                   area_title     |      own_ti~e      |
>  industry_title      |
        |              Barnwell County, South Carolina      |      Private       |
>     Retail trade     |
```

```
        |                                   agglvl_title    |           size_title     |  a
> nnual~t  |  annual~l  |
        |   County, NAICS Sector -- by ownership sector  |  All establishment sizes  |
>    82    |     806    |
```

```
        |  total_a~s |  taxable~s |  annual_~s  |  annual~e  |  avg_annua~y  |  total_fun~g  |  f
> ederal_f~g  |  ffrdc_~t  |
        |  18565641  |  7347781.6 |  108690.74  |  442.654   |  23031.58722  |  141667.8737  |  1
> 41667.8737  |      1     |
```

```
        |  dollar~e  |  count~de  |                countytitle  |  msacode  |  msatitle
```

	msatype	csacode			
		.8110166	45011	Barnwell County, South Carolina	

		csatitle		_mer
> ge				matched (
> 3)				

89472.	COUNTY	own_code	indus~de	agglv~de	size_c~e	year
> qtr	disclo~e					
	45011	5	23	74	0	2003
> A						

	industry_title		area_title	own_ti~e	
			Barnwell County, South Carolina	Private	
> Construction				

			agglvl_title	size_title	a
> nnual~t	annual~l		County, NAICS Sector -- by ownership sector	All establishment sizes	
> 46	257				

	total_a~s	taxable~s	annual_~s	annual~e	avg_annua~y	total_fun~g	f
> ederal_f~g	ffrdc_~t						
	8888288.9	3181675.2	114353.38	665.694	34652.20393	131225.0361	1
> 31225.0361	1						

	dollar~e	count~de		countytitle	msacode	msatitle
	msatype	csacode				
	.7195502	45011	Barnwell County, South Carolina		

		csatitle		_mer
> ge				matched (
> 3)				

89473.	COUNTY	own_code	indus~de	agglv~de	size_c~e	year
> qtr	disclo~e					
	45011	5	44-45	74	0	2006
> A						

	industry_title		area_title	own_ti~e	
			Barnwell County, South Carolina	Private	
> Retail trade				

			agglvl_title	size_title	a
> nnual~t	annual~l		County, NAICS Sector -- by ownership sector	All establishment sizes	
> 97	870				

	total_a~s	taxable~s	annual_~s	annual~e	avg_annua~y	total_fun~g	f

```
> ederal_f~g | ffrdc_~t |
           |  19593849 | 7900939.1 | 119433.46 |   432.454 | 22512.98478 | 130049.5184 | 1
> 30049.5184 |         1 |

           | dollar~e | count~de |                       countytitle | msacode | msatitle
 | msatype  | csacode  |
           | .7885227 |    45011 | Barnwell County, South Carolina   |         |
 |          |          |

           |                          csatitle              |                        _mer
> ge        |          |
           |                                                |                    matched (
> 3)        |          |
```

```
 89474. | COUNTY   | own_code |   indus~de |   agglv~de |   size_c~e |   year   |
>  qtr   | disclo~e |
        |    45011 |        5 |      44-45 |         74 |          0 |   2019   |
>   A    |          |

        |                       area_title        |      own_ti~e      |
>  industry_title        |
        | Barnwell County, South Carolina         |      Private        |       NAICS 44
> -45 Retail trade      |

        |                           agglvl_title  |             size_title  | a
> nnual~t  | annual~l |
        | County, NAICS Sector -- by ownership sector  | All establishment sizes |
>     80  |      714 |

        | total_a~s | taxable~s | annual_~s | annual~e | avg_annua~y | total_fun~g | f
> ederal_f~g | ffrdc_~t |
        |  16721876 |   9224364 |    106667 |      451 |       23431 |      176379 |
>   173239 |         1 |

        | dollar~e | count~de |                       countytitle | msacode | msatitle
 | msatype  | csacode  |
        |        1 |    45011 | Barnwell County, South Carolina   |         |
 |          |          |

        |                          csatitle              |                        _mer
> ge        |          |
        |                                                |                    matched (
> 3)        |          |
```

```
 89475. | COUNTY   | own_code |   indus~de |   agglv~de |   size_c~e |   year   |
>  qtr   | disclo~e |
        |    45011 |        5 |         23 |         74 |          0 |   2007   |
>   A    |          |

        |                       area_title        |      own_ti~e      |
>  industry_title        |
        | Barnwell County, South Carolina         |      Private        |
>    Construction        |

        |                           agglvl_title  |             size_title  | a
```

> nnual~t │   annual~l │
      │ **County, NAICS Sector -- by ownership sector** │ **All establishment sizes** │
>   36 │   253 │

      │ total_a~s │ taxable~s │ annual_~s │ annual~e │ avg_annua~y │ total_fun~g │ f
> ederal_f~g │ ffrdc_~t
      │ **9911693.3** │ **3338982.1** │ **120284.83** │ **752.142** │ **39112.63869** │ **141667.8737** │ **1**
> **41667.8737** │   **1**

      │ dollar~e │ count~de │   countytitle │ msacode │ msatitle
  │ msatype │ csacode
      │ **.8110166** │   **45011** │ **Barnwell County, South Carolina** │   │
  │

      │   csatitle   │   _mer
> ge
      │   │   **matched (**
> **3)**

89476. │ COUNTY │ own_code │ indus~de │ agglv~de │ size_c~e │   year │
> qtr │ disclo~e │
      │ **45011** │   **5** │   **44-45** │   **74** │   **0** │ **2005** │
>   **A** │   │

      │   area_title   │   own_ti~e   │
> industry_title │
      │   **Barnwell County, South Carolina** │   **Private**   │
>   **Retail trade** │

      │   agglvl_title │   size_title │ a
> nnual~t │   annual~l │
      │ **County, NAICS Sector -- by ownership sector** │ **All establishment sizes** │
>   95 │   923 │

      │ total_a~s │ taxable~s │ annual_~s │ annual~e │ avg_annua~y │ total_fun~g │ f
> ederal_f~g │ ffrdc_~t
      │ **20501409** │ **8556687.3** │ **132574.41** │ **426.768** │ **22214.20958** │ **129143.248** │
> **129143.248** │   **1**

      │ dollar~e │ count~de │   countytitle │ msacode │ msatitle
  │ msatype │ csacode
      │ **.7638804** │   **45011** │ **Barnwell County, South Carolina** │   │
  │

      │   csatitle   │   _mer
> ge
      │   │   **matched (**
> **3)**

89477.	COUNTY	own_code	indus~de	agglv~de	size_c~e	year
> qtr	disclo~e					
	45011	5	44-45	74	0	2002
> A						

	industry_title		area_title		own_ti~e	
		Barnwell County, South Carolina		Private	
> Retail trade					

			agglvl_title		size_title	a
> nnual~t	annual~l					
		County, NAICS Sector -- by ownership sector	All establishment sizes	
> 109	846				

	total_a~s	taxable~s	annual_~s	annual~e	avg_annua~y	total_fun~g	f
> ederal_f~g	ffrdc_~t						
	19683993	8260732.4	94974.505	447.711	23273.88459	133037.0776	1
> 33037.0776	1						

	dollar~e	count~de		countytitle	msacode	msatitle
msatype	csacode					
	.7035783	45011	Barnwell County, South Carolina		

		csatitle		_mer
> ge				
> 3)				matched (

89478.	COUNTY	own_code	indus~de	agglv~de	size_c~e	year
> qtr	disclo~e					
	45011	5	23	74	0	2006
> A						

	industry_title		area_title		own_ti~e	
		Barnwell County, South Carolina		Private	
> Construction					

			agglvl_title		size_title	a
> nnual~t	annual~l					
		County, NAICS Sector -- by ownership sector	All establishment sizes	
> 41	225				

	total_a~s	taxable~s	annual_~s	annual~e	avg_annua~y	total_fun~g	f
> ederal_f~g	ffrdc_~t						
	8866697	2939061.8	111850.93	758.38	39407.86892	130049.5184	1
> 30049.5184	1						

	dollar~e	count~de		countytitle	msacode	msatitle
msatype	csacode					
	.7885227	45011	Barnwell County, South Carolina		

| | | csatitle | | _mer |

```
> ge                      |                                                         |                              matched (
> 3)                      |                                                         |
```

```
89479. |  COUNTY  |  own_code  |  indus~de  |  agglv~de  |  size_c~e  |   year   |
>  qtr  |  disclo~e  |
       |   45011   |      5     |     23     |     74     |      0     |   2002   |
>   A   |          |
```

```
       |                              area_title              |   own_ti~e   |
>  industry_title        |
       |        Barnwell County, South Carolina               |    Private   |
>     Construction       |
```

```
       |                              agglvl_title            |          size_title   | a
> nnual~t |  annual~l  |
       |  County, NAICS Sector -- by ownership sector  |  All establishment sizes  |
>    49   |     213    |
```

```
       |  total_a~s  |  taxable~s  |  annual_~s  |  annual~e  |  avg_annua~y  |  total_fun~g  | f
> ederal_f~g |  ffrdc_~t
       |  7013287.7  |  2669451.3  |  72738.174  |  632.481  |  32913.1814   |  133037.0776  | 1
> 33037.0776 |      1
```

```
       |  dollar~e  |  count~de  |                  countytitle  |  msacode  |  msatitle
   | msatype  |  csacode
       |  .7035783  |    45011   |  Barnwell County, South Carolina  |           |
   |
```

```
       |                              csatitle                |                       _mer
> ge                      |                                                         |                              matched (
> 3)                      |                                                         |
```

```
89480. |  COUNTY  |  own_code  |  indus~de  |  agglv~de  |  size_c~e  |   year   |
>  qtr  |  disclo~e  |
       |   45011   |      5     |     23     |     74     |      0     |   2012   |
>   A   |          |
```

```
       |                              area_title              |   own_ti~e   |
>  industry_title        |
       |        Barnwell County, South Carolina               |    Private   |
>     Construction       |
```

```
       |                              agglvl_title            |          size_title   | a
> nnual~t |  annual~l  |
       |  County, NAICS Sector -- by ownership sector  |  All establishment sizes  |
>    24   |     169    |
```

```
       |  total_a~s  |  taxable~s  |  annual_~s  |  annual~e  |  avg_annua~y  |  total_fun~g  | f
> ederal_f~g |  ffrdc_~t
       |  4759555.9  |  2505936.4  |  115444.17  |  541.171  |  28135.30706  |  147382.1521  | 1
> 47382.1521 |      1
```

```
       |  dollar~e  |  count~de  |                  countytitle  |  msacode  |  msatitle
```

	msatype	csacode	
	.8980531	45011	**Barnwell County, South Carolina**	

| | | csatitle | | _mer |
| > ge |
| > 3) | | | | **matched (** |

89481.	COUNTY	own_code	indus~de	agglv~de	size_c~e	year
> qtr	disclo~e
> A	45011	5	**44-45**	**74**	**0**	**2001**

| | | area_title | | own_ti~e | |
| > industry_title |
| | | **Barnwell County, South Carolina** | | **Private** | |
| > **Retail trade** |

		agglvl_title		size_title		a
> nnual~t	annual~l
	County, NAICS Sector -- by ownership sector		**All establishment sizes**	
> 102	829

	total_a~s	taxable~s	annual_~s	annual~e	avg_annua~y	total_fun~g	f
> ederal_f~g	ffrdc_~t
	18345580	8187526.1	77531.762	425.935	22118.31089	125851.5863	1
> 25851.5863	1

	dollar~e	count~de		countytitle	msacode	msatitle
msatype	csacode
	.6925936	45011	**Barnwell County, South Carolina**		

| | | csatitle | | _mer |
| > ge |
| > 3) | | | | **matched (** |

596 drop if msacode == "" //omit that FFRDC
   (52,660 observations deleted)

597
598 //summarize by MSA
599 collapse (sum) total_funding federal_funding ffrdc_count annual_avg_estabs_count ann
  > ual_avg_emplvl total_annual_wages, by(industry_code msacode msatitle msatype year)

600 gen avg_annual_pay = total_annual_wages/annual_avg_emplvl
   (233 missing values generated)

```
601
602
603 //look into only Metro, not Micro
604 tab ffrdc msatype
```

(sum) ffrdc_count	MSA Type		
	Metro	Micro	Total
0	13,986	20,500	34,486
1	606	58	664
2	38	0	38
3	38	0	38
5	38	0	38
8	10	0	10
9	2	0	2
10	4	0	4
11	4	0	4
12	8	0	8
13	10	0	10
Total	14,744	20,558	35,302

```
605 list msatitle year if msatype == "Micro" & ffrdc_count > 0 //Alamogordo, NM 2010+, L
  > os Alamos, NM throughout 2001-2019 each with one ffrdc_count
```

	msatitle	year
162.	Alamogordo, NM	2010
163.	Alamogordo, NM	2011
164.	Alamogordo, NM	2012
165.	Alamogordo, NM	2013
166.	Alamogordo, NM	2014
167.	Alamogordo, NM	2015
168.	Alamogordo, NM	2016
169.	Alamogordo, NM	2017
170.	Alamogordo, NM	2018
171.	Alamogordo, NM	2019
9368.	Los Alamos, NM	2001
9369.	Los Alamos, NM	2002
9370.	Los Alamos, NM	2003
9371.	Los Alamos, NM	2004
9372.	Los Alamos, NM	2005
9373.	Los Alamos, NM	2006
9374.	Los Alamos, NM	2007
9375.	Los Alamos, NM	2008
9376.	Los Alamos, NM	2009
9377.	Los Alamos, NM	2010
9378.	Los Alamos, NM	2011
9379.	Los Alamos, NM	2012
9380.	Los Alamos, NM	2013
9381.	Los Alamos, NM	2014
9382.	Los Alamos, NM	2015
9383.	Los Alamos, NM	2016
9384.	Los Alamos, NM	2017
9385.	Los Alamos, NM	2018
9386.	Los Alamos, NM	2019
17813.	Alamogordo, NM	2010
17814.	Alamogordo, NM	2011
17815.	Alamogordo, NM	2012
17816.	Alamogordo, NM	2013
17817.	Alamogordo, NM	2014
17818.	Alamogordo, NM	2015
17819.	Alamogordo, NM	2016

```
17820.   | Alamogordo, NM   2017
17821.   | Alamogordo, NM   2018
17822.   | Alamogordo, NM   2019
27019.   | Los Alamos, NM   2001

27020.   | Los Alamos, NM   2002
27021.   | Los Alamos, NM   2003
27022.   | Los Alamos, NM   2004
27023.   | Los Alamos, NM   2005
27024.   | Los Alamos, NM   2006

27025.   | Los Alamos, NM   2007
27026.   | Los Alamos, NM   2008
27027.   | Los Alamos, NM   2009
27028.   | Los Alamos, NM   2010
27029.   | Los Alamos, NM   2011

27030.   | Los Alamos, NM   2012
27031.   | Los Alamos, NM   2013
27032.   | Los Alamos, NM   2014
27033.   | Los Alamos, NM   2015
27034.   | Los Alamos, NM   2016

27035.   | Los Alamos, NM   2017
27036.   | Los Alamos, NM   2018
27037.   | Los Alamos, NM   2019
```

```
606
607 keep if msatype == "Metro"
  (20,558 observations deleted)

608 save data/intermediate/merged_MetroMSAs_constructionretail_private_post01, replace
  file data/intermediate/merged_MetroMSAs_constructionretail_private_post01.dta saved

609
610
  end of do-file

611 do code/5-industry-regressions.do

612 cd C:\Users\ecsxn\Documents\repo\rd_spillovers_1433
  C:\Users\ecsxn\Documents\repo\rd_spillovers_1433

613
614 use data/intermediate/merged_MetroMSAs_constructionretail_private_post01, clear

615
616 //take logs
617 gen log_avg_annual_pay = asinh(avg_annual_pay)
  (19 missing values generated)

618 gen log_annual_avg_emplvl = asinh(annual_avg_emplvl)

619 gen log_federal_funding = asinh(federal_funding * 1000)

620
621 replace avg_annual_pay = avg_annual_pay/1000
  (14,725 real changes made)
```

```
622 label variable avg_annual_pay "Average annual pay of employed workers (thousands 201
  > 9$)"

623 replace annual_avg_emplvl = annual_avg_emplvl / 1000
  (14,725 real changes made)

624 label variable annual_avg_emplvl "Annual average of total employment (thousands)"

625 replace federal_funding = federal_funding / 1000
  (758 real changes made)

626 label variable federal_funding "Total federal FFRDC funding received (millions 2019$
  > )"

627
628 preserve

629 keep if industry_code == "23"
  (7,372 observations deleted)

630 save data/intermediate/merged_MetroMSAs_construction_private_post01_scaled, replace
  file data/intermediate/merged_MetroMSAs_construction_private_post01_scaled.dta saved

631 restore

632
633 preserve

634 keep if industry_code == "44-45"
  (7,372 observations deleted)

635 save data/intermediate/merged_MetroMSAs_retail_private_post01_scaled, replace
  file data/intermediate/merged_MetroMSAs_retail_private_post01_scaled.dta saved

636 restore

637
638
639
640
641 //construction
642 use data/intermediate/merged_MetroMSAs_construction_private_post01_scaled, clear

643
644 estimates clear

645 eststo: estpost summarize avg_annual_pay annual_avg_emplvl federal_funding
```

	e(count)	e(sum_w)	e(mean)	e(Var)	e(sd)	e(min)	e(
> max) e(sum)							
avg_annual~y	7353	7353	51.15485	104.2765	10.21159	13.37946	114.
> 2214 376141.6							
annual_avg~l	7372	7372	14.73758	1033.45	32.14731	0	404
> .334 108645.4							
federal_fu~g	7372	7372	41.39821	77271.13	277.9769	0	3969
> .324 305187.6							

```
  (est1 stored)
```

```
646 esttab using output/summarystats_construction.csv, cells("mean(fmt(2)) sd(fmt(2)) mi
 > n(fmt(2)) max(fmt(2))") label nodepvar replace
   (output written to output/summarystats_construction.csv)

647
648 encode msacode, gen(msa_factor)

649
650 //OLS, construction
651 reg log_avg_annual_pay log_federal_funding i.year i.msa_factor i.ffrdc_count, robust
 >  cluster(msa_factor)
   note: 2.ffrdc_count omitted because of collinearity
   note: 3.ffrdc_count omitted because of collinearity
   note: 5.ffrdc_count omitted because of collinearity
   note: 13.ffrdc_count omitted because of collinearity
```

Linear regression

Number of obs   =   7,353
$F_{(19, 387)}$ =   .
Prob > F   =   .
R-squared   =   0.9312
Root MSE   =   .05864

(Std. Err. adjusted for **388** clusters in msa_factor)

log_avg_annual_pay	Coef.	Robust Std. Err.	t	P>|t|	[95% Conf. Interval]	
log_federal_funding	-.0094742	.0123438	-0.77	0.443	-.0337436	.0147951
year						
2002	-.0007121	.0018138	-0.39	0.695	-.0042782	.0028539
2003	-.0073275	.0024504	-2.99	0.003	-.0121453	-.0025097
2004	-.0082918	.0029045	-2.85	0.005	-.0140023	-.0025812
2005	.0005867	.0034344	0.17	0.864	-.0061657	.0073391
2006	.0260947	.0038768	6.73	0.000	.0184725	.0337168
2007	.0504401	.0040511	12.45	0.000	.0424753	.058405
2008	.0570561	.0046215	12.35	0.000	.0479698	.0661424
2009	.0681568	.005233	13.02	0.000	.0578682	.0784454
2010	.063247	.0052713	12.00	0.000	.0528831	.073611
2011	.0510339	.0056144	9.09	0.000	.0399954	.0620724
2012	.0577787	.0059494	9.71	0.000	.0460815	.0694759
2013	.0601182	.0056532	10.63	0.000	.0490034	.0712331
2014	.0768255	.0059066	13.01	0.000	.0652125	.0884385
2015	.1072772	.005859	18.31	0.000	.0957579	.1187966
2016	.1246002	.0056777	21.95	0.000	.1134371	.1357633
2017	.1378489	.005821	23.68	0.000	.1264041	.1492937
2018	.1442867	.0061929	23.30	0.000	.1321108	.1564627
2019	.1615545	.006003	26.91	0.000	.1497518	.1733571
msa_factor						
C1038	-1.053845	2.50e-13	-4.2e+12	0.000	-1.053845	-1.053845
C1042	.1261442	2.50e-13	5.0e+11	0.000	.1261442	.1261442
C1050	-.0547471	2.50e-13	-2.2e+11	0.000	-.0547471	-.0547471
C1054	.0401932	2.50e-13	1.6e+11	0.000	.0401932	.0401932
C1058	.2760702	2.50e-13	1.1e+12	0.000	.2760702	.2760702
C1074	.0363627	.0518721	0.70	0.484	-.0656236	.138349
C1078	.0057144	2.50e-13	2.3e+10	0.000	.0057144	.0057144
C1090	.2133659	2.50e-13	8.5e+11	0.000	.2133659	.2133659
C1102	-.1264165	2.50e-13	-5.1e+11	0.000	-.1264165	-.1264165
C1110	-.0180091	2.50e-13	-7.2e+10	0.000	-.0180091	-.0180091
C1118	.0591474	.0124689	4.74	0.000	.0346321	.0836627
C1126	.4843136	2.50e-13	1.9e+12	0.000	.4843136	.4843136
C1146	.2588218	2.50e-13	1.0e+12	0.000	.2588218	.2588218
C1150	-.1872766	2.50e-13	-7.5e+11	0.000	-.1872766	-.1872766
C1154	.2168632	2.50e-13	8.7e+11	0.000	.2168632	.2168632
C1164	-.925065	2.50e-13	-3.7e+12	0.000	-.925065	-.925065
C1170	-.1229609	2.50e-13	-4.9e+11	0.000	-.1229609	-.1229609
C1202	-.0490257	2.50e-13	-2.0e+11	0.000	-.0490257	-.0490257
C1206	.2195187	2.50e-13	8.8e+11	0.000	.2195187	.2195187
C1210	.3310365	2.50e-13	1.3e+12	0.000	.3310365	.3310365
C1222	-.0892965	2.50e-13	-3.6e+11	0.000	-.0892965	-.0892965
C1226	.0768123	2.50e-13	3.1e+11	0.000	.0768123	.0768123

C1242	.1603584	2.50e-13	6.4e+11	0.000	.1603584	.1603584
C1254	.1467882	2.50e-13	5.9e+11	0.000	.1467882	.1467882
C1258	.2581392	.0063747	40.49	0.000	.2456058	.2706726
C1262	-.042085	2.50e-13	-1.7e+11	0.000	-.042085	-.042085
C1270	.1880102	2.50e-13	7.5e+11	0.000	.1880102	.1880102
C1294	.2376328	2.50e-13	9.5e+11	0.000	.2376328	.2376328
C1298	.1750764	2.50e-13	7.0e+11	0.000	.1750764	.1750764
C1302	-.0565956	2.50e-13	-2.3e+11	0.000	-.0565956	-.0565956
C1314	.2494207	2.50e-13	1.0e+12	0.000	.2494207	.2494207
C1322	-.1008528	2.50e-13	-4.0e+11	0.000	-.1008528	-.1008528
C1338	.2191402	2.50e-13	8.8e+11	0.000	.2191402	.2191402
C1346	-.0380429	2.50e-13	-1.5e+11	0.000	-.0380429	-.0380429
C1374	.0861178	2.50e-13	3.4e+11	0.000	.0861178	.0861178
C1378	.1367132	2.50e-13	5.5e+11	0.000	.1367132	.1367132
C1382	.1382135	2.50e-13	5.5e+11	0.000	.1382135	.1382135
C1390	.0412043	2.50e-13	1.6e+11	0.000	.0412043	.0412043
C1398	-.2180259	2.50e-13	-8.7e+11	0.000	-.2180259	-.2180259
C1401	.1117501	2.50e-13	4.5e+11	0.000	.1117501	.1117501
C1402	.0077248	2.50e-13	3.1e+10	0.000	.0077248	.0077248
C1410	.1346712	2.50e-13	5.4e+11	0.000	.1346712	.1346712
C1426	-.0203067	2.50e-13	-8.1e+10	0.000	-.0203067	-.0203067
C1446	.509235	.0388212	13.12	0.000	.4329082	.5855617
C1450	.1101148	.0214625	5.13	0.000	.067917	.1523126
C1454	-.0175727	2.50e-13	-7.0e+10	0.000	-.0175727	-.0175727
C1474	.0694256	2.50e-13	2.8e+11	0.000	.0694256	.0694256
C1486	.3225976	.0011809	273.18	0.000	.3202758	.3249194
C1518	-.3168211	2.50e-13	-1.3e+12	0.000	-.3168211	-.3168211
C1526	-.1614909	2.50e-13	-6.5e+11	0.000	-.1614909	-.1614909
C1538	.1459018	2.50e-13	5.8e+11	0.000	.1459018	.1459018
C1550	-.1401359	2.50e-13	-5.6e+11	0.000	-.1401359	-.1401359
C1554	.1322865	2.50e-13	5.3e+11	0.000	.1322865	.1322865
C1568	.0310565	2.50e-13	1.2e+11	0.000	.0310565	.0310565
C1594	.0949061	2.50e-13	3.8e+11	0.000	.0949061	.0949061
C1598	-.0449799	2.50e-13	-1.8e+11	0.000	-.0449799	-.0449799
C1602	-.038259	2.50e-13	-1.5e+11	0.000	-.038259	-.038259
C1606	-.0265541	2.50e-13	-1.1e+11	0.000	-.0265541	-.0265541
C1618	-.0106289	.0020218	-5.26	0.000	-.0146041	-.0066538
C1622	.0968555	2.50e-13	3.9e+11	0.000	.0968555	.0968555
C1630	.1946628	2.50e-13	7.8e+11	0.000	.1946628	.1946628
C1654	-.0824919	2.50e-13	-3.3e+11	0.000	-.0824919	-.0824919
C1658	.1356032	2.50e-13	5.4e+11	0.000	.1356032	.1356032
C1662	.1726274	2.50e-13	6.9e+11	0.000	.1726274	.1726274
C1670	.0470613	2.50e-13	1.9e+11	0.000	.0470613	.0470613
C1674	.1218276	2.50e-13	4.9e+11	0.000	.1218276	.1218276
C1682	-.044827	.0153515	-2.92	0.004	-.0750099	-.0146442
C1686	.1270813	2.50e-13	5.1e+11	0.000	.1270813	.1270813
C1694	-.0131611	2.50e-13	-5.3e+10	0.000	-.0131611	-.0131611
C1698	.6459694	.265294	2.43	0.015	.1243715	1.167567
C1702	.0037421	2.50e-13	1.5e+10	0.000	.0037421	.0037421
C1714	.1685949	2.50e-13	6.7e+11	0.000	.1685949	.1685949
C1730	-.071822	2.50e-13	-2.9e+11	0.000	-.071822	-.071822
C1742	.0235262	2.50e-13	9.4e+10	0.000	.0235262	.0235262
C1746	.1873901	2.50e-13	7.5e+11	0.000	.1873901	.1873901
C1766	-.1510208	2.50e-13	-6.0e+11	0.000	-.1510208	-.1510208
C1778	-.0786142	2.50e-13	-3.1e+11	0.000	-.0786142	-.0786142
C1782	.0782255	2.50e-13	3.1e+11	0.000	.0782255	.0782255
C1786	-.0236466	2.50e-13	-9.5e+10	0.000	-.0236466	-.0236466
C1790	-.004198	2.50e-13	-1.7e+10	0.000	-.004198	-.004198
C1798	-.1111454	2.50e-13	-4.4e+11	0.000	-.1111454	-.1111454
C1802	.0729655	2.50e-13	2.9e+11	0.000	.0729655	.0729655
C1814	.1969194	2.50e-13	7.9e+11	0.000	.1969194	.1969194
C1858	.1820443	2.50e-13	7.3e+11	0.000	.1820443	.1820443
C1870	.0150118	2.50e-13	6.0e+10	0.000	.0150118	.0150118
C1888	-.1828416	2.50e-13	-7.3e+11	0.000	-.1828416	-.1828416
C1906	-.0848484	2.50e-13	-3.4e+11	0.000	-.0848484	-.0848484
C1910	.2067013	2.50e-13	8.3e+11	0.000	.2067013	.2067013
C1914	-.2044202	2.50e-13	-8.2e+11	0.000	-.2044202	-.2044202
C1918	-.0622722	2.50e-13	-2.5e+11	0.000	-.0622722	-.0622722
C1930	-.0994666	2.50e-13	-4.0e+11	0.000	-.0994666	-.0994666
C1934	.1706603	2.50e-13	6.8e+11	0.000	.1706603	.1706603
C1938	.0987665	2.50e-13	4.0e+11	0.000	.0987665	.0987665
C1946	.0238783	2.50e-13	9.6e+10	0.000	.0238783	.0238783

C1950	.1714464	2.50e-13	6.9e+11	0.000	.1714464	.1714464
C1966	-.1742414	2.50e-13	-7.0e+11	0.000	-.1742414	-.1742414
C1974	.2476437	.0278354	8.90	0.000	.1929163	.3023712
C1978	.2041798	2.50e-13	8.2e+11	0.000	.2041798	.2041798
C1982	.3421771	2.50e-13	1.4e+12	0.000	.3421771	.3421771
C2002	-.1036974	2.50e-13	-4.2e+11	0.000	-.1036974	-.1036974
C2010	.0437446	2.50e-13	1.8e+11	0.000	.0437446	.0437446
C2022	.0647125	2.50e-13	2.6e+11	0.000	.0647125	.0647125
C2026	.1812334	2.50e-13	7.3e+11	0.000	.1812334	.1812334
C2050	.0363582	2.50e-13	1.5e+11	0.000	.0363582	.0363582
C2070	-.0253169	2.50e-13	-1.0e+11	0.000	-.0253169	-.0253169
C2074	.075616	2.50e-13	3.0e+11	0.000	.075616	.075616
C2094	.0280617	2.50e-13	1.1e+11	0.000	.0280617	.0280617
C2106	-.0709995	2.50e-13	-2.8e+11	0.000	-.0709995	-.0709995
C2114	.1158826	2.50e-13	4.6e+11	0.000	.1158826	.1158826
C2130	.12659	2.50e-13	5.1e+11	0.000	.12659	.12659
C2134	-.1962867	2.50e-13	-7.9e+11	0.000	-.1962867	-.1962867
C2150	-.0173632	2.50e-13	-6.9e+10	0.000	-.0173632	-.0173632
C2166	.0510118	2.50e-13	2.0e+11	0.000	.0510118	.0510118
C2178	.1606526	2.50e-13	6.4e+11	0.000	.1606526	.1606526
C2182	.5112834	2.50e-13	2.0e+12	0.000	.5112834	.5112834
C2202	.108478	2.50e-13	4.3e+11	0.000	.108478	.108478
C2214	.038457	2.50e-13	1.5e+11	0.000	.038457	.038457
C2218	-.0459011	2.50e-13	-1.8e+11	0.000	-.0459011	-.0459011
C2222	-.0529174	2.50e-13	-2.1e+11	0.000	-.0529174	-.0529174
C2238	-.1746224	2.50e-13	-7.0e+11	0.000	-.1746224	-.1746224
C2242	.1324759	2.50e-13	5.3e+11	0.000	.1324759	.1324759
C2250	-.1140384	2.50e-13	-4.6e+11	0.000	-.1140384	-.1140384
C2252	-.0402911	2.50e-13	-1.6e+11	0.000	-.0402911	-.0402911
C2254	.2235089	2.50e-13	8.9e+11	0.000	.2235089	.2235089
C2266	.0959017	2.50e-13	3.8e+11	0.000	.0959017	.0959017
C2290	-.1307988	2.50e-13	-5.2e+11	0.000	-.1307988	-.1307988
C2306	.0970936	2.50e-13	3.9e+11	0.000	.0970936	.0970936
C2342	.0767957	2.50e-13	3.1e+11	0.000	.0767957	.0767957
C2346	-.1463546	2.50e-13	-5.9e+11	0.000	-.1463546	-.1463546
C2354	-.1482694	2.50e-13	-5.9e+11	0.000	-.1482694	-.1482694
C2358	.0044324	2.50e-13	1.8e+10	0.000	.0044324	.0044324
C2390	.0711347	2.50e-13	2.8e+11	0.000	.0711347	.0711347
C2402	.0617281	2.50e-13	2.5e+11	0.000	.0617281	.0617281
C2414	-.0497935	2.50e-13	-2.0e+11	0.000	-.0497935	-.0497935
C2422	.0936591	2.50e-13	3.7e+11	0.000	.0936591	.0936591
C2426	-.1173072	2.50e-13	-4.7e+11	0.000	-.1173072	-.1173072
C2430	.0577478	2.50e-13	2.3e+11	0.000	.0577478	.0577478
C2434	.1465754	2.50e-13	5.9e+11	0.000	.1465754	.1465754
C2442	-.2568961	2.50e-13	-1.0e+12	0.000	-.2568961	-.2568961
C2450	-.0056501	2.50e-13	-2.3e+10	0.000	-.0056501	-.0056501
C2454	.1318377	2.50e-13	5.3e+11	0.000	.1318377	.1318377
C2458	.1303679	2.50e-13	5.2e+11	0.000	.1303679	.1303679
C2466	.0097604	2.50e-13	3.9e+10	0.000	.0097604	.0097604
C2478	-.1488362	2.50e-13	-6.0e+11	0.000	-.1488362	-.1488362
C2486	.0440073	2.50e-13	1.8e+11	0.000	.0440073	.0440073
C2502	-.7405899	2.50e-13	-3.0e+12	0.000	-.7405899	-.7405899
C2506	.0228815	2.50e-13	9.2e+10	0.000	.0228815	.0228815
C2518	-.0380819	2.50e-13	-1.5e+11	0.000	-.0380819	-.0380819
C2522	-.0907687	2.50e-13	-3.6e+11	0.000	-.0907687	-.0907687
C2526	.0401436	2.50e-13	1.6e+11	0.000	.0401436	.0401436
C2542	.1832625	2.50e-13	7.3e+11	0.000	.1832625	.1832625
C2550	-.0684138	2.50e-13	-2.7e+11	0.000	-.0684138	-.0684138
C2554	.3580657	2.50e-13	1.4e+12	0.000	.3580657	.3580657
C2562	-.1240175	2.50e-13	-5.0e+11	0.000	-.1240175	-.1240175
C2586	-.1862214	2.50e-13	-7.5e+11	0.000	-.1862214	-.1862214
C2594	-.0375907	2.50e-13	-1.5e+11	0.000	-.0375907	-.0375907
C2598	-.1786149	2.50e-13	-7.1e+11	0.000	-.1786149	-.1786149
C2614	-.2657553	2.50e-13	-1.1e+12	0.000	-.2657553	-.2657553
C2630	-.3173613	2.50e-13	-1.3e+12	0.000	-.3173613	-.3173613
C2638	.2116074	2.50e-13	8.5e+11	0.000	.2116074	.2116074
C2642	.3524602	2.50e-13	1.4e+12	0.000	.3524602	.3524602
C2658	.1263071	2.50e-13	5.1e+11	0.000	.1263071	.1263071
C2662	-.0371111	2.50e-13	-1.5e+11	0.000	-.0371111	-.0371111
C2682	-.1251457	.0300344	-4.17	0.000	-.1841968	-.0660946
C2690	.1970679	2.50e-13	7.9e+11	0.000	.1970679	.1970679
C2698	.0226558	2.50e-13	9.1e+10	0.000	.0226558	.0226558

C2706	-.0293867	.0101558	-2.89	0.004	-.0493542	-.0094193
C2710	.1053816	2.50e-13	4.2e+11	0.000	.1053816	.1053816
C2714	-.0071319	2.50e-13	-2.9e+10	0.000	-.0071319	-.0071319
C2718	.097077	2.50e-13	3.9e+11	0.000	.097077	.097077
C2726	.0468286	2.50e-13	1.9e+11	0.000	.0468286	.0468286
C2734	-.2444488	2.50e-13	-9.8e+11	0.000	-.2444488	-.2444488
C2750	.1768009	2.50e-13	7.1e+11	0.000	.1768009	.1768009
C2762	.0464324	2.50e-13	1.9e+11	0.000	.0464324	.0464324
C2774	-.097666	2.50e-13	-3.9e+11	0.000	-.097666	-.097666
C2778	-.10766	2.50e-13	-4.3e+11	0.000	-.10766	-.10766
C2786	-.1646795	2.50e-13	-6.6e+11	0.000	-.1646795	-.1646795
C2790	-.1332747	2.50e-13	-5.3e+11	0.000	-.1332747	-.1332747
C2798	.3104701	2.50e-13	1.2e+12	0.000	.3104701	.3104701
C2802	.1537243	2.50e-13	6.2e+11	0.000	.1537243	.1537243
C2810	.2024313	2.50e-13	8.1e+11	0.000	.2024313	.2024313
C2814	.2331754	2.50e-13	9.3e+11	0.000	.2331754	.2331754
C2842	.1767592	.0406884	4.34	0.000	.0967612	.2567572
C2866	-.0356886	2.50e-13	-1.4e+11	0.000	-.0356886	-.0356886
C2870	-.1088613	2.50e-13	-4.4e+11	0.000	-.1088613	-.1088613
C2874	.0248435	2.50e-13	9.9e+10	0.000	.0248435	.0248435
C2894	.1130616	.0437254	2.59	0.010	.0270925	.1990306
C2902	-.0661435	2.50e-13	-2.6e+11	0.000	-.0661435	-.0661435
C2910	.0775312	2.50e-13	3.1e+11	0.000	.0775312	.0775312
C2918	.0951731	2.50e-13	3.8e+11	0.000	.0951731	.0951731
C2920	-.0040742	2.50e-13	-1.6e+10	0.000	-.0040742	-.0040742
C2934	.189384	2.50e-13	7.6e+11	0.000	.189384	.189384
C2942	-.240078	2.50e-13	-9.6e+11	0.000	-.240078	-.240078
C2946	-.0705326	2.50e-13	-2.8e+11	0.000	-.0705326	-.0705326
C2954	.1796524	2.50e-13	7.2e+11	0.000	.1796524	.1796524
C2962	.1919072	2.50e-13	7.7e+11	0.000	.1919072	.1919072
C2970	-.3600018	2.50e-13	-1.4e+12	0.000	-.3600018	-.3600018
C2974	-.3020488	2.50e-13	-1.2e+12	0.000	-.3020488	-.3020488
C2982	.2398339	2.50e-13	9.6e+11	0.000	.2398339	.2398339
C2994	-.0639675	2.50e-13	-2.6e+11	0.000	-.0639675	-.0639675
C3002	-.2083933	2.50e-13	-8.3e+11	0.000	-.2083933	-.2083933
C3014	.0337094	2.50e-13	1.3e+11	0.000	.0337094	.0337094
C3030	-.0448614	2.50e-13	-1.8e+11	0.000	-.0448614	-.0448614
C3034	-.0133414	2.50e-13	-5.3e+10	0.000	-.0133414	-.0133414
C3046	.0831251	2.50e-13	3.3e+11	0.000	.0831251	.0831251
C3062	.0173674	2.50e-13	7.0e+10	0.000	.0173674	.0173674
C3070	-.0327268	2.50e-13	-1.3e+11	0.000	-.0327268	-.0327268
C3078	-.0150579	2.50e-13	-6.0e+10	0.000	-.0150579	-.0150579
C3086	-.3427238	2.50e-13	-1.4e+12	0.000	-.3427238	-.3427238
C3098	.0334301	2.50e-13	1.3e+11	0.000	.0334301	.0334301
C3102	.2208752	2.50e-13	8.8e+11	0.000	.2208752	.2208752
C3108	.500149	.2763809	1.81	0.071	-.0432471	1.043545
C3114	.0850745	2.50e-13	3.4e+11	0.000	.0850745	.0850745
C3118	-.0924478	2.50e-13	-3.7e+11	0.000	-.0924478	-.0924478
C3134	-.153426	2.50e-13	-6.1e+11	0.000	-.153426	-.153426
C3142	-.0475364	2.50e-13	-1.9e+11	0.000	-.0475364	-.0475364
C3146	-.0635183	2.50e-13	-2.5e+11	0.000	-.0635183	-.0635183
C3154	.2504757	2.50e-13	1.0e+12	0.000	.2504757	.2504757
C3170	.2732872	2.50e-13	1.1e+12	0.000	.2732872	.2732872
C3174	-.0832503	2.50e-13	-3.3e+11	0.000	-.0832503	-.0832503
C3186	.0757289	2.50e-13	3.0e+11	0.000	.0757289	.0757289
C3190	.0139033	2.50e-13	5.6e+10	0.000	.0139033	.0139033
C3242	-.9487052	2.50e-13	-3.8e+12	0.000	-.9487052	-.9487052
C3258	-.3435763	2.50e-13	-1.4e+12	0.000	-.3435763	-.3435763
C3278	-.0580696	2.50e-13	-2.3e+11	0.000	-.0580696	-.0580696
C3282	.1236078	2.50e-13	4.9e+11	0.000	.1236078	.1236078
C3290	-.0926883	2.50e-13	-3.7e+11	0.000	-.0926883	-.0926883
C3310	.0947101	2.50e-13	3.8e+11	0.000	.0947101	.0947101
C3314	.2195471	2.50e-13	8.8e+11	0.000	.2195471	.2195471
C3322	.1043049	2.50e-13	4.2e+11	0.000	.1043049	.1043049
C3326	.0732585	2.50e-13	2.9e+11	0.000	.0732585	.0732585
C3334	.2883932	2.50e-13	1.2e+12	0.000	.2883932	.2883932
C3346	.353409	2.50e-13	1.4e+12	0.000	.353409	.353409
C3354	-.0408489	2.50e-13	-1.6e+11	0.000	-.0408489	-.0408489
C3366	.0354824	2.50e-13	1.4e+11	0.000	.0354824	.0354824
C3370	.0723785	2.50e-13	2.9e+11	0.000	.0723785	.0723785
C3374	-.1526496	2.50e-13	-6.1e+11	0.000	-.1526496	-.1526496
C3378	.3382842	2.50e-13	1.4e+12	0.000	.3382842	.3382842

C3386	-.0154493	2.50e-13	-6.2e+10	0.000	-.0154493	-.0154493
C3406	.0122019	2.50e-13	4.9e+10	0.000	.0122019	.0122019
C3410	-.2015593	2.50e-13	-8.1e+11	0.000	-.2015593	-.2015593
C3458	.2352287	2.50e-13	9.4e+11	0.000	.2352287	.2352287
C3462	-.049579	2.50e-13	-2.0e+11	0.000	-.049579	-.049579
C3474	.1626317	2.50e-13	6.5e+11	0.000	.1626317	.1626317
C3482	-.1506153	2.50e-13	-6.0e+11	0.000	-.1506153	-.1506153
C3490	.3058248	2.50e-13	1.2e+12	0.000	.3058248	.3058248
C3494	.0213625	2.50e-13	8.6e+10	0.000	.0213625	.0213625
C3498	.1747056	2.50e-13	7.0e+11	0.000	.1747056	.1747056
C3510	-.1395328	2.50e-13	-5.6e+11	0.000	-.1395328	-.1395328
C3530	.3421878	2.50e-13	1.4e+12	0.000	.3421878	.3421878
C3538	.1476633	2.50e-13	5.9e+11	0.000	.1476633	.1476633
C3562	.4528007	.0345336	13.11	0.000	.3849039	.5206976
C3566	-.0056219	2.50e-13	-2.3e+10	0.000	-.0056219	-.0056219
C3584	-.0286972	2.50e-13	-1.1e+11	0.000	-.0286972	-.0286972
C3598	.2767086	2.50e-13	1.1e+12	0.000	.2767086	.2767086
C3610	-.2144954	2.50e-13	-8.6e+11	0.000	-.2144954	-.2144954
C3614	.0302199	2.50e-13	1.2e+11	0.000	.0302199	.0302199
C3622	.2546831	2.50e-13	1.0e+12	0.000	.2546831	.2546831
C3626	-.036731	2.50e-13	-1.5e+11	0.000	-.036731	-.036731
C3642	-.0222732	2.50e-13	-8.9e+10	0.000	-.0222732	-.0222732
C3650	.058051	2.50e-13	2.3e+11	0.000	.058051	.058051
C3654	.0865731	2.50e-13	3.5e+11	0.000	.0865731	.0865731
C3674	.0763419	2.50e-13	3.1e+11	0.000	.0763419	.0763419
C3678	.2160066	2.50e-13	8.6e+11	0.000	.2160066	.2160066
C3698	-.0515844	2.50e-13	-2.1e+11	0.000	-.0515844	-.0515844
C3710	.1557088	2.50e-13	6.2e+11	0.000	.1557088	.1557088
C3734	-.0390276	2.50e-13	-1.6e+11	0.000	-.0390276	-.0390276
C3746	-.1766892	2.50e-13	-7.1e+11	0.000	-.1766892	-.1766892
C3762	.1130993	2.50e-13	4.5e+11	0.000	.1130993	.1130993
C3786	-.1355571	2.50e-13	-5.4e+11	0.000	-.1355571	-.1355571
C3790	.2037556	2.50e-13	8.2e+11	0.000	.2037556	.2037556
C3798	.3746494	2.50e-13	1.5e+12	0.000	.3746494	.3746494
C3806	.1321555	2.50e-13	5.3e+11	0.000	.1321555	.1321555
C3822	-.0023432	2.50e-13	-9.4e+09	0.000	-.0023432	-.0023432
C3830	.231485	.0162464	14.25	0.000	.1995428	.2634272
C3834	.1159022	2.50e-13	4.6e+11	0.000	.1159022	.1159022
C3854	-.2109638	2.50e-13	-8.4e+11	0.000	-.2109638	-.2109638
C3866	-.812228	2.50e-13	-3.3e+12	0.000	-.812228	-.812228
C3886	.054196	2.50e-13	2.2e+11	0.000	.054196	.054196
C3890	.2381086	2.50e-13	9.5e+11	0.000	.2381086	.2381086
C3894	-.1334897	2.50e-13	-5.3e+11	0.000	-.1334897	-.1334897
C3914	-.1993819	2.50e-13	-8.0e+11	0.000	-.1993819	-.1993819
C3930	.2257479	2.50e-13	9.0e+11	0.000	.2257479	.2257479
C3934	-.1157205	2.50e-13	-4.6e+11	0.000	-.1157205	-.1157205
C3938	.0655753	2.50e-13	2.6e+11	0.000	.0655753	.0655753
C3946	-.1898446	2.50e-13	-7.6e+11	0.000	-.1898446	-.1898446
C3954	.1392393	2.50e-13	5.6e+11	0.000	.1392393	.1392393
C3958	.0805072	2.50e-13	3.2e+11	0.000	.0805072	.0805072
C3966	-.1015232	2.50e-13	-4.1e+11	0.000	-.1015232	-.1015232
C3974	.2220956	2.50e-13	8.9e+11	0.000	.2220956	.2220956
C3982	.0683251	2.50e-13	2.7e+11	0.000	.0683251	.0683251
C3990	.1597666	2.50e-13	6.4e+11	0.000	.1597666	.1597666
C4006	.0991885	2.50e-13	4.0e+11	0.000	.0991885	.0991885
C4014	.1246356	2.50e-13	5.0e+11	0.000	.1246356	.1246356
C4022	-.143595	2.50e-13	-5.7e+11	0.000	-.143595	-.143595
C4034	.1163949	2.50e-13	4.7e+11	0.000	.1163949	.1163949
C4038	.1705036	2.50e-13	6.8e+11	0.000	.1705036	.1705036
C4042	.2609087	2.50e-13	1.0e+12	0.000	.2609087	.2609087
C4058	-.0449208	2.50e-13	-1.8e+11	0.000	-.0449208	-.0449208
C4066	-.1184162	2.50e-13	-4.7e+11	0.000	-.1184162	-.1184162
C4090	.2413273	2.50e-13	9.7e+11	0.000	.2413273	.2413273
C4098	.1032901	2.50e-13	4.1e+11	0.000	.1032901	.1032901
C4106	.2076439	2.50e-13	8.3e+11	0.000	.2076439	.2076439
C4110	-.2928245	2.50e-13	-1.2e+12	0.000	-.2928245	-.2928245
C4114	.216802	2.50e-13	8.7e+11	0.000	.216802	.216802
C4118	.2380925	2.50e-13	9.5e+11	0.000	.2380925	.2380925
C4142	.0530652	2.50e-13	2.1e+11	0.000	.0530652	.0530652
C4150	.1639106	2.50e-13	6.6e+11	0.000	.1639106	.1639106
C4154	-.0692841	2.50e-13	-2.8e+11	0.000	-.0692841	-.0692841
C4162	.0791191	2.50e-13	3.2e+11	0.000	.0791191	.0791191

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C4166     -.1132817    2.50e-13  -4.5e+11   0.000    -.1132817    -.1132817
C4170      .0558868    .0184733      3.03    0.003     .0195663     .0922074
C4174      .2496815    2.50e-13   1.0e+12   0.000     .2496815     .2496815
C4186      .7011779    .2758114      2.54    0.011     .1589016    1.243454
C4190     -1.038124    2.50e-13  -4.2e+12   0.000    -1.038124    -1.038124
C4194      .4585318    2.50e-13   1.8e+12   0.000     .4585318     .4585318
C4198     -.6241004    2.50e-13  -2.5e+12   0.000    -.6241004    -.6241004
C4202      .1641389    2.50e-13   6.6e+11   0.000     .1641389     .1641389
C4210      .1621372    2.50e-13   6.5e+11   0.000     .1621372     .1621372
C4214     -.1750528    2.50e-13  -7.0e+11   0.000    -.1750528    -.1750528
C4220      .1660523    2.50e-13   6.6e+11   0.000     .1660523     .1660523
C4222      .2606028    2.50e-13   1.0e+12   0.000     .2606028     .2606028
C4234     -.0047592    2.50e-13  -1.9e+10   0.000    -.0047592    -.0047592
C4254      .0686509    2.50e-13   2.7e+11   0.000     .0686509     .0686509
C4266      .2743588    2.50e-13   1.1e+12   0.000     .2743588     .2743588
C4268     -.1238563    2.50e-13  -5.0e+11   0.000    -.1238563    -.1238563
C4270     -.3743417    2.50e-13  -1.5e+12   0.000    -.3743417    -.3743417
C4310      .0981711    2.50e-13   3.9e+11   0.000     .0981711     .0981711
C4330      .0381547    2.50e-13   1.5e+11   0.000     .0381547     .0381547
C4334      -.04939     2.50e-13  -2.0e+11   0.000     -.04939      -.04939
C4342     -.2017303    2.50e-13  -8.1e+11   0.000    -.2017303    -.2017303
C4358      .0931133    2.50e-13   3.7e+11   0.000     .0931133     .0931133
C4362      .0181837    2.50e-13   7.3e+10   0.000     .0181837     .0181837
C4378      .1267852    2.50e-13   5.1e+11   0.000     .1267852     .1267852
C4390      .0268112    2.50e-13   1.1e+11   0.000     .0268112     .0268112
C4406      .0068034    2.50e-13   2.7e+10   0.000     .0068034     .0068034
C4410      .1386821    2.50e-13   5.6e+11   0.000     .1386821     .1386821
C4414      .2632314    2.50e-13   1.1e+12   0.000     .2632314     .2632314
C4418     -.0965186    2.50e-13  -3.9e+11   0.000    -.0965186    -.0965186
C4422     -.0727614    2.50e-13  -2.9e+11   0.000    -.0727614    -.0727614
C4430      .0158827    2.50e-13   6.4e+10   0.000     .0158827     .0158827
C4442     -.1522478    2.50e-13  -6.1e+11   0.000    -.1522478    -.1522478
C4470      .1744649    2.50e-13   7.0e+11   0.000     .1744649     .1744649
C4494      -.053566    2.50e-13  -2.1e+11   0.000     -.053566     -.053566
C4506      .1683324    2.50e-13   6.7e+11   0.000     .1683324     .1683324
C4522     -.1178114    2.50e-13  -4.7e+11   0.000    -.1178114    -.1178114
C4530       .019411    2.50e-13   7.8e+10   0.000      .019411      .019411
C4546      .0731302    2.50e-13   2.9e+11   0.000     .0731302     .0731302
C4550     -.1768315    2.50e-13  -7.1e+11   0.000    -.1768315    -.1768315
C4554      -.155691    2.50e-13  -6.2e+11   0.000     -.155691     -.155691
C4578      .2700051    2.50e-13   1.1e+12   0.000     .2700051     .2700051
C4582      .0619793    2.50e-13   2.5e+11   0.000     .0619793     .0619793
C4594      .4218665    .0157003     26.87    0.000     .3909979     .4527351
C4606     -.0790501    .0123676     -6.39    0.000    -.1033662     -.054734
C4614      .0255969    2.50e-13   1.0e+11   0.000     .0255969     .0255969
C4622     -.0879027    2.50e-13  -3.5e+11   0.000    -.0879027    -.0879027
C4634     -.1042785    2.50e-13  -4.2e+11   0.000    -.1042785    -.1042785
C4652       .449595    2.50e-13   1.8e+12   0.000      .449595      .449595
C4654      .0485889    2.50e-13   1.9e+11   0.000     .0485889     .0485889
C4666     -.0134571    2.50e-13  -5.4e+10   0.000    -.0134571    -.0134571
C4670      .3375676    2.50e-13   1.4e+12   0.000     .3375676     .3375676
C4702      .0900637    2.50e-13   3.6e+11   0.000     .0900637     .0900637
C4722      .2856858    2.50e-13   1.1e+12   0.000     .2856858     .2856858
C4726      .0302109    .0175957      1.72    0.087    -.0043842     .064806
C4730     -.0105639    2.50e-13  -4.2e+10   0.000    -.0105639    -.0105639
C4738     -.1066232    2.50e-13  -4.3e+11   0.000    -.1066232    -.1066232
C4746     -.1400007    2.50e-13  -5.6e+11   0.000    -.1400007    -.1400007
C4758     -.0816476    2.50e-13  -3.3e+11   0.000    -.0816476    -.0816476
C4790      .4880704    .2757736      1.77    0.078    -.0541317    1.030272
C4794      .0474272    2.50e-13   1.9e+11   0.000     .0474272     .0474272
C4806      .1277874    2.50e-13   5.1e+11   0.000     .1277874     .1277874
C4814      .1291561    2.50e-13   5.2e+11   0.000     .1291561     .1291561
C4826      .1359814    .0001645    826.55    0.000     .1356579     .1363048
C4830     -.0385273    2.50e-13  -1.5e+11   0.000    -.0385273    -.0385273
C4854      .1269445    2.50e-13   5.1e+11   0.000     .1269445     .1269445
C4862     -.0182198    2.50e-13  -7.3e+10   0.000    -.0182198    -.0182198
C4866     -.1492576    2.50e-13  -6.0e+11   0.000    -.1492576    -.1492576
C4870      .0365029    2.50e-13   1.5e+11   0.000     .0365029     .0365029
C4890     -.0241184    2.50e-13  -9.7e+10   0.000    -.0241184    -.0241184
C4902     -.0619852    2.50e-13  -2.5e+11   0.000    -.0619852    -.0619852
C4918     -.0666403    2.50e-13  -2.7e+11   0.000    -.0666403    -.0666403
C4934      .2891555    2.50e-13   1.2e+12   0.000     .2891555     .2891555
```

C4942	-.0966299	2.50e-13	-3.9e+11	0.000	-.0966299	-.0966299
C4962	.1730153	2.50e-13	6.9e+11	0.000	.1730153	.1730153
C4966	.0548093	2.50e-13	2.2e+11	0.000	.0548093	.0548093
C4970	.1327803	2.50e-13	5.3e+11	0.000	.1327803	.1327803
C4974	-.290144	2.50e-13	-1.2e+12	0.000	-.290144	-.290144
ffrdc_count						
1	.1735562	.2258922	0.77	0.443	-.2705734	.6176858
2	0	(omitted)				
3	0	(omitted)				
5	0	(omitted)				
8	.0235716	.0150895	1.56	0.119	-.006096	.0532393
9	.0298056	.0138596	2.15	0.032	.0025561	.0570552
10	.0164971	.0074635	2.21	0.028	.001823	.0311713
11	.0236365	.0041347	5.72	0.000	.0155073	.0317658
12	.0077259	.0032829	2.35	0.019	.0012713	.0141805
13	0	(omitted)				
_cons	11.42218	.0038075	2999.93	0.000	11.41469	11.42967

```
652 outreg2 using output/reg_construction.doc, replace ctitle("OLS full controls, Averag
  > e annual pay (log-log)") keep(log_federal_funding) addtext(MSA FE, Yes, Year FE, Yes
  > , FFRDC count FE, Yes)
  output/reg_construction.doc
  dir : seeout

653
654 reg log_annual_avg_emplvl log_federal_funding i.year i.msa_factor i.ffrdc_count, rob
  > ust cluster(msa_factor)
note: 2.ffrdc_count omitted because of collinearity
note: 3.ffrdc_count omitted because of collinearity
note: 5.ffrdc_count omitted because of collinearity
note: 13.ffrdc_count omitted because of collinearity
```

Linear regression				Number of obs	=	7,372
				F(19, 387)	=	.
				Prob > F	=	.
				R-squared	=	0.9201
				Root MSE	=	.37848

(Std. Err. adjusted for **388** clusters in msa_factor)

log_annual_avg_em~l	Coef.	Robust Std. Err.	t	P>|t|	[95% Conf. Interval]	
log_federal_funding	.0554069	.0454064	1.22	0.223	-.0338673	.1446811
year						
2002	-.0348901	.0274915	-1.27	0.205	-.0889416	.0191614
2003	-.0253161	.0278936	-0.91	0.365	-.080158	.0295258
2004	.0130048	.0283643	0.46	0.647	-.0427627	.0687723
2005	.0565667	.0293879	1.92	0.055	-.0012133	.1143466
2006	.0972726	.0298989	3.25	0.001	.038488	.1560571
2007	.0865638	.0299634	2.89	0.004	.0276523	.1454753
2008	.0304134	.0294281	1.03	0.302	-.0274455	.0882723
2009	-.11768	.0116566	-10.10	0.000	-.1405982	-.0947618
2010	-.1946397	.0127004	-15.33	0.000	-.2196101	-.1696693
2011	-.2121266	.0143999	-14.73	0.000	-.2404385	-.1838147
2012	-.1782015	.0244515	-7.29	0.000	-.226276	-.1301271
2013	-.1597143	.0251759	-6.34	0.000	-.2092129	-.1102157
2014	-.1490421	.0338111	-4.41	0.000	-.2155184	-.0825657
2015	-.0883311	.0272616	-3.24	0.001	-.1419305	-.0347318
2016	-.0595795	.0272267	-2.19	0.029	-.1131102	-.0060487
2017	-.0217325	.0271449	-0.80	0.424	-.0751024	.0316374
2018	.0185733	.0269387	0.69	0.491	-.0343911	.0715378
2019	.0497938	.0275046	1.81	0.071	-.0042835	.103871
msa_factor						
C1038	-.4427221	2.88e-13	-1.5e+12	0.000	-.4427221	-.4427221
C1042	1.363436	2.88e-13	4.7e+12	0.000	1.363436	1.363436
C1050	-.1360438	2.88e-13	-4.7e+11	0.000	-.1360438	-.1360438

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C1054      -.3499109    2.88e-13  -1.2e+12    0.000    -.3499109    -.3499109
C1058      1.680197     2.88e-13   5.8e+12    0.000     1.680197     1.680197
C1074      1.810833     .1853203      9.77    0.000     1.446473     2.175194
C1078      .2116308     2.88e-13   7.3e+11    0.000     .2116308     .2116308
C1090      1.402788     2.88e-13   4.9e+12    0.000     1.402788     1.402788
C1102      -.2464291    2.88e-13  -8.5e+11    0.000    -.2464291    -.2464291
C1110      .5805018     2.88e-13   2.0e+12    0.000     .5805018     .5805018
C1118      -.4282393    .0161261     -26.56    0.000    -.459945     -.3965336
C1126      1.153818     2.88e-13   4.0e+12    0.000     1.153818     1.153818
C1146      .3021349     2.88e-13   1.0e+12    0.000     .3021349     .3021349
C1150      -1.073369    2.88e-13  -3.7e+12    0.000    -1.073369    -1.073369
C1154      .9235311     2.88e-13   3.2e+12    0.000     .9235311     .9235311
C1164      -1.192485    2.88e-13  -4.1e+12    0.000    -1.192485    -1.192485
C1170      1.021628     2.88e-13   3.5e+12    0.000     1.021628     1.021628
C1202      -.196237     2.88e-13  -6.8e+11    0.000    -.196237     -.196237
C1206      3.527937     2.88e-13   1.2e+13    0.000     3.527937     3.527937
C1210      .5425126     2.88e-13   1.9e+12    0.000     .5425126     .5425126
C1222      -.4577333    2.88e-13  -1.6e+12    0.000    -.4577333    -.4577333
C1226      1.288117     2.88e-13   4.5e+12    0.000     1.288117     1.288117
C1242      2.622497     2.88e-13   9.1e+12    0.000     2.622497     2.622497
C1254      1.581283     2.88e-13   5.5e+12    0.000     1.581283     1.581283
C1258      3.11211      .0170767     182.24    0.000     3.078536     3.145685
C1262      -.0913233    2.88e-13  -3.2e+11    0.000    -.0913233    -.0913233
C1270      .5204823     2.88e-13   1.8e+12    0.000     .5204823     .5204823
C1294      2.550257     2.88e-13   8.8e+12    0.000     2.550257     2.550257
C1298      -.5660063    2.88e-13  -2.0e+12    0.000    -.5660063    -.5660063
C1302      -.9573687    2.88e-13  -3.3e+12    0.000    -.9573687    -.9573687
C1314      1.649759     2.88e-13   5.7e+12    0.000     1.649759     1.649759
C1322      -.6106743    2.88e-13  -2.1e+12    0.000    -.6106743    -.6106743
C1338      .6280734     2.88e-13   2.2e+12    0.000     .6280734     .6280734
C1346      .4406017     2.88e-13   1.5e+12    0.000     .4406017     .4406017
C1374      .4434043     2.88e-13   1.5e+12    0.000     .4434043     .4434043
C1378      .2228757     2.88e-13   7.7e+11    0.000     .2228757     .2228757
C1382      2.1174       2.88e-13   7.3e+12    0.000     2.1174       2.1174
C1390      .1539352     2.88e-13   5.3e+11    0.000     .1539352     .1539352
C1398      -.449569     2.88e-13  -1.6e+12    0.000    -.449569     -.449569
C1401      -.0563492    2.88e-13  -2.0e+11    0.000    -.0563492    -.0563492
C1402      -.2208416    2.88e-13  -7.7e+11    0.000    -.2208416    -.2208416
C1410      -.9960396    2.88e-13  -3.5e+12    0.000    -.9960396    -.9960396
C1426      1.692537     2.88e-13   5.9e+12    0.000     1.692537     1.692537
C1446      3.274632     .1355924      24.15    0.000     3.008042     3.541222
C1450      .4767442     .0656304       7.26    0.000     .3477075     .605781
C1454      -.0842862    2.88e-13  -2.9e+11    0.000    -.0842862    -.0842862
C1474      .2382551     2.88e-13   8.3e+11    0.000     .2382551     .2382551
C1486      -2.362748    2.88e-13  -8.2e+12    0.000    -2.362748    -2.362748
C1518      .1044243     2.88e-13   3.6e+11    0.000     .1044243     .1044243
C1526      -.4400128    2.88e-13  -1.5e+12    0.000    -.4400128    -.4400128
C1538      1.805896     2.88e-13   6.3e+12    0.000     1.805896     1.805896
C1550      -.0877366    2.88e-13  -3.0e+11    0.000    -.0877366    -.0877366
C1554      .5544041     2.88e-13   1.9e+12    0.000     .5544041     .5544041
C1568      -.6097875    2.88e-13  -2.1e+12    0.000    -.6097875    -.6097875
C1594      .8714657     2.88e-13   3.0e+12    0.000     .8714657     .8714657
C1598      1.971884     2.88e-13   6.8e+12    0.000     1.971884     1.971884
C1602      -.4625668    2.88e-13  -1.6e+12    0.000    -.4625668    -.4625668
C1606      -.6588774    2.88e-13  -2.3e+12    0.000    -.6588774    -.6588774
C1618      -5.514887    2.88e-13  -1.9e+13    0.000    -5.514887    -5.514887
C1622      -.1615052    2.88e-13  -5.6e+11    0.000    -.1615052    -.1615052
C1630      .8506799     2.88e-13   2.9e+12    0.000     .8506799     .8506799
C1654      -.3971336    2.88e-13  -1.4e+12    0.000    -.3971336    -.3971336
C1658      .129387      2.88e-13   4.5e+11    0.000     .129387      .129387
C1662      .3912432     2.88e-13   1.4e+12    0.000     .3912432     .3912432
C1670      1.651711     2.88e-13   5.7e+12    0.000     1.651711     1.651711
C1674      2.871782     2.88e-13   1.0e+13    0.000     2.871782     2.871782
C1682      .561128      .0360413      15.57    0.000     .4902667     .6319893
C1686      1.059791     2.88e-13   3.7e+12    0.000     1.059791     1.059791
C1694      -.0941535    2.88e-13  -3.3e+11    0.000    -.0941535    -.0941535
C1698      2.812216     .9758769       2.88    0.004     .8935319     4.7309
C1702      -.0098477    2.88e-13  -3.4e+10    0.000    -.0098477    -.0098477
C1714      2.56742      2.88e-13   8.9e+12    0.000     2.56742      2.56742
C1730      -.1750301    2.88e-13  -6.1e+11    0.000    -.1750301    -.1750301
C1742      -.7419659    2.88e-13  -2.6e+12    0.000    -.7419659    -.7419659
C1746      2.437106     2.88e-13   8.4e+12    0.000     2.437106     2.437106
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C1766	.2649002	2.88e-13	9.2e+11	0.000	.2649002	.2649002
C1778	.4031006	2.88e-13	1.4e+12	0.000	.4031006	.4031006
C1782	1.5316	2.88e-13	5.3e+12	0.000	1.5316	1.5316
C1786	.1040657	2.88e-13	3.6e+11	0.000	.1040657	.1040657
C1790	1.606617	2.88e-13	5.6e+12	0.000	1.606617	1.606617
C1798	.3947293	2.88e-13	1.4e+12	0.000	.3947293	.3947293
C1802	-.7219926	2.88e-13	-2.5e+12	0.000	-.7219926	-.7219926
C1814	2.405547	2.88e-13	8.3e+12	0.000	2.405547	2.405547
C1858	1.644775	2.88e-13	5.7e+12	0.000	1.644775	1.644775
C1870	-1.159042	2.88e-13	-4.0e+12	0.000	-1.159042	-1.159042
C1888	.6511143	2.88e-13	2.3e+12	0.000	.6511143	.6511143
C1906	-.7841893	2.88e-13	-2.7e+12	0.000	-.7841893	-.7841893
C1910	3.909312	2.88e-13	1.4e+13	0.000	3.909312	3.909312
C1914	-.9995881	2.88e-13	-3.5e+12	0.000	-.9995881	-.9995881
C1918	-1.608316	2.88e-13	-5.6e+12	0.000	-1.608316	-1.608316
C1930	.145487	2.88e-13	5.0e+11	0.000	.145487	.145487
C1934	.9884716	2.88e-13	3.4e+12	0.000	.9884716	.9884716
C1938	1.363778	2.88e-13	4.7e+12	0.000	1.363778	1.363778
C1946	.0904536	2.88e-13	3.1e+11	0.000	.0904536	.0904536
C1950	-.0205219	2.88e-13	-7.1e+10	0.000	-.0205219	-.0205219
C1966	1.263935	2.88e-13	4.4e+12	0.000	1.263935	1.263935
C1974	3.157817	.092342	34.20	0.000	2.976262	3.339372
C1978	1.633008	2.88e-13	5.7e+12	0.000	1.633008	1.633008
C1982	3.03913	2.88e-13	1.1e+13	0.000	3.03913	3.03913
C2002	-.1398208	2.88e-13	-4.8e+11	0.000	-.1398208	-.1398208
C2010	-.1752702	2.88e-13	-6.1e+11	0.000	-.1752702	-.1752702
C2022	-.2994204	2.88e-13	-1.0e+12	0.000	-.2994204	-.2994204
C2026	.519657	2.88e-13	1.8e+12	0.000	.519657	.519657
C2050	.9274048	2.88e-13	3.2e+12	0.000	.9274048	.9274048
C2070	-.4672249	2.88e-13	-1.6e+12	0.000	-.4672249	-.4672249
C2074	-.021128	2.88e-13	-7.3e+10	0.000	-.021128	-.021128
C2094	-.712589	2.88e-13	-2.5e+12	0.000	-.712589	-.712589
C2106	-.4679498	2.88e-13	-1.6e+12	0.000	-.4679498	-.4679498
C2114	.115933	2.88e-13	4.0e+11	0.000	.115933	.115933
C2130	-.7902875	2.88e-13	-2.7e+12	0.000	-.7902875	-.7902875
C2134	1.458471	2.88e-13	5.1e+12	0.000	1.458471	1.458471
C2150	.2361222	2.88e-13	8.2e+11	0.000	.2361222	.2361222
C2166	.6928023	2.88e-13	2.4e+12	0.000	.6928023	.6928023
C2178	1.112878	2.88e-13	3.9e+12	0.000	1.112878	1.112878
C2182	-.1902022	2.88e-13	-6.6e+11	0.000	-.1902022	-.1902022
C2202	.8194727	2.88e-13	2.8e+12	0.000	.8194727	.8194727
C2214	.1740788	2.88e-13	6.0e+11	0.000	.1740788	.1740788
C2218	.5207535	2.88e-13	1.8e+12	0.000	.5207535	.5207535
C2222	1.032921	2.88e-13	3.6e+12	0.000	1.032921	1.032921
C2238	-.2593204	2.88e-13	-9.0e+11	0.000	-.2593204	-.2593204
C2242	.4396403	2.88e-13	1.5e+12	0.000	.4396403	.4396403
C2250	-.0012225	2.88e-13	-4.2e+09	0.000	-.0012225	-.0012225
C2252	-.1178361	2.88e-13	-4.1e+11	0.000	-.1178361	-.1178361
C2254	-.2302148	2.88e-13	-8.0e+11	0.000	-.2302148	-.2302148
C2266	1.07899	2.88e-13	3.7e+12	0.000	1.07899	1.07899
C2290	.3167263	2.88e-13	1.1e+12	0.000	.3167263	.3167263
C2306	1.141602	2.88e-13	4.0e+12	0.000	1.141602	1.141602
C2342	1.631482	2.88e-13	5.7e+12	0.000	1.631482	1.631482
C2346	-.9406252	2.88e-13	-3.3e+12	0.000	-.9406252	-.9406252
C2354	.4439808	2.88e-13	1.5e+12	0.000	.4439808	.4439808
C2358	.1137478	2.88e-13	3.9e+11	0.000	.1137478	.1137478
C2390	-.7227233	2.88e-13	-2.5e+12	0.000	-.7227233	-.7227233
C2402	-.3821935	2.88e-13	-1.3e+12	0.000	-.3821935	-.3821935
C2414	-.455323	2.88e-13	-1.6e+12	0.000	-.455323	-.455323
C2422	-.2204552	2.88e-13	-7.6e+11	0.000	-.2204552	-.2204552
C2426	-.4604997	2.88e-13	-1.6e+12	0.000	-.4604997	-.4604997
C2430	.3029731	2.88e-13	1.1e+12	0.000	.3029731	.3029731
C2434	1.873915	2.88e-13	6.5e+12	0.000	1.873915	1.873915
C2442	-1.135429	2.88e-13	-3.9e+12	0.000	-1.135429	-1.135429
C2450	-.4391457	2.88e-13	-1.5e+12	0.000	-.4391457	-.4391457
C2454	.9211637	2.88e-13	3.2e+12	0.000	.9211637	.9211637
C2458	.873778	2.88e-13	3.0e+12	0.000	.873778	.873778
C2466	1.58574	2.88e-13	5.5e+12	0.000	1.58574	1.58574
C2478	-.0186108	2.88e-13	-6.5e+10	0.000	-.0186108	-.0186108
C2486	1.648873	2.88e-13	5.7e+12	0.000	1.648873	1.648873
C2502	-2.239789	2.88e-13	-7.8e+12	0.000	-2.239789	-2.239789
C2506	.8941229	2.88e-13	3.1e+12	0.000	.8941229	.8941229

C2518	.27548	2.88e-13	9.5e+11	0.000	.27548	.27548
C2522	-.8765042	2.88e-13	-3.0e+12	0.000	-.8765042	-.8765042
C2526	-1.137753	2.88e-13	-3.9e+12	0.000	-1.137753	-1.137753
C2542	1.233242	2.88e-13	4.3e+12	0.000	1.233242	1.233242
C2550	.026695	2.88e-13	9.3e+10	0.000	.026695	.026695
C2554	1.88766	2.88e-13	6.5e+12	0.000	1.88766	1.88766
C2562	-.3560718	2.88e-13	-1.2e+12	0.000	-.3560718	-.3560718
C2586	.2960113	2.88e-13	1.0e+12	0.000	.2960113	.2960113
C2594	.5014372	2.88e-13	1.7e+12	0.000	.5014372	.5014372
C2598	-2.215512	2.88e-13	-7.7e+12	0.000	-2.215512	-2.215512
C2614	-.1362509	2.88e-13	-4.7e+11	0.000	-.1362509	-.1362509
C2630	-.4951691	2.88e-13	-1.7e+12	0.000	-.4951691	-.4951691
C2638	.4462634	2.88e-13	1.5e+12	0.000	.4462634	.4462634
C2642	4.088555	2.88e-13	1.4e+13	0.000	4.088555	4.088555
C2658	.8869981	2.88e-13	3.1e+12	0.000	.8869981	.8869981
C2662	.7786564	2.88e-13	2.7e+12	0.000	.7786564	.7786564
C2682	.0164409	.1011865	0.16	0.871	-.1825031	.215385
C2690	2.671898	2.88e-13	9.3e+12	0.000	2.671898	2.671898
C2698	.0576819	2.88e-13	2.0e+11	0.000	.0576819	.0576819
C2706	-1.209619	.0281575	-42.96	0.000	-1.26498	-1.154259
C2710	-.5382764	2.88e-13	-1.9e+12	0.000	-.5382764	-.5382764
C2714	1.16063	2.88e-13	4.0e+12	0.000	1.16063	1.16063
C2718	-.1205223	2.88e-13	-4.2e+11	0.000	-.1205223	-.1205223
C2726	2.421427	2.88e-13	8.4e+12	0.000	2.421427	2.421427
C2734	-.2095631	2.88e-13	-7.3e+11	0.000	-.2095631	-.2095631
C2750	-.1307954	2.88e-13	-4.5e+11	0.000	-.1307954	-.1307954
C2762	.088938	2.88e-13	3.1e+11	0.000	.088938	.088938
C2774	-.1709607	2.88e-13	-5.9e+11	0.000	-.1709607	-.1709607
C2778	-.5580928	2.88e-13	-1.9e+12	0.000	-.5580928	-.5580928
C2786	-.4951623	2.88e-13	-1.7e+12	0.000	-.4951623	-.4951623
C2790	-.1794985	2.88e-13	-6.2e+11	0.000	-.1794985	-.1794985
C2798	.0995129	2.88e-13	3.4e+11	0.000	.0995129	.0995129
C2802	.5593406	2.88e-13	1.9e+12	0.000	.5593406	.5593406
C2810	-.8220335	2.88e-13	-2.8e+12	0.000	-.8220335	-.8220335
C2814	2.660203	2.88e-13	9.2e+12	0.000	2.660203	2.660203
C2842	.5085141	.1427791	3.56	0.000	.2277944	.7892339
C2866	.5938588	2.88e-13	2.1e+12	0.000	.5938588	.5938588
C2870	.7136328	2.88e-13	2.5e+12	0.000	.7136328	.7136328
C2874	-.2948635	2.88e-13	-1.0e+12	0.000	-.2948635	-.2948635
C2894	1.509191	.1544062	9.77	0.000	1.205611	1.812771
C2902	-1.14252	2.88e-13	-4.0e+12	0.000	-1.14252	-1.14252
C2910	-.2813767	2.88e-13	-9.8e+11	0.000	-.2813767	-.2813767
C2918	1.251511	2.88e-13	4.3e+12	0.000	1.251511	1.251511
C2920	.0017671	2.88e-13	6.1e+09	0.000	.0017671	.0017671
C2934	1.313689	2.88e-13	4.6e+12	0.000	1.313689	1.313689
C2942	.0768197	2.88e-13	2.7e+11	0.000	.0768197	.0768197
C2946	1.271909	2.88e-13	4.4e+12	0.000	1.271909	1.271909
C2954	1.548371	2.88e-13	5.4e+12	0.000	1.548371	1.548371
C2962	.776198	2.88e-13	2.7e+12	0.000	.776198	.776198
C2970	-.3647306	2.88e-13	-1.3e+12	0.000	-.3647306	-.3647306
C2974	.1587483	2.88e-13	5.5e+11	0.000	.1587483	.1587483
C2982	2.991384	2.88e-13	1.0e+13	0.000	2.991384	2.991384
C2994	-.4858017	2.88e-13	-1.7e+12	0.000	-.4858017	-.4858017
C3002	-.7006918	2.88e-13	-2.4e+12	0.000	-.7006918	-.7006918
C3014	-.6158835	2.88e-13	-2.1e+12	0.000	-.6158835	-.6158835
C3030	-.9758546	2.88e-13	-3.4e+12	0.000	-.9758546	-.9758546
C3034	-.2672777	2.88e-13	-9.3e+11	0.000	-.2672777	-.2672777
C3046	1.251187	2.88e-13	4.3e+12	0.000	1.251187	1.251187
C3062	-.4668531	2.88e-13	-1.6e+12	0.000	-.4668531	-.4668531
C3070	.9235903	2.88e-13	3.2e+12	0.000	.9235903	.9235903
C3078	1.554921	2.88e-13	5.4e+12	0.000	1.554921	1.554921
C3086	-.1848939	2.88e-13	-6.4e+11	0.000	-.1848939	-.1848939
C3098	.8661072	2.88e-13	3.0e+12	0.000	.8661072	.8661072
C3102	-.3155394	2.88e-13	-1.1e+12	0.000	-.3155394	-.3155394
C3108	2.988441	1.01666	2.94	0.003	.9895728	4.987309
C3114	2.147326	2.88e-13	7.4e+12	0.000	2.147326	2.147326
C3118	.5979972	2.88e-13	2.1e+12	0.000	.5979972	.5979972
C3134	.3661371	2.88e-13	1.3e+12	0.000	.3661371	.3661371
C3142	.1286172	2.88e-13	4.5e+11	0.000	.1286172	.1286172
C3146	-.6665436	2.88e-13	-2.3e+12	0.000	-.6665436	-.6665436
C3154	1.576527	2.88e-13	5.5e+12	0.000	1.576527	1.576527
C3170	.8212882	2.88e-13	2.8e+12	0.000	.8212882	.8212882

C3174	-.4126873	2.88e-13	-1.4e+12	0.000	-.4126873	-.4126873
C3186	-.4244652	2.88e-13	-1.5e+12	0.000	-.4244652	-.4244652
C3190	-.4796135	2.88e-13	-1.7e+12	0.000	-.4796135	-.4796135
C3242	-.60539	2.88e-13	-2.1e+12	0.000	-.60539	-.60539
C3258	.8790619	2.88e-13	3.0e+12	0.000	.8790619	.8790619
C3278	.203287	2.88e-13	7.0e+11	0.000	.203287	.203287
C3282	1.952636	2.88e-13	6.8e+12	0.000	1.952636	1.952636
C3290	-.3367322	2.88e-13	-1.2e+12	0.000	-.3367322	-.3367322
C3310	3.586786	2.88e-13	1.2e+13	0.000	3.586786	3.586786
C3314	-.4681381	2.88e-13	-1.6e+12	0.000	-.4681381	-.4681381
C3322	-.2739347	2.88e-13	-9.5e+11	0.000	-.2739347	-.2739347
C3326	.2009804	2.88e-13	7.0e+11	0.000	.2009804	.2009804
C3334	2.245361	2.88e-13	7.8e+12	0.000	2.245361	2.245361
C3346	3.117814	2.88e-13	1.1e+13	0.000	3.117814	3.117814
C3354	-.1082958	2.88e-13	-3.8e+11	0.000	-.1082958	-.1082958
C3366	1.238819	2.88e-13	4.3e+12	0.000	1.238819	1.238819
C3370	1.042935	2.88e-13	3.6e+12	0.000	1.042935	1.042935
C3374	.1117593	2.88e-13	3.9e+11	0.000	.1117593	.1117593
C3378	-.4599838	2.88e-13	-1.6e+12	0.000	-.4599838	-.4599838
C3386	.7189033	2.88e-13	2.5e+12	0.000	.7189033	.7189033
C3406	-.0969753	2.88e-13	-3.4e+11	0.000	-.0969753	-.0969753
C3410	-1.027446	2.88e-13	-3.6e+12	0.000	-1.027446	-1.027446
C3458	-.0117052	2.88e-13	-4.1e+10	0.000	-.0117052	-.0117052
C3462	-.6231224	2.88e-13	-2.2e+12	0.000	-.6231224	-.6231224
C3474	-.465491	2.88e-13	-1.6e+12	0.000	-.465491	-.465491
C3482	1.046736	2.88e-13	3.6e+12	0.000	1.046736	1.046736
C3490	.1767595	2.88e-13	6.1e+11	0.000	.1767595	.1767595
C3494	1.463419	2.88e-13	5.1e+12	0.000	1.463419	1.463419
C3498	2.403479	2.88e-13	8.3e+12	0.000	2.403479	2.403479
C3510	-.5994066	2.88e-13	-2.1e+12	0.000	-.5994066	-.5994066
C3530	1.457737	2.88e-13	5.1e+12	0.000	1.457737	1.457737
C3538	2.261936	2.88e-13	7.8e+12	0.000	2.261936	2.261936
C3562	4.56468	.1189489	38.38	0.000	4.330813	4.798547
C3566	-.5319727	2.88e-13	-1.8e+12	0.000	-.5319727	-.5319727
C3584	1.830915	2.88e-13	6.3e+12	0.000	1.830915	1.830915
C3598	.1680151	2.88e-13	5.8e+11	0.000	.1680151	.1680151
C3610	.7949955	2.88e-13	2.8e+12	0.000	.7949955	.7949955
C3614	-.3687815	2.88e-13	-1.3e+12	0.000	-.3687815	-.3687815
C3622	.54233	2.88e-13	1.9e+12	0.000	.54233	.54233
C3626	1.577867	2.88e-13	5.5e+12	0.000	1.577867	1.577867
C3642	2.117927	2.88e-13	7.3e+12	0.000	2.117927	2.117927
C3650	.2819503	2.88e-13	9.8e+11	0.000	.2819503	.2819503
C3654	2.029396	2.88e-13	7.0e+12	0.000	2.029396	2.029396
C3674	2.965289	2.88e-13	1.0e+13	0.000	2.965289	2.965289
C3678	.2322551	2.88e-13	8.1e+11	0.000	.2322551	.2322551
C3698	-.2934305	2.88e-13	-1.0e+12	0.000	-.2934305	-.2934305
C3710	1.557172	2.88e-13	5.4e+12	0.000	1.557172	1.557172
C3734	1.297291	2.88e-13	4.5e+12	0.000	1.297291	1.297291
C3746	.4344368	2.88e-13	1.5e+12	0.000	.4344368	.4344368
C3762	-.533477	2.88e-13	-1.8e+12	0.000	-.533477	-.533477
C3786	1.224105	2.88e-13	4.2e+12	0.000	1.224105	1.224105
C3790	.897101	2.88e-13	3.1e+12	0.000	.897101	.897101
C3798	3.501219	2.88e-13	1.2e+13	0.000	3.501219	3.501219
C3806	3.60037	2.88e-13	1.2e+13	0.000	3.60037	3.60037
C3822	-1.119961	2.88e-13	-3.9e+12	0.000	-1.119961	-1.119961
C3830	2.799636	.0409325	68.40	0.000	2.719158	2.880114
C3834	-.1265909	2.88e-13	-4.4e+11	0.000	-.1265909	-.1265909
C3854	-.6618395	2.88e-13	-2.3e+12	0.000	-.6618395	-.6618395
C3866	-.0092793	2.88e-13	-3.2e+10	0.000	-.0092793	-.0092793
C3886	1.312853	2.88e-13	4.6e+12	0.000	1.312853	1.312853
C3890	2.856175	2.88e-13	9.9e+12	0.000	2.856175	2.856175
C3894	1.090247	2.88e-13	3.8e+12	0.000	1.090247	1.090247
C3914	.3695848	2.88e-13	1.3e+12	0.000	.3695848	.3695848
C3930	2.127946	2.88e-13	7.4e+12	0.000	2.127946	2.127946
C3934	1.548653	2.88e-13	5.4e+12	0.000	1.548653	1.548653
C3938	.0811106	2.88e-13	2.8e+11	0.000	.0811106	.0811106
C3946	.0742474	2.88e-13	2.6e+11	0.000	.0742474	.0742474
C3954	-.1098544	2.88e-13	-3.8e+11	0.000	-.1098544	-.1098544
C3958	2.344897	2.88e-13	8.1e+12	0.000	2.344897	2.344897
C3966	.3752397	2.88e-13	1.3e+12	0.000	.3752397	.3752397
C3974	.8351503	2.88e-13	2.9e+12	0.000	.8351503	.8351503
C3982	.0139123	2.88e-13	4.8e+10	0.000	.0139123	.0139123

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C3990  │    1.524283   2.88e-13   5.3e+12   0.000    1.524283    1.524283
C4006  │    2.350416   2.88e-13   8.1e+12   0.000    2.350416    2.350416
C4014  │    3.320123   2.88e-13   1.2e+13   0.000    3.320123    3.320123
C4022  │     .3652262   2.88e-13   1.3e+12   0.000     .3652262    .3652262
C4034  │     .2945371   2.88e-13   1.0e+12   0.000     .2945371    .2945371
C4038  │    1.741734   2.88e-13   6.0e+12   0.000    1.741734    1.741734
C4042  │     .5906194   2.88e-13   2.0e+12   0.000     .5906194    .5906194
C4058  │    -.106202    2.88e-13  -3.7e+11   0.000    -.106202    -.106202
C4066  │   -1.207121    2.88e-13  -4.2e+12   0.000   -1.207121   -1.207121
C4090  │    2.843608    2.88e-13   9.9e+12   0.000    2.843608    2.843608
C4098  │    -.0026111   2.88e-13  -9.1e+09   0.000    -.0026111   -.0026111
C4106  │     .4390492   2.88e-13   1.5e+12   0.000     .4390492    .4390492
C4110  │     .509943    2.88e-13   1.8e+12   0.000     .509943     .509943
C4114  │    -.3368306   2.88e-13  -1.2e+12   0.000    -.3368306   -.3368306
C4118  │    2.93398    2.88e-13   1.0e+13   0.000    2.93398     2.93398
C4142  │     .9132253   2.88e-13   3.2e+12   0.000     .9132253    .9132253
C4150  │     .5711123   2.88e-13   2.0e+12   0.000     .5711123    .5711123
C4154  │     .9991643   2.88e-13   3.5e+12   0.000     .9991643    .9991643
C4162  │    2.392988   2.88e-13   8.3e+12   0.000    2.392988    2.392988
C4166  │    -.4144454   2.88e-13  -1.4e+12   0.000    -.4144454   -.4144454
C4170  │    2.787706   .0531485     52.45   0.000    2.68321     2.892202
C4174  │    3.131862   2.88e-13   1.1e+13   0.000    3.131862    3.131862
C4186  │    2.265935   1.014565      2.23   0.026     .2711855   4.260684
C4190  │   -1.398397    2.88e-13  -4.8e+12   0.000   -1.398397   -1.398397
C4194  │    2.583226   2.88e-13   9.0e+12   0.000    2.583226    2.583226
C4198  │    2.2068     2.88e-13   7.7e+12   0.000    2.2068      2.2068
C4202  │     .7198742   2.88e-13   2.5e+12   0.000     .7198742    .7198742
C4210  │     .263703    2.88e-13   9.1e+11   0.000     .263703     .263703
C4214  │     .0564699   2.88e-13   2.0e+11   0.000     .0564699    .0564699
C4220  │     .962826    2.88e-13   3.3e+12   0.000     .962826     .962826
C4222  │    1.330149   2.88e-13   4.6e+12   0.000    1.330149    1.330149
C4234  │     .8062582   2.88e-13   2.8e+12   0.000     .8062582    .8062582
C4254  │    1.057062   2.88e-13   3.7e+12   0.000    1.057062    1.057062
C4266  │    3.406774   2.88e-13   1.2e+13   0.000    3.406774    3.406774
C4268  │     .1311766   2.88e-13   4.5e+11   0.000     .1311766    .1311766
C4270  │    -.9340951   2.88e-13  -3.2e+12   0.000    -.9340951   -.9340951
C4310  │    -.3830865   2.88e-13  -1.3e+12   0.000    -.3830865   -.3830865
C4330  │    -.2158639   2.88e-13  -7.5e+11   0.000    -.2158639   -.2158639
C4334  │    1.023236   2.88e-13   3.5e+12   0.000    1.023236    1.023236
C4342  │    -.6405961   2.88e-13  -2.2e+12   0.000    -.6405961   -.6405961
C4358  │     .2187445   2.88e-13   7.6e+11   0.000     .2187445    .2187445
C4362  │     .8251971   2.88e-13   2.9e+12   0.000     .8251971    .8251971
C4378  │     .5246527   2.88e-13   1.8e+12   0.000     .5246527    .5246527
C4390  │     .6352327   2.88e-13   2.2e+12   0.000     .6352327    .6352327
C4406  │    1.232845   2.88e-13   4.3e+12   0.000    1.232845    1.232845
C4410  │     .255917    2.88e-13   8.9e+11   0.000     .255917     .255917
C4414  │    1.04071    2.88e-13   3.6e+12   0.000    1.04071     1.04071
C4418  │     .9361369   2.88e-13   3.2e+12   0.000     .9361369    .9361369
C4422  │    -.8995124   2.88e-13  -3.1e+12   0.000    -.8995124   -.8995124
C4430  │    -.0959211   2.88e-13  -3.3e+11   0.000    -.0959211   -.0959211
C4442  │    -.288314    2.88e-13  -1.0e+12   0.000    -.288314    -.288314
C4470  │    1.259731   2.88e-13   4.4e+12   0.000    1.259731    1.259731
C4494  │    -.3024278   2.88e-13  -1.0e+12   0.000    -.3024278   -.3024278
C4506  │    1.324562   2.88e-13   4.6e+12   0.000    1.324562    1.324562
C4522  │     .7995103   2.88e-13   2.8e+12   0.000     .7995103    .7995103
C4530  │    3.026821   2.88e-13   1.0e+13   0.000    3.026821    3.026821
C4546  │    -.0607054   2.88e-13  -2.1e+11   0.000    -.0607054   -.0607054
C4550  │    -.2318744   2.88e-13  -8.0e+11   0.000    -.2318744   -.2318744
C4554  │    -.4405124   2.88e-13  -1.5e+12   0.000    -.4405124   -.4405124
C4578  │    1.399243   2.88e-13   4.9e+12   0.000    1.399243    1.399243
C4582  │     .5156379   2.88e-13   1.8e+12   0.000     .5156379    .5156379
C4594  │     .4915338   .0379879     12.94   0.000     .4168453    .5662224
C4606  │    1.817703   .0148942    122.04   0.000    1.788419    1.846986
C4614  │    1.908358   2.88e-13   6.6e+12   0.000    1.908358    1.908358
C4622  │     .4425712   2.88e-13   1.5e+12   0.000     .4425712    .4425712
C4634  │     .2044071   2.88e-13   7.1e+11   0.000     .2044071    .2044071
C4652  │    1.971388   2.88e-13   6.8e+12   0.000    1.971388    1.971388
C4654  │    -.0158535   2.88e-13  -5.5e+10   0.000    -.0158535   -.0158535
C4666  │    -.2367685   2.88e-13  -8.2e+11   0.000    -.2367685   -.2367685
C4670  │    1.136743   2.88e-13   3.9e+12   0.000    1.136743    1.136743
C4702  │    -.3312679   2.88e-13  -1.1e+12   0.000    -.3312679   -.3312679
C4722  │    -.2561721   2.88e-13  -8.9e+11   0.000    -.2561721   -.2561721
```

C4726	2.407338	.0478015	50.36	0.000	2.313355	2.501321
C4730	.5339294	2.88e-13	1.9e+12	0.000	.5339294	.5339294
C4738	.6488159	2.88e-13	2.2e+12	0.000	.6488159	.6488159
C4746	-1.236281	2.88e-13	-4.3e+12	0.000	-1.236281	-1.236281
C4758	-.6840595	2.88e-13	-2.4e+12	0.000	-.6840595	-.6840595
C4790	2.567227	1.010993	2.54	0.011	.5795014	4.554953
C4794	.1364566	2.88e-13	4.7e+11	0.000	.1364566	.1364566
C4806	-.6297958	2.88e-13	-2.2e+12	0.000	-.6297958	-.6297958
C4814	-.2636225	2.88e-13	-9.1e+11	0.000	-.2636225	-.2636225
C4826	-1.527723	2.88e-13	-5.3e+12	0.000	-1.527723	-1.527723
C4830	-.3827934	2.88e-13	-1.3e+12	0.000	-.3827934	-.3827934
C4854	-.527587	2.88e-13	-1.8e+12	0.000	-.527587	-.527587
C4862	1.544856	2.88e-13	5.4e+12	0.000	1.544856	1.544856
C4866	-.4110877	2.88e-13	-1.4e+12	0.000	-.4110877	-.4110877
C4870	-.4500141	2.88e-13	-1.6e+12	0.000	-.4500141	-.4500141
C4890	.8790163	2.88e-13	3.0e+12	0.000	.8790163	.8790163
C4902	-.2868882	2.88e-13	-9.9e+11	0.000	-.2868882	-.2868882
C4918	1.205789	2.88e-13	4.2e+12	0.000	1.205789	1.205789
C4934	1.458723	2.88e-13	5.1e+12	0.000	1.458723	1.458723
C4942	-.0222083	2.88e-13	-7.7e+10	0.000	-.0222083	-.0222083
C4962	1.173161	2.88e-13	4.1e+12	0.000	1.173161	1.173161
C4966	1.024185	2.88e-13	3.6e+12	0.000	1.024185	1.024185
C4970	-.5155452	2.88e-13	-1.8e+12	0.000	-.5155452	-.5155452
C4974	-.0425611	2.88e-13	-1.5e+11	0.000	-.0425611	-.0425611
ffrdc_count						
1	-1.058128	.8304001	-1.27	0.203	-2.690788	.5745324
2	0	(omitted)				
3	0	(omitted)				
5	0	(omitted)				
8	.1694969	.0560167	3.03	0.003	.0593618	.279632
9	.18054	.0534425	3.38	0.001	.0754661	.2856139
10	.1092779	.0384118	2.84	0.005	.0337559	.1847999
11	.0772475	.0240731	3.21	0.001	.029917	.124578
12	.1076862	.0115134	9.35	0.000	.0850496	.1303228
13	0	(omitted)				
_cons	8.806016	.0167861	524.60	0.000	8.773013	8.83902

```
655 outreg2 using output/reg_construction.doc, append ctitle("OLS full controls, Average
  >  employment (log-log)") keep(log_federal_funding) addtext(MSA FE, Yes, Year FE, Yes,
  >  FFRDC count FE, Yes)
  output/reg_construction.doc
  dir : seeout

656
657
658 //defense instrument, construction
659
660 merge m:1 msacode msatitle using data/intermediate/defense_budget_ratios
```

Result	# of obs.	
not matched	7,011	
from master	7,011	(_merge==1)
from using	0	(_merge==2)
matched	361	(_merge==3)

```
661 recode avg_budget_ratio (. = 0)
    (avg_budget_ratio: 7011 changes made)

662 drop _merge

663
664 merge m:1 year using data/intermediate/total_us_military_spending
    (note: variable year was int, now float to accommodate using data's values)

        Result                          # of obs.

        not matched                           41
            from master                        0  (_merge==1)
            from using                        41  (_merge==2)

        matched                            7,372  (_merge==3)


665 keep if _merge == 3
    (41 observations deleted)

666 drop _merge

667
668 gen defense_funding_instrument = avg_budget_ratio * total_military_spending

669
670 reg log_federal_funding i.msa_factor, robust cluster(msa_factor)
```

Linear regression			Number of obs	=	7,372
			F(0, 387)	=	.
			Prob > F	=	.
			R-squared	=	0.9794
			Root MSE	=	.6608

(Std. Err. adjusted for 388 clusters in msa_factor)

log_federa~g	Coef.	Robust Std. Err.	t	P>|t|	[95% Conf. Interval]	
msa_factor						
C1038	4.47e-14	4.59e-14	0.97	0.330	-4.55e-14	1.35e-13
C1042	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C1050	4.48e-14	4.59e-14	0.98	0.330	-4.54e-14	1.35e-13
C1054	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C1058	4.48e-14	4.59e-14	0.98	0.330	-4.54e-14	1.35e-13
C1074	22.35426	4.60e-14	4.9e+14	0.000	22.35426	22.35426
C1078	4.49e-14	4.59e-14	0.98	0.328	-4.53e-14	1.35e-13
C1090	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C1102	4.46e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C1110	4.45e-14	4.59e-14	0.97	0.333	-4.57e-14	1.35e-13
C1118	18.1292	4.59e-14	3.9e+14	0.000	18.1292	18.1292
C1126	4.50e-14	4.59e-14	0.98	0.328	-4.53e-14	1.35e-13
C1146	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C1150	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C1154	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C1164	4.46e-14	4.59e-14	0.97	0.332	-4.57e-14	1.35e-13
C1170	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C1202	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C1206	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C1210	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C1222	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C1226	4.46e-14	4.59e-14	0.97	0.332	-4.56e-14	1.35e-13
C1242	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C1254	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C1258	7.09397	4.59e-14	1.5e+14	0.000	7.09397	7.09397
C1262	4.46e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C1270	4.47e-14	4.59e-14	0.97	0.330	-4.55e-14	1.35e-13
C1294	4.46e-14	4.59e-14	0.97	0.332	-4.56e-14	1.35e-13
C1298	4.49e-14	4.59e-14	0.98	0.328	-4.53e-14	1.35e-13
C1302	4.49e-14	4.59e-14	0.98	0.328	-4.53e-14	1.35e-13
C1314	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13

C1322	4.50e-14	4.59e-14	0.98	0.328	-4.53e-14	1.35e-13
C1338	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C1346	4.48e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C1374	4.48e-14	4.59e-14	0.97	0.330	-4.55e-14	1.35e-13
C1378	4.46e-14	4.59e-14	0.97	0.332	-4.57e-14	1.35e-13
C1382	4.47e-14	4.59e-14	0.97	0.330	-4.55e-14	1.35e-13
C1390	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C1398	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C1401	4.47e-14	4.59e-14	0.97	0.330	-4.55e-14	1.35e-13
C1402	4.48e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C1410	4.47e-14	4.59e-14	0.97	0.330	-4.55e-14	1.35e-13
C1426	4.48e-14	4.59e-14	0.97	0.330	-4.55e-14	1.35e-13
C1446	21.25448	4.60e-14	4.6e+14	0.000	21.25448	21.25448
C1450	19.69514	4.67e-14	4.2e+14	0.000	19.69514	19.69514
C1454	4.45e-14	4.59e-14	0.97	0.334	-4.58e-14	1.35e-13
C1474	4.47e-14	4.59e-14	0.97	0.331	-4.55e-14	1.35e-13
C1486	4.48e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C1518	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C1526	4.49e-14	4.59e-14	0.98	0.328	-4.53e-14	1.35e-13
C1538	4.47e-14	4.59e-14	0.97	0.330	-4.55e-14	1.35e-13
C1550	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C1554	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C1568	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C1594	4.49e-14	4.59e-14	0.98	0.328	-4.53e-14	1.35e-13
C1598	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C1602	4.45e-14	4.59e-14	0.97	0.333	-4.57e-14	1.35e-13
C1606	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C1618	4.48e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C1622	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C1630	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C1654	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C1658	4.48e-14	4.59e-14	0.98	0.330	-4.54e-14	1.35e-13
C1662	4.47e-14	4.59e-14	0.97	0.330	-4.55e-14	1.35e-13
C1670	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C1674	4.46e-14	4.59e-14	0.97	0.332	-4.57e-14	1.35e-13
C1682	19.01221	4.59e-14	4.1e+14	0.000	19.01221	19.01221
C1686	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C1694	4.46e-14	4.59e-14	0.97	0.332	-4.56e-14	1.35e-13
C1698	21.49204	4.60e-14	4.7e+14	0.000	21.49204	21.49204
C1702	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C1714	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C1730	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C1742	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C1746	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C1766	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C1778	4.47e-14	4.59e-14	0.97	0.330	-4.55e-14	1.35e-13
C1782	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C1786	4.48e-14	4.59e-14	0.97	0.330	-4.55e-14	1.35e-13
C1790	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C1798	4.46e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C1802	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C1814	4.46e-14	4.59e-14	0.97	0.332	-4.56e-14	1.35e-13
C1858	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C1870	4.47e-14	4.59e-14	0.97	0.330	-4.55e-14	1.35e-13
C1888	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C1906	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C1910	4.46e-14	4.59e-14	0.97	0.332	-4.56e-14	1.35e-13
C1914	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C1918	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C1930	4.48e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C1934	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C1938	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C1946	4.47e-14	4.59e-14	0.97	0.330	-4.55e-14	1.35e-13
C1950	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C1966	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C1974	20.29388	4.63e-14	4.4e+14	0.000	20.29388	20.29388
C1978	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C1982	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C2002	4.48e-14	4.59e-14	0.97	0.330	-4.55e-14	1.35e-13
C2010	4.47e-14	4.59e-14	0.97	0.330	-4.55e-14	1.35e-13
C2022	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C2026	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13

C2050	4.48e-14	4.59e-14	0.98	0.330	-4.54e-14	1.35e-13
C2070	4.47e-14	4.59e-14	0.97	0.330	-4.55e-14	1.35e-13
C2074	4.46e-14	4.59e-14	0.97	0.332	-4.56e-14	1.35e-13
C2094	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C2106	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C2114	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C2130	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C2134	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C2150	4.48e-14	4.59e-14	0.97	0.330	-4.55e-14	1.35e-13
C2166	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C2178	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C2182	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C2202	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C2214	4.47e-14	4.59e-14	0.97	0.331	-4.55e-14	1.35e-13
C2218	4.49e-14	4.59e-14	0.98	0.328	-4.53e-14	1.35e-13
C2222	4.46e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C2238	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C2242	4.46e-14	4.59e-14	0.97	0.332	-4.57e-14	1.35e-13
C2250	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C2252	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C2254	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C2266	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C2290	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C2306	4.47e-14	4.59e-14	0.97	0.330	-4.55e-14	1.35e-13
C2342	4.48e-14	4.59e-14	0.97	0.330	-4.55e-14	1.35e-13
C2346	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C2354	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C2358	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C2390	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C2402	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C2414	4.49e-14	4.59e-14	0.98	0.329	-4.53e-14	1.35e-13
C2422	4.46e-14	4.59e-14	0.97	0.332	-4.57e-14	1.35e-13
C2426	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C2430	4.48e-14	4.59e-14	0.97	0.330	-4.55e-14	1.35e-13
C2434	4.48e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C2442	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C2450	4.50e-14	4.59e-14	0.98	0.328	-4.53e-14	1.35e-13
C2454	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C2458	4.47e-14	4.59e-14	0.97	0.331	-4.55e-14	1.35e-13
C2466	4.46e-14	4.59e-14	0.97	0.332	-4.57e-14	1.35e-13
C2478	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C2486	4.46e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C2502	4.45e-14	4.59e-14	0.97	0.333	-4.57e-14	1.35e-13
C2506	4.46e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C2518	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C2522	4.48e-14	4.59e-14	0.97	0.330	-4.55e-14	1.35e-13
C2526	4.47e-14	4.59e-14	0.97	0.331	-4.55e-14	1.35e-13
C2542	4.47e-14	4.59e-14	0.97	0.330	-4.55e-14	1.35e-13
C2550	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C2554	4.50e-14	4.59e-14	0.98	0.327	-4.52e-14	1.35e-13
C2562	4.46e-14	4.59e-14	0.97	0.332	-4.56e-14	1.35e-13
C2586	4.46e-14	4.59e-14	0.97	0.332	-4.57e-14	1.35e-13
C2594	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C2598	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C2614	4.46e-14	4.59e-14	0.97	0.332	-4.56e-14	1.35e-13
C2630	4.48e-14	4.59e-14	0.97	0.330	-4.55e-14	1.35e-13
C2638	4.48e-14	4.59e-14	0.98	0.330	-4.54e-14	1.35e-13
C2642	4.47e-14	4.59e-14	0.97	0.331	-4.55e-14	1.35e-13
C2658	4.48e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C2662	4.50e-14	4.59e-14	0.98	0.328	-4.53e-14	1.35e-13
C2682	20.49089	4.60e-14	4.5e+14	0.000	20.49089	20.49089
C2690	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C2698	4.45e-14	4.59e-14	0.97	0.332	-4.57e-14	1.35e-13
C2706	9.994283	4.59e-14	2.2e+14	0.000	9.994283	9.994283
C2710	4.50e-14	4.59e-14	0.98	0.328	-4.53e-14	1.35e-13
C2714	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C2718	4.47e-14	4.59e-14	0.97	0.331	-4.55e-14	1.35e-13
C2726	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C2734	4.49e-14	4.59e-14	0.98	0.328	-4.53e-14	1.35e-13
C2750	4.47e-14	4.59e-14	0.97	0.331	-4.55e-14	1.35e-13
C2762	4.47e-14	4.59e-14	0.97	0.330	-4.55e-14	1.35e-13
C2774	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13

C2778	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C2786	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C2790	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C2798	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C2802	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C2810	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C2814	4.47e-14	4.59e-14	0.97	0.331	-4.55e-14	1.35e-13
C2842	21.41362	4.67e-14	4.6e+14	0.000	21.41362	21.41362
C2866	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C2870	4.50e-14	4.59e-14	0.98	0.328	-4.53e-14	1.35e-13
C2874	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C2894	21.67092	4.62e-14	4.7e+14	0.000	21.67092	21.67092
C2902	4.47e-14	4.59e-14	0.97	0.330	-4.55e-14	1.35e-13
C2910	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C2918	4.47e-14	4.59e-14	0.97	0.330	-4.55e-14	1.35e-13
C2920	4.48e-14	4.59e-14	0.97	0.330	-4.55e-14	1.35e-13
C2934	4.47e-14	4.59e-14	0.97	0.330	-4.55e-14	1.35e-13
C2942	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C2946	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C2954	4.46e-14	4.59e-14	0.97	0.332	-4.57e-14	1.35e-13
C2962	4.49e-14	4.59e-14	0.98	0.328	-4.53e-14	1.35e-13
C2970	4.46e-14	4.59e-14	0.97	0.332	-4.57e-14	1.35e-13
C2974	4.48e-14	4.59e-14	0.97	0.330	-4.55e-14	1.35e-13
C2982	4.47e-14	4.59e-14	0.97	0.331	-4.55e-14	1.35e-13
C2994	4.48e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C3002	4.49e-14	4.59e-14	0.98	0.328	-4.53e-14	1.35e-13
C3014	4.46e-14	4.59e-14	0.97	0.332	-4.57e-14	1.35e-13
C3030	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C3034	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C3046	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C3062	4.48e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C3070	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C3078	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C3086	4.47e-14	4.59e-14	0.97	0.330	-4.55e-14	1.35e-13
C3098	4.46e-14	4.59e-14	0.97	0.332	-4.57e-14	1.35e-13
C3102	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C3108	22.39022	4.62e-14	4.8e+14	0.000	22.39022	22.39022
C3114	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C3118	4.47e-14	4.59e-14	0.97	0.330	-4.55e-14	1.35e-13
C3134	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C3142	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C3146	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C3154	4.47e-14	4.59e-14	0.97	0.330	-4.55e-14	1.35e-13
C3170	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C3174	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C3186	4.46e-14	4.59e-14	0.97	0.332	-4.57e-14	1.35e-13
C3190	4.45e-14	4.59e-14	0.97	0.333	-4.57e-14	1.35e-13
C3242	4.47e-14	4.59e-14	0.97	0.330	-4.55e-14	1.35e-13
C3258	4.46e-14	4.59e-14	0.97	0.332	-4.56e-14	1.35e-13
C3278	4.48e-14	4.59e-14	0.98	0.330	-4.54e-14	1.35e-13
C3282	4.46e-14	4.59e-14	0.97	0.332	-4.56e-14	1.35e-13
C3290	4.46e-14	4.59e-14	0.97	0.332	-4.57e-14	1.35e-13
C3310	4.48e-14	4.59e-14	0.97	0.330	-4.55e-14	1.35e-13
C3314	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C3322	4.48e-14	4.59e-14	0.98	0.330	-4.54e-14	1.35e-13
C3326	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C3334	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C3346	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C3354	4.47e-14	4.59e-14	0.97	0.331	-4.55e-14	1.35e-13
C3366	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C3370	4.47e-14	4.59e-14	0.97	0.331	-4.55e-14	1.35e-13
C3374	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C3378	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C3386	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C3406	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C3410	4.46e-14	4.59e-14	0.97	0.332	-4.57e-14	1.35e-13
C3458	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C3462	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C3474	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C3482	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C3490	4.46e-14	4.59e-14	0.97	0.332	-4.56e-14	1.35e-13
C3494	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13

C3498	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C3510	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C3530	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C3538	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C3562	20.88553	4.59e-14	4.5e+14	0.000	20.88553	20.88553
C3566	4.47e-14	4.59e-14	0.97	0.330	-4.55e-14	1.35e-13
C3584	4.46e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C3598	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C3610	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C3614	4.48e-14	4.59e-14	0.98	0.330	-4.54e-14	1.35e-13
C3622	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C3626	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C3642	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C3650	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C3654	4.48e-14	4.59e-14	0.97	0.330	-4.55e-14	1.35e-13
C3674	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C3678	4.48e-14	4.59e-14	0.98	0.330	-4.54e-14	1.35e-13
C3698	4.46e-14	4.59e-14	0.97	0.332	-4.57e-14	1.35e-13
C3710	4.47e-14	4.59e-14	0.97	0.330	-4.55e-14	1.35e-13
C3734	4.48e-14	4.59e-14	0.98	0.330	-4.54e-14	1.35e-13
C3746	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C3762	4.46e-14	4.59e-14	0.97	0.332	-4.57e-14	1.35e-13
C3786	4.46e-14	4.59e-14	0.97	0.332	-4.56e-14	1.35e-13
C3790	4.45e-14	4.59e-14	0.97	0.333	-4.57e-14	1.35e-13
C3798	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C3806	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C3822	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C3830	19.12853	4.60e-14	4.2e+14	0.000	19.12853	19.12853
C3834	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C3854	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C3866	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C3886	4.48e-14	4.59e-14	0.97	0.330	-4.55e-14	1.35e-13
C3890	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C3894	4.46e-14	4.59e-14	0.97	0.332	-4.57e-14	1.35e-13
C3914	4.45e-14	4.59e-14	0.97	0.332	-4.57e-14	1.35e-13
C3930	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C3934	4.45e-14	4.59e-14	0.97	0.333	-4.57e-14	1.35e-13
C3938	4.48e-14	4.59e-14	0.98	0.330	-4.54e-14	1.35e-13
C3946	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C3954	4.49e-14	4.59e-14	0.98	0.328	-4.53e-14	1.35e-13
C3958	4.50e-14	4.59e-14	0.98	0.328	-4.53e-14	1.35e-13
C3966	4.47e-14	4.59e-14	0.97	0.331	-4.55e-14	1.35e-13
C3974	4.47e-14	4.59e-14	0.97	0.331	-4.55e-14	1.35e-13
C3982	4.46e-14	4.59e-14	0.97	0.332	-4.57e-14	1.35e-13
C3990	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C4006	4.46e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C4014	4.46e-14	4.59e-14	0.97	0.332	-4.57e-14	1.35e-13
C4022	4.50e-14	4.59e-14	0.98	0.328	-4.53e-14	1.35e-13
C4034	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C4038	4.47e-14	4.59e-14	0.97	0.331	-4.55e-14	1.35e-13
C4042	4.45e-14	4.59e-14	0.97	0.333	-4.57e-14	1.35e-13
C4058	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C4066	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C4090	4.45e-14	4.59e-14	0.97	0.333	-4.57e-14	1.35e-13
C4098	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C4106	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C4110	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C4114	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C4118	4.46e-14	4.59e-14	0.97	0.332	-4.57e-14	1.35e-13
C4142	4.48e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C4150	4.46e-14	4.59e-14	0.97	0.332	-4.56e-14	1.35e-13
C4154	4.47e-14	4.59e-14	0.97	0.331	-4.55e-14	1.35e-13
C4162	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C4166	4.45e-14	4.59e-14	0.97	0.333	-4.58e-14	1.35e-13
C4170	17.15917	4.59e-14	3.7e+14	0.000	17.15917	17.15917
C4174	4.45e-14	4.59e-14	0.97	0.333	-4.58e-14	1.35e-13
C4186	22.34408	4.61e-14	4.8e+14	0.000	22.34408	22.34408
C4190	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C4194	4.48e-14	4.59e-14	0.98	0.330	-4.54e-14	1.35e-13
C4198	4.46e-14	4.59e-14	0.97	0.332	-4.57e-14	1.35e-13
C4202	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C4210	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13

C4214	4.46e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C4220	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C4222	4.48e-14	4.59e-14	0.97	0.330	-4.55e-14	1.35e-13
C4234	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C4254	4.46e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C4266	4.49e-14	4.59e-14	0.98	0.328	-4.53e-14	1.35e-13
C4268	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C4270	4.50e-14	4.59e-14	0.98	0.327	-4.52e-14	1.35e-13
C4310	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C4330	4.50e-14	4.59e-14	0.98	0.328	-4.53e-14	1.35e-13
C4334	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C4342	4.50e-14	4.59e-14	0.98	0.328	-4.53e-14	1.35e-13
C4358	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C4362	4.47e-14	4.59e-14	0.97	0.331	-4.55e-14	1.35e-13
C4378	4.46e-14	4.59e-14	0.97	0.332	-4.57e-14	1.35e-13
C4390	4.50e-14	4.59e-14	0.98	0.327	-4.52e-14	1.35e-13
C4406	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C4410	4.49e-14	4.59e-14	0.98	0.329	-4.53e-14	1.35e-13
C4414	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C4418	4.50e-14	4.59e-14	0.98	0.328	-4.53e-14	1.35e-13
C4422	4.47e-14	4.59e-14	0.97	0.330	-4.55e-14	1.35e-13
C4430	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C4442	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C4470	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C4494	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C4506	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C4522	4.46e-14	4.59e-14	0.97	0.332	-4.57e-14	1.35e-13
C4530	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C4546	4.44e-14	4.59e-14	0.97	0.334	-4.58e-14	1.35e-13
C4550	4.50e-14	4.59e-14	0.98	0.328	-4.53e-14	1.35e-13
C4554	4.46e-14	4.59e-14	0.97	0.332	-4.57e-14	1.35e-13
C4578	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C4582	4.44e-14	4.59e-14	0.97	0.334	-4.59e-14	1.35e-13
C4594	19.0588	4.60e-14	4.1e+14	0.000	19.0588	19.0588
C4606	18.20885	4.59e-14	4.0e+14	0.000	18.20885	18.20885
C4614	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C4622	4.48e-14	4.59e-14	0.97	0.330	-4.55e-14	1.35e-13
C4634	4.48e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C4652	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C4654	4.46e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C4666	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C4670	4.45e-14	4.59e-14	0.97	0.333	-4.57e-14	1.35e-13
C4702	4.46e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C4722	4.50e-14	4.59e-14	0.98	0.328	-4.53e-14	1.35e-13
C4726	19.28864	4.59e-14	4.2e+14	0.000	19.28864	19.28864
C4730	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C4738	4.46e-14	4.59e-14	0.97	0.332	-4.57e-14	1.35e-13
C4746	4.46e-14	4.59e-14	0.97	0.332	-4.56e-14	1.35e-13
C4758	4.48e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C4790	21.91143	4.61e-14	4.8e+14	0.000	21.91143	21.91143
C4794	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C4806	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C4814	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C4826	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C4830	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C4854	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C4862	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C4866	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C4870	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C4890	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C4902	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C4918	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C4934	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C4942	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C4962	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C4966	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C4970	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C4974	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
_cons	-4.46e-14	4.59e-14	-0.97	0.332	-1.35e-13	4.56e-14

671 predict resid_log_federal_funding, residuals

672 reg defense_funding_instrument i.msa_factor, robust cluster(msa_factor)

Linear regression

Number of obs	=	7,372
F(313, 387)	=	.
Prob > F	=	.
R-squared	=	0.9622
Root MSE	=	1.9e+07

(Std. Err. adjusted for 388 clusters in msa_factor)

defense_fu~t	Coef.	Robust Std. Err.	t	P>|t|	[95% Conf. Interval]	
msa_factor						
C1038	-3.99e-07	4.10e-07	-0.97	0.331	-1.20e-06	4.07e-07
C1042	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C1050	-3.97e-07	4.10e-07	-0.97	0.333	-1.20e-06	4.09e-07
C1054	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C1058	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C1074	7.99e+08	4.32e-07	1.8e+15	0.000	7.99e+08	7.99e+08
C1078	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C1090	-3.98e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C1102	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C1110	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C1118	4662.512	4.10e-07	1.1e+10	0.000	4662.512	4662.512
C1126	-4.00e-07	4.10e-07	-0.97	0.330	-1.21e-06	4.07e-07
C1146	-3.98e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C1150	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C1154	-3.98e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C1164	-4.01e-07	4.10e-07	-0.98	0.329	-1.21e-06	4.05e-07
C1170	-4.01e-07	4.10e-07	-0.98	0.329	-1.21e-06	4.05e-07
C1202	-3.98e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C1206	-4.01e-07	4.10e-07	-0.98	0.329	-1.21e-06	4.06e-07
C1210	-3.99e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C1222	-3.99e-07	4.10e-07	-0.97	0.331	-1.20e-06	4.07e-07
C1226	-4.01e-07	4.10e-07	-0.98	0.329	-1.21e-06	4.05e-07
C1242	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C1254	-4.01e-07	4.10e-07	-0.98	0.329	-1.21e-06	4.05e-07
C1258	-3.99e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C1262	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C1270	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C1294	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C1298	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C1302	-3.99e-07	4.10e-07	-0.97	0.331	-1.20e-06	4.07e-07
C1314	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C1322	-3.98e-07	4.10e-07	-0.97	0.333	-1.20e-06	4.09e-07
C1338	-3.98e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C1346	-3.98e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C1374	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C1378	-4.00e-07	4.10e-07	-0.97	0.330	-1.21e-06	4.06e-07
C1382	-3.98e-07	4.10e-07	-0.97	0.333	-1.20e-06	4.09e-07
C1390	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C1398	-3.98e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C1401	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C1402	-3.98e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C1410	-4.00e-07	4.10e-07	-0.97	0.330	-1.21e-06	4.06e-07
C1426	-3.98e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C1446	8.33e+08	4.13e-07	2.0e+15	0.000	8.33e+08	8.33e+08
C1450	5901519	4.10e-07	1.4e+13	0.000	5901519	5901519
C1454	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C1474	-4.00e-07	4.10e-07	-0.97	0.330	-1.21e-06	4.07e-07
C1486	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C1518	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C1526	-3.98e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C1538	-4.00e-07	4.10e-07	-0.97	0.330	-1.21e-06	4.07e-07
C1550	-3.99e-07	4.10e-07	-0.97	0.331	-1.20e-06	4.07e-07
C1554	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C1568	-4.00e-07	4.10e-07	-0.97	0.330	-1.21e-06	4.07e-07
C1594	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C1598	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07

C1602	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C1606	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C1618	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C1622	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C1630	-4.00e-07	4.10e-07	-0.98	0.329	-1.21e-06	4.06e-07
C1654	-4.00e-07	4.10e-07	-0.97	0.330	-1.21e-06	4.06e-07
C1658	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C1662	-3.99e-07	4.10e-07	-0.97	0.331	-1.20e-06	4.07e-07
C1670	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C1674	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C1682	988994.4	4.10e-07	2.4e+12	0.000	988994.4	988994.4
C1686	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C1694	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C1698	1.85e+07	4.10e-07	4.5e+13	0.000	1.85e+07	1.85e+07
C1702	-3.98e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C1714	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C1730	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C1742	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C1746	-3.98e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C1766	-4.00e-07	4.10e-07	-0.97	0.330	-1.21e-06	4.07e-07
C1778	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C1782	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C1786	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C1790	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C1798	-4.01e-07	4.10e-07	-0.98	0.329	-1.21e-06	4.05e-07
C1802	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C1814	-3.99e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C1858	-4.01e-07	4.10e-07	-0.98	0.329	-1.21e-06	4.06e-07
C1870	-4.01e-07	4.10e-07	-0.98	0.329	-1.21e-06	4.05e-07
C1888	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C1906	-3.98e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C1910	-4.00e-07	4.10e-07	-0.97	0.330	-1.21e-06	4.07e-07
C1914	-3.99e-07	4.10e-07	-0.97	0.331	-1.20e-06	4.07e-07
C1918	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C1930	-4.00e-07	4.10e-07	-0.97	0.330	-1.21e-06	4.07e-07
C1934	-4.00e-07	4.10e-07	-0.98	0.329	-1.21e-06	4.06e-07
C1938	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C1946	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C1950	-4.00e-07	4.10e-07	-0.97	0.330	-1.21e-06	4.07e-07
C1966	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C1974	6495448	4.10e-07	1.6e+13	0.000	6495448	6495448
C1978	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C1982	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C2002	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C2010	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C2022	-4.00e-07	4.10e-07	-0.97	0.330	-1.21e-06	4.07e-07
C2026	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C2050	-3.99e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C2070	-3.99e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C2074	-4.01e-07	4.10e-07	-0.98	0.328	-1.21e-06	4.05e-07
C2094	-3.98e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C2106	-3.99e-07	4.10e-07	-0.97	0.331	-1.20e-06	4.07e-07
C2114	-4.01e-07	4.10e-07	-0.98	0.328	-1.21e-06	4.05e-07
C2130	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C2134	-3.98e-07	4.10e-07	-0.97	0.333	-1.20e-06	4.08e-07
C2150	-4.01e-07	4.10e-07	-0.98	0.328	-1.21e-06	4.05e-07
C2166	-3.99e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.07e-07
C2178	-3.98e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C2182	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C2202	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C2214	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C2218	-3.98e-07	4.10e-07	-0.97	0.333	-1.20e-06	4.08e-07
C2222	-4.00e-07	4.10e-07	-0.98	0.329	-1.21e-06	4.06e-07
C2238	-4.01e-07	4.10e-07	-0.98	0.329	-1.21e-06	4.06e-07
C2242	-4.00e-07	4.10e-07	-0.97	0.330	-1.21e-06	4.06e-07
C2250	-4.01e-07	4.10e-07	-0.98	0.329	-1.21e-06	4.05e-07
C2252	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C2254	-4.00e-07	4.10e-07	-0.97	0.330	-1.21e-06	4.07e-07
C2266	-3.99e-07	4.10e-07	-0.97	0.331	-1.20e-06	4.07e-07
C2290	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C2306	-3.98e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C2342	-3.99e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07

C2346	-4.00e-07	4.10e-07	-0.97	0.330	-1.21e-06	4.07e-07
C2354	-3.99e-07	4.10e-07	-0.97	0.331	-1.20e-06	4.07e-07
C2358	-3.99e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C2390	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C2402	-3.99e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C2414	-3.97e-07	4.10e-07	-0.97	0.333	-1.20e-06	4.09e-07
C2422	-4.01e-07	4.10e-07	-0.98	0.329	-1.21e-06	4.05e-07
C2426	-3.97e-07	4.10e-07	-0.97	0.334	-1.20e-06	4.09e-07
C2430	-4.00e-07	4.10e-07	-0.98	0.329	-1.21e-06	4.06e-07
C2434	-3.98e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C2442	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C2450	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C2454	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C2458	-3.99e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C2466	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C2478	-3.99e-07	4.10e-07	-0.97	0.331	-1.20e-06	4.07e-07
C2486	-4.01e-07	4.10e-07	-0.98	0.329	-1.21e-06	4.05e-07
C2502	-3.98e-07	4.10e-07	-0.97	0.333	-1.20e-06	4.08e-07
C2506	-3.98e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C2518	-3.96e-07	4.10e-07	-0.97	0.334	-1.20e-06	4.10e-07
C2522	-3.99e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C2526	-4.01e-07	4.10e-07	-0.98	0.329	-1.21e-06	4.05e-07
C2542	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C2550	-3.98e-07	4.10e-07	-0.97	0.333	-1.20e-06	4.08e-07
C2554	-3.97e-07	4.10e-07	-0.97	0.333	-1.20e-06	4.09e-07
C2562	-4.02e-07	4.10e-07	-0.98	0.328	-1.21e-06	4.04e-07
C2586	-3.99e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C2594	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C2598	-3.98e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C2614	-4.01e-07	4.10e-07	-0.98	0.329	-1.21e-06	4.05e-07
C2630	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C2638	-3.98e-07	4.10e-07	-0.97	0.333	-1.20e-06	4.08e-07
C2642	-4.00e-07	4.10e-07	-0.98	0.329	-1.21e-06	4.06e-07
C2658	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C2662	-3.98e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C2682	3.80e+07	4.10e-07	9.3e+13	0.000	3.80e+07	3.80e+07
C2690	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C2698	-4.01e-07	4.10e-07	-0.98	0.329	-1.21e-06	4.05e-07
C2706	-4.01e-07	4.10e-07	-0.98	0.329	-1.21e-06	4.06e-07
C2710	-3.99e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C2714	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C2718	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C2726	-3.98e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C2734	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C2750	-3.99e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C2762	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C2774	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C2778	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C2786	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C2790	-4.01e-07	4.10e-07	-0.98	0.329	-1.21e-06	4.05e-07
C2798	-3.98e-07	4.10e-07	-0.97	0.333	-1.20e-06	4.09e-07
C2802	-3.98e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C2810	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C2814	-3.99e-07	4.10e-07	-0.97	0.331	-1.20e-06	4.07e-07
C2842	7.55e+07	4.10e-07	1.8e+14	0.000	7.55e+07	7.55e+07
C2866	-3.98e-07	4.10e-07	-0.97	0.333	-1.20e-06	4.08e-07
C2870	-3.97e-07	4.10e-07	-0.97	0.333	-1.20e-06	4.09e-07
C2874	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C2894	2.96e+07	4.10e-07	7.2e+13	0.000	2.96e+07	2.96e+07
C2902	-3.98e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C2910	-4.00e-07	4.10e-07	-0.98	0.329	-1.21e-06	4.06e-07
C2918	-3.99e-07	4.10e-07	-0.97	0.331	-1.20e-06	4.07e-07
C2920	-3.98e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C2934	-3.99e-07	4.10e-07	-0.97	0.331	-1.20e-06	4.07e-07
C2942	-3.98e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C2946	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C2954	-4.01e-07	4.10e-07	-0.98	0.329	-1.21e-06	4.05e-07
C2962	-3.98e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C2970	-4.02e-07	4.10e-07	-0.98	0.327	-1.21e-06	4.04e-07
C2974	-3.99e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C2982	-3.98e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C2994	-3.99e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07

C3002	-4.00e-07	4.10e-07	-0.97	0.330	-1.21e-06	4.07e-07
C3014	-4.01e-07	4.10e-07	-0.98	0.328	-1.21e-06	4.05e-07
C3030	-3.98e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C3034	-3.98e-07	4.10e-07	-0.97	0.333	-1.20e-06	4.08e-07
C3046	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C3062	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C3070	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C3078	-3.98e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C3086	-3.98e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C3098	-4.01e-07	4.10e-07	-0.98	0.329	-1.21e-06	4.05e-07
C3102	-3.97e-07	4.10e-07	-0.97	0.334	-1.20e-06	4.10e-07
C3108	9.59e+08	4.62e-07	2.1e+15	0.000	9.59e+08	9.59e+08
C3114	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C3118	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C3134	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C3142	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C3146	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C3154	-4.01e-07	4.10e-07	-0.98	0.328	-1.21e-06	4.05e-07
C3170	-3.97e-07	4.10e-07	-0.97	0.333	-1.20e-06	4.09e-07
C3174	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C3186	-3.99e-07	4.10e-07	-0.97	0.331	-1.20e-06	4.07e-07
C3190	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C3242	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C3258	-4.01e-07	4.10e-07	-0.98	0.328	-1.21e-06	4.05e-07
C3278	-3.99e-07	4.10e-07	-0.97	0.331	-1.20e-06	4.07e-07
C3282	-3.99e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.07e-07
C3290	-3.99e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C3310	-3.98e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C3314	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C3322	-3.98e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C3326	-4.00e-07	4.10e-07	-0.97	0.330	-1.21e-06	4.06e-07
C3334	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C3346	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C3354	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C3366	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C3370	-3.99e-07	4.10e-07	-0.97	0.331	-1.20e-06	4.07e-07
C3374	-4.00e-07	4.10e-07	-0.97	0.330	-1.21e-06	4.07e-07
C3378	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C3386	-4.00e-07	4.10e-07	-0.97	0.330	-1.21e-06	4.07e-07
C3406	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C3410	-4.01e-07	4.10e-07	-0.98	0.329	-1.21e-06	4.06e-07
C3458	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C3462	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C3474	-3.99e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C3482	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C3490	-3.99e-07	4.10e-07	-0.97	0.331	-1.20e-06	4.07e-07
C3494	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C3498	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C3510	-4.00e-07	4.10e-07	-0.97	0.330	-1.21e-06	4.06e-07
C3530	-3.99e-07	4.10e-07	-0.97	0.331	-1.20e-06	4.07e-07
C3538	-4.01e-07	4.10e-07	-0.98	0.329	-1.21e-06	4.06e-07
C3562	307419.8	4.10e-07	7.5e+11	0.000	307419.8	307419.8
C3566	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C3584	-3.98e-07	4.10e-07	-0.97	0.333	-1.20e-06	4.08e-07
C3598	-4.00e-07	4.10e-07	-0.97	0.330	-1.21e-06	4.07e-07
C3610	-4.01e-07	4.10e-07	-0.98	0.329	-1.21e-06	4.05e-07
C3614	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C3622	-3.98e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C3626	-3.98e-07	4.10e-07	-0.97	0.333	-1.20e-06	4.08e-07
C3642	-3.99e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C3650	-4.01e-07	4.10e-07	-0.98	0.329	-1.21e-06	4.06e-07
C3654	-3.99e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C3674	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C3678	-3.98e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C3698	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C3710	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C3734	-3.97e-07	4.10e-07	-0.97	0.333	-1.20e-06	4.09e-07
C3746	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C3762	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C3786	-4.01e-07	4.10e-07	-0.98	0.328	-1.21e-06	4.05e-07
C3790	-4.01e-07	4.10e-07	-0.98	0.328	-1.21e-06	4.05e-07
C3798	-4.00e-07	4.10e-07	-0.98	0.329	-1.21e-06	4.06e-07

C3806	-3.99e-07	4.10e-07	-0.97	0.331	-1.20e-06	4.07e-07
C3822	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C3830	7.58e+07	4.10e-07	1.8e+14	0.000	7.58e+07	7.58e+07
C3834	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C3854	-4.00e-07	4.10e-07	-0.98	0.329	-1.21e-06	4.06e-07
C3866	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C3886	-4.00e-07	4.10e-07	-0.97	0.330	-1.21e-06	4.06e-07
C3890	-4.00e-07	4.10e-07	-0.98	0.329	-1.21e-06	4.06e-07
C3894	-4.00e-07	4.10e-07	-0.97	0.330	-1.21e-06	4.07e-07
C3914	-4.01e-07	4.10e-07	-0.98	0.329	-1.21e-06	4.06e-07
C3930	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C3934	-4.00e-07	4.10e-07	-0.98	0.329	-1.21e-06	4.06e-07
C3938	-3.99e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C3946	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C3954	-4.00e-07	4.10e-07	-0.97	0.330	-1.21e-06	4.06e-07
C3958	-3.98e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C3966	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C3974	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C3982	-3.98e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C3990	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C4006	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C4014	-4.01e-07	4.10e-07	-0.98	0.328	-1.21e-06	4.05e-07
C4022	-3.97e-07	4.10e-07	-0.97	0.334	-1.20e-06	4.09e-07
C4034	-4.02e-07	4.10e-07	-0.98	0.328	-1.21e-06	4.04e-07
C4038	-4.01e-07	4.10e-07	-0.98	0.328	-1.21e-06	4.05e-07
C4042	-4.01e-07	4.10e-07	-0.98	0.329	-1.21e-06	4.06e-07
C4058	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C4066	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C4090	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C4098	-4.02e-07	4.10e-07	-0.98	0.328	-1.21e-06	4.04e-07
C4106	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C4110	-4.01e-07	4.10e-07	-0.98	0.329	-1.21e-06	4.06e-07
C4114	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C4118	-4.01e-07	4.10e-07	-0.98	0.329	-1.21e-06	4.05e-07
C4142	-3.95e-07	4.10e-07	-0.96	0.336	-1.20e-06	4.11e-07
C4150	-4.00e-07	4.10e-07	-0.97	0.330	-1.21e-06	4.06e-07
C4154	-3.99e-07	4.10e-07	-0.97	0.331	-1.20e-06	4.07e-07
C4162	-3.98e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C4166	-4.01e-07	4.10e-07	-0.98	0.328	-1.21e-06	4.05e-07
C4170	227.0006	4.10e-07	5.5e+08	0.000	227.0006	227.0006
C4174	-4.01e-07	4.10e-07	-0.98	0.329	-1.21e-06	4.06e-07
C4186	1.95e+08	4.19e-07	4.7e+14	0.000	1.95e+08	1.95e+08
C4190	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C4194	-4.00e-07	4.10e-07	-0.97	0.330	-1.21e-06	4.07e-07
C4198	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C4202	-4.01e-07	4.10e-07	-0.98	0.329	-1.21e-06	4.05e-07
C4210	-3.98e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C4214	-3.98e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C4220	-4.02e-07	4.10e-07	-0.98	0.328	-1.21e-06	4.05e-07
C4222	-4.02e-07	4.10e-07	-0.98	0.328	-1.21e-06	4.05e-07
C4234	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C4254	-4.02e-07	4.10e-07	-0.98	0.328	-1.21e-06	4.04e-07
C4266	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C4268	-3.99e-07	4.10e-07	-0.97	0.331	-1.20e-06	4.07e-07
C4270	-3.97e-07	4.10e-07	-0.97	0.333	-1.20e-06	4.09e-07
C4310	-3.99e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C4330	-4.00e-07	4.10e-07	-0.97	0.330	-1.21e-06	4.07e-07
C4334	-4.05e-07	4.10e-07	-0.99	0.324	-1.21e-06	4.02e-07
C4342	-4.01e-07	4.10e-07	-0.98	0.329	-1.21e-06	4.05e-07
C4358	-3.95e-07	4.10e-07	-0.96	0.335	-1.20e-06	4.11e-07
C4362	-4.00e-07	4.10e-07	-0.97	0.330	-1.21e-06	4.07e-07
C4378	-3.97e-07	4.10e-07	-0.97	0.333	-1.20e-06	4.09e-07
C4390	-3.97e-07	4.10e-07	-0.97	0.333	-1.20e-06	4.09e-07
C4406	-3.97e-07	4.10e-07	-0.97	0.333	-1.20e-06	4.09e-07
C4410	-3.97e-07	4.10e-07	-0.97	0.333	-1.20e-06	4.09e-07
C4414	-4.01e-07	4.10e-07	-0.98	0.329	-1.21e-06	4.06e-07
C4418	-3.98e-07	4.10e-07	-0.97	0.333	-1.20e-06	4.09e-07
C4422	-4.02e-07	4.10e-07	-0.98	0.328	-1.21e-06	4.04e-07
C4430	-4.02e-07	4.10e-07	-0.98	0.327	-1.21e-06	4.04e-07
C4442	-3.98e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C4470	-3.97e-07	4.10e-07	-0.97	0.333	-1.20e-06	4.09e-07
C4494	-3.94e-07	4.10e-07	-0.96	0.337	-1.20e-06	4.12e-07

C4506	-4.00e-07	4.10e-07	-0.97	0.330	-1.21e-06	4.06e-07
C4522	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C4530	-3.99e-07	4.10e-07	-0.97	0.331	-1.20e-06	4.07e-07
C4546	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C4550	-4.02e-07	4.10e-07	-0.98	0.327	-1.21e-06	4.04e-07
C4554	-3.99e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.07e-07
C4578	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C4582	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C4594	192774.6	4.10e-07	4.7e+11	0.000	192774.6	192774.6
C4606	14185.14	4.10e-07	3.5e+10	0.000	14185.14	14185.14
C4614	-3.95e-07	4.10e-07	-0.96	0.336	-1.20e-06	4.11e-07
C4622	-3.94e-07	4.10e-07	-0.96	0.338	-1.20e-06	4.13e-07
C4634	-4.02e-07	4.10e-07	-0.98	0.327	-1.21e-06	4.04e-07
C4652	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C4654	-4.00e-07	4.10e-07	-0.97	0.330	-1.21e-06	4.07e-07
C4666	-3.97e-07	4.10e-07	-0.97	0.333	-1.20e-06	4.09e-07
C4670	-4.04e-07	4.10e-07	-0.99	0.325	-1.21e-06	4.02e-07
C4702	-3.97e-07	4.10e-07	-0.97	0.334	-1.20e-06	4.09e-07
C4722	-3.88e-07	4.10e-07	-0.94	0.345	-1.19e-06	4.19e-07
C4726	35348.64	4.10e-07	8.6e+10	0.000	35348.64	35348.64
C4730	-4.03e-07	4.10e-07	-0.98	0.327	-1.21e-06	4.03e-07
C4738	-4.01e-07	4.10e-07	-0.98	0.329	-1.21e-06	4.05e-07
C4746	-3.92e-07	4.10e-07	-0.96	0.339	-1.20e-06	4.14e-07
C4758	-3.97e-07	4.10e-07	-0.97	0.333	-1.20e-06	4.09e-07
C4790	1.08e+09	4.66e-07	2.3e+15	0.000	1.08e+09	1.08e+09
C4794	-3.95e-07	4.10e-07	-0.96	0.336	-1.20e-06	4.11e-07
C4806	-3.95e-07	4.10e-07	-0.96	0.336	-1.20e-06	4.11e-07
C4814	-3.95e-07	4.10e-07	-0.96	0.336	-1.20e-06	4.11e-07
C4826	-3.95e-07	4.10e-07	-0.96	0.336	-1.20e-06	4.11e-07
C4830	-3.95e-07	4.10e-07	-0.96	0.336	-1.20e-06	4.11e-07
C4854	-3.95e-07	4.10e-07	-0.96	0.336	-1.20e-06	4.11e-07
C4862	-3.95e-07	4.10e-07	-0.96	0.336	-1.20e-06	4.11e-07
C4866	-3.95e-07	4.10e-07	-0.96	0.336	-1.20e-06	4.11e-07
C4870	-3.95e-07	4.10e-07	-0.96	0.336	-1.20e-06	4.11e-07
C4890	-3.95e-07	4.10e-07	-0.96	0.336	-1.20e-06	4.11e-07
C4902	-3.95e-07	4.10e-07	-0.96	0.336	-1.20e-06	4.11e-07
C4918	-3.95e-07	4.10e-07	-0.96	0.336	-1.20e-06	4.11e-07
C4934	-3.95e-07	4.10e-07	-0.96	0.336	-1.20e-06	4.11e-07
C4942	-3.95e-07	4.10e-07	-0.96	0.336	-1.20e-06	4.11e-07
C4962	-3.95e-07	4.10e-07	-0.96	0.336	-1.20e-06	4.11e-07
C4966	-3.95e-07	4.10e-07	-0.96	0.336	-1.20e-06	4.11e-07
C4970	-3.95e-07	4.10e-07	-0.96	0.336	-1.20e-06	4.11e-07
C4974	-3.95e-07	4.10e-07	-0.96	0.336	-1.20e-06	4.11e-07
_cons	3.99e-07	4.10e-07	0.97	0.332	-4.08e-07	1.20e-06

```
673 predict resid_defense_funding_instrument, residuals

674
675 reg resid_log_federal_funding resid_defense_funding_instrument, robust cluster(msa_f
  > actor)
```

Linear regression

```
Number of obs   =       7,372
F(1, 387)       =        9.87
Prob > F        =      0.0018
R-squared       =      0.0015
Root MSE        =      .64277
```

(Std. Err. adjusted for **388** clusters in
  > msa_factor)

resid_log_federal_funding > f. Interval]	Coef.	Robust Std. Err.	t	P>|t|	[95% Con
resid_defense_funding_instrument > 2.19e-09	1.35e-09	4.28e-10	3.14	0.002	5.03e-10
_cons > 3.19e-10	2.76e-11	1.48e-10	0.19	0.852	-2.64e-10

_____|_____
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676 outreg2 using output/defense_first_stage_construction.doc, replace ctitle("With MSA
  > FE") addstat("F stat", e(F))
  output/defense_first_stage_construction.doc
  dir : seeout

677
678 ivregress 2sls log_avg_annual_pay i.msa_factor (log_federal_funding = defense_fundin
  > g_instrument i.msa_factor), robust cluster(msa_factor)
  note: 1b.msa_factor dropped because of collinearity
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Instrumental variables (2SLS) regression

Number of obs	= 7,353
Wald chi2(**388**)	= 6.07
Prob > chi2	= 1.0000
R-squared	= 0.7546
Root MSE	= .10757

(Std. Err. adjusted for **388** clusters in msa_factor)

log_avg_annual_pay	Coef.	Robust Std. Err.	z	P>|z|	[95% Conf. Interval]	
log_federal_funding	.1169399	.0422425	2.77	0.006	.034146	.1997337
msa_factor						
C1038	-1.053845	4.14e-12	-2.5e+11	0.000	-1.053845	-1.053845
C1042	.1261442	4.14e-12	3.0e+10	0.000	.1261442	.1261442
C1050	-.0547471	4.13e-12	-1.3e+10	0.000	-.0547471	-.0547471
C1054	.0401932	4.14e-12	9.7e+09	0.000	.0401932	.0401932
C1058	.2760702	4.13e-12	6.7e+10	0.000	.2760702	.2760702
C1074	-2.615974	.9443005	-2.77	0.006	-4.466769	-.7651788
C1078	.0057144	4.14e-12	1.4e+09	0.000	.0057144	.0057144
C1090	.2133659	4.14e-12	5.2e+10	0.000	.2133659	.2133659
C1102	-.1264165	4.14e-12	-3.1e+10	0.000	-.1264165	-.1264165
C1110	-.0180091	4.13e-12	-4.4e+09	0.000	-.0180091	-.0180091
C1118	-2.059082	.7658234	-2.69	0.007	-3.560069	-.5580962
C1126	.4843136	4.14e-12	1.2e+11	0.000	.4843136	.4843136
C1146	.2588218	4.14e-12	6.3e+10	0.000	.2588218	.2588218
C1150	-.1872766	4.13e-12	-4.5e+10	0.000	-.1872766	-.1872766
C1154	.2168632	4.14e-12	5.2e+10	0.000	.2168632	.2168632
C1164	-.925065	4.14e-12	-2.2e+11	0.000	-.925065	-.925065
C1170	-.1229609	4.14e-12	-3.0e+10	0.000	-.1229609	-.1229609
C1202	-.0490257	4.14e-12	-1.2e+10	0.000	-.0490257	-.0490257

C1206	.2195187	4.13e-12	5.3e+10	0.000	.2195187	.2195187
C1210	.3310365	4.14e-12	8.0e+10	0.000	.3310365	.3310365
C1222	-.0892965	4.14e-12	-2.2e+10	0.000	-.0892965	-.0892965
C1226	.0768123	4.13e-12	1.9e+10	0.000	.0768123	.0768123
C1242	.1603584	4.14e-12	3.9e+10	0.000	.1603584	.1603584
C1254	.1467882	4.14e-12	3.5e+10	0.000	.1467882	.1467882
C1258	-.5746967	.2996673	-1.92	0.055	-1.162034	.0126404
C1262	-.042085	4.14e-12	-1.0e+10	0.000	-.042085	-.042085
C1270	.1880102	4.14e-12	4.5e+10	0.000	.1880102	.1880102
C1294	.2376328	4.14e-12	5.7e+10	0.000	.2376328	.2376328
C1298	.1750764	4.14e-12	4.2e+10	0.000	.1750764	.1750764
C1302	-.0565956	4.13e-12	-1.4e+10	0.000	-.0565956	-.0565956
C1314	.2494207	4.14e-12	6.0e+10	0.000	.2494207	.2494207
C1322	-.1008528	4.14e-12	-2.4e+10	0.000	-.1008528	-.1008528
C1338	.2191402	4.14e-12	5.3e+10	0.000	.2191402	.2191402
C1346	-.0380429	4.14e-12	-9.2e+09	0.000	-.0380429	-.0380429
C1374	.0861178	4.14e-12	2.1e+10	0.000	.0861178	.0861178
C1378	.1367132	4.13e-12	3.3e+10	0.000	.1367132	.1367132
C1382	.1382135	4.14e-12	3.3e+10	0.000	.1382135	.1382135
C1390	.0412043	4.14e-12	1.0e+10	0.000	.0412043	.0412043
C1398	-.2180259	4.14e-12	-5.3e+10	0.000	-.2180259	-.2180259
C1401	.1117501	4.14e-12	2.7e+10	0.000	.1117501	.1117501
C1402	.0077248	4.14e-12	1.9e+09	0.000	.0077248	.0077248
C1410	.1346712	4.14e-12	3.3e+10	0.000	.1346712	.1346712
C1426	-.0203067	4.14e-12	-4.9e+09	0.000	-.0203067	-.0203067
C1446	-2.004075	.8978432	-2.23	0.026	-3.763815	-.2443341
C1450	-2.206072	.8319726	-2.65	0.008	-3.836708	-.5754353
C1454	-.0175727	4.14e-12	-4.2e+09	0.000	-.0175727	-.0175727
C1474	.0694256	4.14e-12	1.7e+10	0.000	.0694256	.0694256
C1486	.3487158	4.14e-12	8.4e+10	0.000	.3487158	.3487158
C1518	-.3168211	4.14e-12	-7.7e+10	0.000	-.3168211	-.3168211
C1526	-.1614909	4.14e-12	-3.9e+10	0.000	-.1614909	-.1614909
C1538	.1459018	4.14e-12	3.5e+10	0.000	.1459018	.1459018
C1550	-.1401359	4.14e-12	-3.4e+10	0.000	-.1401359	-.1401359
C1554	.1322865	4.14e-12	3.2e+10	0.000	.1322865	.1322865
C1568	.0310565	4.14e-12	7.5e+09	0.000	.0310565	.0310565
C1594	.0949061	4.14e-12	2.3e+10	0.000	.0949061	.0949061
C1598	-.0449799	4.14e-12	-1.1e+10	0.000	-.0449799	-.0449799
C1602	-.038259	4.14e-12	-9.3e+09	0.000	-.038259	-.038259
C1606	-.0265541	4.14e-12	-6.4e+09	0.000	-.0265541	-.0265541
C1618	.0365482	4.14e-12	8.8e+09	0.000	.0365482	.0365482
C1622	.0968555	4.14e-12	2.3e+10	0.000	.0968555	.0968555
C1630	.1946628	4.14e-12	4.7e+10	0.000	.1946628	.1946628
C1654	-.0824919	4.14e-12	-2.0e+10	0.000	-.0824919	-.0824919
C1658	.1356032	4.14e-12	3.3e+10	0.000	.1356032	.1356032
C1662	.1726274	4.14e-12	4.2e+10	0.000	.1726274	.1726274
C1670	.0470613	4.14e-12	1.1e+10	0.000	.0470613	.0470613
C1674	.1218276	4.14e-12	2.9e+10	0.000	.1218276	.1218276
C1682	-2.274682	.8031241	-2.83	0.005	-3.848777	-.7005878
C1686	.1270813	4.14e-12	3.1e+10	0.000	.1270813	.1270813
C1694	-.0131611	4.14e-12	-3.2e+09	0.000	-.0131611	-.0131611
C1698	-2.070927	.9078782	-2.28	0.023	-3.850335	-.2915181
C1702	.0037421	4.14e-12	9.0e+08	0.000	.0037421	.0037421
C1714	.1685949	4.14e-12	4.1e+10	0.000	.1685949	.1685949
C1730	-.071822	4.14e-12	-1.7e+10	0.000	-.071822	-.071822
C1742	.0235262	4.14e-12	5.7e+09	0.000	.0235262	.0235262
C1746	.1873901	4.14e-12	4.5e+10	0.000	.1873901	.1873901
C1766	-.1510208	4.14e-12	-3.7e+10	0.000	-.1510208	-.1510208
C1778	-.0786142	4.14e-12	-1.9e+10	0.000	-.0786142	-.0786142
C1782	.0782255	4.14e-12	1.9e+10	0.000	.0782255	.0782255
C1786	-.0236466	4.14e-12	-5.7e+09	0.000	-.0236466	-.0236466
C1790	-.004198	4.14e-12	-1.0e+09	0.000	-.004198	-.004198
C1798	-.1111454	4.14e-12	-2.7e+10	0.000	-.1111454	-.1111454
C1802	.0729655	4.14e-12	1.8e+10	0.000	.0729655	.0729655
C1814	.1969194	4.14e-12	4.8e+10	0.000	.1969194	.1969194
C1858	.1820443	4.14e-12	4.4e+10	0.000	.1820443	.1820443
C1870	.0150118	4.14e-12	3.6e+09	0.000	.0150118	.0150118
C1888	-.1828416	4.14e-12	-4.4e+10	0.000	-.1828416	-.1828416
C1906	-.0848484	4.14e-12	-2.1e+10	0.000	-.0848484	-.0848484
C1910	.2067013	4.14e-12	5.0e+10	0.000	.2067013	.2067013
C1914	-.2044202	4.14e-12	-4.9e+10	0.000	-.2044202	-.2044202
C1918	-.0622722	4.14e-12	-1.5e+10	0.000	-.0622722	-.0622722

C1930	-.0994666	4.14e-12	-2.4e+10	0.000	-.0994666	-.0994666
C1934	.1706603	4.14e-12	4.1e+10	0.000	.1706603	.1706603
C1938	.0987665	4.14e-12	2.4e+10	0.000	.0987665	.0987665
C1946	.0238783	4.14e-12	5.8e+09	0.000	.0238783	.0238783
C1950	.1714464	4.14e-12	4.1e+10	0.000	.1714464	.1714464
C1966	-.1742414	4.14e-12	-4.2e+10	0.000	-.1742414	-.1742414
C1974	-2.144232	.857265	-2.50	0.012	-3.824441	-.4640237
C1978	.2041798	4.14e-12	4.9e+10	0.000	.2041798	.2041798
C1982	.3421771	4.14e-12	8.3e+10	0.000	.3421771	.3421771
C2002	-.1036974	4.14e-12	-2.5e+10	0.000	-.1036974	-.1036974
C2010	.0437446	4.14e-12	1.1e+10	0.000	.0437446	.0437446
C2022	.0647125	4.14e-12	1.6e+10	0.000	.0647125	.0647125
C2026	.1812334	4.14e-12	4.4e+10	0.000	.1812334	.1812334
C2050	.0363582	4.14e-12	8.8e+09	0.000	.0363582	.0363582
C2070	-.0253169	4.14e-12	-6.1e+09	0.000	-.0253169	-.0253169
C2074	.075616	4.14e-12	1.8e+10	0.000	.075616	.075616
C2094	.0280617	4.14e-12	6.8e+09	0.000	.0280617	.0280617
C2106	-.0709995	4.14e-12	-1.7e+10	0.000	-.0709995	-.0709995
C2114	.1158826	4.14e-12	2.8e+10	0.000	.1158826	.1158826
C2130	.12659	4.14e-12	3.1e+10	0.000	.12659	.12659
C2134	-.1962867	4.14e-12	-4.7e+10	0.000	-.1962867	-.1962867
C2150	-.0173632	4.14e-12	-4.2e+09	0.000	-.0173632	-.0173632
C2166	.0510118	4.14e-12	1.2e+10	0.000	.0510118	.0510118
C2178	.1606526	4.14e-12	3.9e+10	0.000	.1606526	.1606526
C2182	.5112834	4.14e-12	1.2e+11	0.000	.5112834	.5112834
C2202	.108478	4.14e-12	2.6e+10	0.000	.108478	.108478
C2214	.038457	4.14e-12	9.3e+09	0.000	.038457	.038457
C2218	-.0459011	4.14e-12	-1.1e+10	0.000	-.0459011	-.0459011
C2222	-.0529174	4.14e-12	-1.3e+10	0.000	-.0529174	-.0529174
C2238	-.1746224	4.14e-12	-4.2e+10	0.000	-.1746224	-.1746224
C2242	.1324759	4.14e-12	3.2e+10	0.000	.1324759	.1324759
C2250	-.1140384	4.14e-12	-2.8e+10	0.000	-.1140384	-.1140384
C2252	-.0402911	4.14e-12	-9.7e+09	0.000	-.0402911	-.0402911
C2254	.2235089	4.14e-12	5.4e+10	0.000	.2235089	.2235089
C2266	.0959017	4.14e-12	2.3e+10	0.000	.0959017	.0959017
C2290	-.1307988	4.14e-12	-3.2e+10	0.000	-.1307988	-.1307988
C2306	.0970936	4.14e-12	2.3e+10	0.000	.0970936	.0970936
C2342	.0767957	4.14e-12	1.9e+10	0.000	.0767957	.0767957
C2346	-.1463546	4.14e-12	-3.5e+10	0.000	-.1463546	-.1463546
C2354	-.1482694	4.14e-12	-3.6e+10	0.000	-.1482694	-.1482694
C2358	.0044324	4.14e-12	1.1e+09	0.000	.0044324	.0044324
C2390	.0711347	4.14e-12	1.7e+10	0.000	.0711347	.0711347
C2402	.0617281	4.14e-12	1.5e+10	0.000	.0617281	.0617281
C2414	-.0497935	4.14e-12	-1.2e+10	0.000	-.0497935	-.0497935
C2422	.0936591	4.14e-12	2.3e+10	0.000	.0936591	.0936591
C2426	-.1173072	4.14e-12	-2.8e+10	0.000	-.1173072	-.1173072
C2430	.0577478	4.14e-12	1.4e+10	0.000	.0577478	.0577478
C2434	.1465754	4.14e-12	3.5e+10	0.000	.1465754	.1465754
C2442	-.2568961	4.14e-12	-6.2e+10	0.000	-.2568961	-.2568961
C2450	-.0056501	4.14e-12	-1.4e+09	0.000	-.0056501	-.0056501
C2454	.1318377	4.14e-12	3.2e+10	0.000	.1318377	.1318377
C2458	.1303679	4.14e-12	3.2e+10	0.000	.1303679	.1303679
C2466	.0097604	4.14e-12	2.4e+09	0.000	.0097604	.0097604
C2478	-.1488362	4.14e-12	-3.6e+10	0.000	-.1488362	-.1488362
C2486	.0440073	4.14e-12	1.1e+10	0.000	.0440073	.0440073
C2502	-.7405899	4.14e-12	-1.8e+11	0.000	-.7405899	-.7405899
C2506	.0228815	4.14e-12	5.5e+09	0.000	.0228815	.0228815
C2518	-.0380819	4.14e-12	-9.2e+09	0.000	-.0380819	-.0380819
C2522	-.0907687	4.14e-12	-2.2e+10	0.000	-.0907687	-.0907687
C2526	.0401436	4.14e-12	9.7e+09	0.000	.0401436	.0401436
C2542	.1832625	4.14e-12	4.4e+10	0.000	.1832625	.1832625
C2550	-.0684138	4.14e-12	-1.7e+10	0.000	-.0684138	-.0684138
C2554	.3580657	4.14e-12	8.7e+10	0.000	.3580657	.3580657
C2562	-.1240175	4.14e-12	-3.0e+10	0.000	-.1240175	-.1240175
C2586	-.1862214	4.14e-12	-4.5e+10	0.000	-.1862214	-.1862214
C2594	-.0375907	4.14e-12	-9.1e+09	0.000	-.0375907	-.0375907
C2598	-.1786149	4.14e-12	-4.3e+10	0.000	-.1786149	-.1786149
C2614	-.2657553	4.14e-12	-6.4e+10	0.000	-.2657553	-.2657553
C2630	-.3173613	4.14e-12	-7.7e+10	0.000	-.3173613	-.3173613
C2638	.2116074	4.14e-12	5.1e+10	0.000	.2116074	.2116074
C2642	.3524602	4.14e-12	8.5e+10	0.000	.3524602	.3524602
C2658	.1263071	4.14e-12	3.1e+10	0.000	.1263071	.1263071

C2662	-.0371111	4.14e-12	-9.0e+09	0.000	-.0371111	-.0371111
C2682	-2.541926	.8655871	-2.94	0.003	-4.238446	-.8454066
C2690	.1970679	4.14e-12	4.8e+10	0.000	.1970679	.1970679
C2698	.0226558	4.14e-12	5.5e+09	0.000	.0226558	.0226558
C2706	-1.192325	.4221839	-2.82	0.005	-2.01979	-.3648597
C2710	.1053816	4.14e-12	2.5e+10	0.000	.1053816	.1053816
C2714	-.0071319	4.14e-12	-1.7e+09	0.000	-.0071319	-.0071319
C2718	.097077	4.14e-12	2.3e+10	0.000	.097077	.097077
C2726	.0468286	4.14e-12	1.1e+10	0.000	.0468286	.0468286
C2734	-.2444488	4.14e-12	-5.9e+10	0.000	-.2444488	-.2444488
C2750	.1768009	4.14e-12	4.3e+10	0.000	.1768009	.1768009
C2762	.0464324	4.14e-12	1.1e+10	0.000	.0464324	.0464324
C2774	-.097666	4.14e-12	-2.4e+10	0.000	-.097666	-.097666
C2778	-.10766	4.14e-12	-2.6e+10	0.000	-.10766	-.10766
C2786	-.1646795	4.14e-12	-4.0e+10	0.000	-.1646795	-.1646795
C2790	-.1332747	4.14e-12	-3.2e+10	0.000	-.1332747	-.1332747
C2798	.3104701	4.14e-12	7.5e+10	0.000	.3104701	.3104701
C2802	.1537243	4.14e-12	3.7e+10	0.000	.1537243	.1537243
C2810	.2024313	4.14e-12	4.9e+10	0.000	.2024313	.2024313
C2814	.2331754	4.14e-12	5.6e+10	0.000	.2331754	.2331754
C2842	-2.356668	.9045657	-2.61	0.009	-4.129584	-.5837515
C2866	-.0356886	4.14e-12	-8.6e+09	0.000	-.0356886	-.0356886
C2870	-.1088613	4.14e-12	-2.6e+10	0.000	-.1088613	-.1088613
C2874	.0248435	4.14e-12	6.0e+09	0.000	.0248435	.0248435
C2894	-2.452891	.9154345	-2.68	0.007	-4.24711	-.6586725
C2902	-.0661435	4.14e-12	-1.6e+10	0.000	-.0661435	-.0661435
C2910	.0775312	4.14e-12	1.9e+10	0.000	.0775312	.0775312
C2918	.0951731	4.14e-12	2.3e+10	0.000	.0951731	.0951731
C2920	-.0040742	4.14e-12	-9.9e+08	0.000	-.0040742	-.0040742
C2934	.189384	4.14e-12	4.6e+10	0.000	.189384	.189384
C2942	-.240078	4.14e-12	-5.8e+10	0.000	-.240078	-.240078
C2946	-.0705326	4.14e-12	-1.7e+10	0.000	-.0705326	-.0705326
C2954	.1796524	4.14e-12	4.3e+10	0.000	.1796524	.1796524
C2962	.1919072	4.14e-12	4.6e+10	0.000	.1919072	.1919072
C2970	-.3600018	4.14e-12	-8.7e+10	0.000	-.3600018	-.3600018
C2974	-.3020488	4.14e-12	-7.3e+10	0.000	-.3020488	-.3020488
C2982	.2398339	4.14e-12	5.8e+10	0.000	.2398339	.2398339
C2994	-.0639675	4.14e-12	-1.5e+10	0.000	-.0639675	-.0639675
C3002	-.2083933	4.14e-12	-5.0e+10	0.000	-.2083933	-.2083933
C3014	.0337094	4.14e-12	8.1e+09	0.000	.0337094	.0337094
C3030	-.0448614	4.14e-12	-1.1e+10	0.000	-.0448614	-.0448614
C3034	-.0133414	4.14e-12	-3.2e+09	0.000	-.0133414	-.0133414
C3046	.0831251	4.14e-12	2.0e+10	0.000	.0831251	.0831251
C3062	.0173674	4.14e-12	4.2e+09	0.000	.0173674	.0173674
C3070	-.0327268	4.14e-12	-7.9e+09	0.000	-.0327268	-.0327268
C3078	-.0150579	4.14e-12	-3.6e+09	0.000	-.0150579	-.0150579
C3086	-.3427238	4.14e-12	-8.3e+10	0.000	-.3427238	-.3427238
C3098	.0334301	4.14e-12	8.1e+09	0.000	.0334301	.0334301
C3102	.2208752	4.14e-12	5.3e+10	0.000	.2208752	.2208752
C3108	-2.330289	.9458195	-2.46	0.014	-4.184062	-.4765172
C3114	.0850745	4.14e-12	2.1e+10	0.000	.0850745	.0850745
C3118	-.0924478	4.14e-12	-2.2e+10	0.000	-.0924478	-.0924478
C3134	-.153426	4.14e-12	-3.7e+10	0.000	-.153426	-.153426
C3142	-.0475364	4.14e-12	-1.1e+10	0.000	-.0475364	-.0475364
C3146	-.0635183	4.14e-12	-1.5e+10	0.000	-.0635183	-.0635183
C3154	.2504757	4.14e-12	6.1e+10	0.000	.2504757	.2504757
C3170	.2732872	4.14e-12	6.6e+10	0.000	.2732872	.2732872
C3174	-.0832503	4.14e-12	-2.0e+10	0.000	-.0832503	-.0832503
C3186	.0757289	4.14e-12	1.8e+10	0.000	.0757289	.0757289
C3190	.0139033	4.14e-12	3.4e+09	0.000	.0139033	.0139033
C3242	-.9487052	4.14e-12	-2.3e+11	0.000	-.9487052	-.9487052
C3258	-.3435763	4.14e-12	-8.3e+10	0.000	-.3435763	-.3435763
C3278	-.0580696	4.14e-12	-1.4e+10	0.000	-.0580696	-.0580696
C3282	.1236078	4.14e-12	3.0e+10	0.000	.1236078	.1236078
C3290	-.0926883	4.14e-12	-2.2e+10	0.000	-.0926883	-.0926883
C3310	.0947101	4.14e-12	2.3e+10	0.000	.0947101	.0947101
C3314	.2195471	4.14e-12	5.3e+10	0.000	.2195471	.2195471
C3322	.1043049	4.14e-12	2.5e+10	0.000	.1043049	.1043049
C3326	.0732585	4.14e-12	1.8e+10	0.000	.0732585	.0732585
C3334	.2883932	4.14e-12	7.0e+10	0.000	.2883932	.2883932
C3346	.353409	4.14e-12	8.5e+10	0.000	.353409	.353409
C3354	-.0408489	4.14e-12	-9.9e+09	0.000	-.0408489	-.0408489

C3366	.0354824	4.14e-12	8.6e+09	0.000	.0354824	.0354824
C3370	.0723785	4.14e-12	1.7e+10	0.000	.0723785	.0723785
C3374	-.1526496	4.14e-12	-3.7e+10	0.000	-.1526496	-.1526496
C3378	.3382842	4.14e-12	8.2e+10	0.000	.3382842	.3382842
C3386	-.0154493	4.14e-12	-3.7e+09	0.000	-.0154493	-.0154493
C3406	.0122019	4.14e-12	3.0e+09	0.000	.0122019	.0122019
C3410	-.2015593	4.14e-12	-4.9e+10	0.000	-.2015593	-.2015593
C3458	.2352287	4.14e-12	5.7e+10	0.000	.2352287	.2352287
C3462	-.049579	4.14e-12	-1.2e+10	0.000	-.049579	-.049579
C3474	.1626317	4.14e-12	3.9e+10	0.000	.1626317	.1626317
C3482	-.1506153	4.14e-12	-3.6e+10	0.000	-.1506153	-.1506153
C3490	.3058248	4.14e-12	7.4e+10	0.000	.3058248	.3058248
C3494	.0213625	4.14e-12	5.2e+09	0.000	.0213625	.0213625
C3498	.1747056	4.14e-12	4.2e+10	0.000	.1747056	.1747056
C3510	-.1395328	4.14e-12	-3.4e+10	0.000	-.1395328	-.1395328
C3530	.3421878	4.14e-12	8.3e+10	0.000	.3421878	.3421878
C3538	.1476633	4.14e-12	3.6e+10	0.000	.1476633	.1476633
C3562	-2.013868	.8822578	-2.28	0.022	-3.743062	-.2846746
C3566	-.0056219	4.14e-12	-1.4e+09	0.000	-.0056219	-.0056219
C3584	-.0286972	4.14e-12	-6.9e+09	0.000	-.0286972	-.0286972
C3598	.2767086	4.14e-12	6.7e+10	0.000	.2767086	.2767086
C3610	-.2144954	4.14e-12	-5.2e+10	0.000	-.2144954	-.2144954
C3614	.0302199	4.14e-12	7.3e+09	0.000	.0302199	.0302199
C3622	.2546831	4.14e-12	6.2e+10	0.000	.2546831	.2546831
C3626	-.036731	4.14e-12	-8.9e+09	0.000	-.036731	-.036731
C3642	-.0222732	4.14e-12	-5.4e+09	0.000	-.0222732	-.0222732
C3650	.058051	4.14e-12	1.4e+10	0.000	.058051	.058051
C3654	.0865731	4.14e-12	2.1e+10	0.000	.0865731	.0865731
C3674	.0763419	4.14e-12	1.8e+10	0.000	.0763419	.0763419
C3678	.2160066	4.14e-12	5.2e+10	0.000	.2160066	.2160066
C3698	-.0515844	4.14e-12	-1.2e+10	0.000	-.0515844	-.0515844
C3710	.1557088	4.14e-12	3.8e+10	0.000	.1557088	.1557088
C3734	-.0390276	4.14e-12	-9.4e+09	0.000	-.0390276	-.0390276
C3746	-.1766892	4.14e-12	-4.3e+10	0.000	-.1766892	-.1766892
C3762	.1130993	4.14e-12	2.7e+10	0.000	.1130993	.1130993
C3786	-.1355571	4.14e-12	-3.3e+10	0.000	-.1355571	-.1355571
C3790	.2037556	4.14e-12	4.9e+10	0.000	.2037556	.2037556
C3798	.3746494	4.14e-12	9.1e+10	0.000	.3746494	.3746494
C3806	.1321555	4.14e-12	3.2e+10	0.000	.1321555	.1321555
C3822	-.0023432	4.14e-12	-5.7e+08	0.000	-.0023432	-.0023432
C3830	-2.013074	.8080375	-2.49	0.013	-3.596798	-.4293494
C3834	.1159022	4.14e-12	2.8e+10	0.000	.1159022	.1159022
C3854	-.2109638	4.14e-12	-5.1e+10	0.000	-.2109638	-.2109638
C3866	-.812228	4.14e-12	-2.0e+11	0.000	-.812228	-.812228
C3886	.054196	4.14e-12	1.3e+10	0.000	.054196	.054196
C3890	.2381086	4.14e-12	5.8e+10	0.000	.2381086	.2381086
C3894	-.1334897	4.14e-12	-3.2e+10	0.000	-.1334897	-.1334897
C3914	-.1993819	4.14e-12	-4.8e+10	0.000	-.1993819	-.1993819
C3930	.2257479	4.14e-12	5.5e+10	0.000	.2257479	.2257479
C3934	-.1157205	4.14e-12	-2.8e+10	0.000	-.1157205	-.1157205
C3938	.0655753	4.14e-12	1.6e+10	0.000	.0655753	.0655753
C3946	-.1898446	4.14e-12	-4.6e+10	0.000	-.1898446	-.1898446
C3954	.1392393	4.14e-12	3.4e+10	0.000	.1392393	.1392393
C3958	.0805072	4.14e-12	1.9e+10	0.000	.0805072	.0805072
C3966	-.1015232	4.14e-12	-2.5e+10	0.000	-.1015232	-.1015232
C3974	.2220956	4.14e-12	5.4e+10	0.000	.2220956	.2220956
C3982	.0683251	4.14e-12	1.7e+10	0.000	.0683251	.0683251
C3990	.1597666	4.14e-12	3.9e+10	0.000	.1597666	.1597666
C4006	.0991885	4.14e-12	2.4e+10	0.000	.0991885	.0991885
C4014	.1246356	4.14e-12	3.0e+10	0.000	.1246356	.1246356
C4022	-.143595	4.14e-12	-3.5e+10	0.000	-.143595	-.143595
C4034	.1163949	4.14e-12	2.8e+10	0.000	.1163949	.1163949
C4038	.1705036	4.14e-12	4.1e+10	0.000	.1705036	.1705036
C4042	.2609087	4.14e-12	6.3e+10	0.000	.2609087	.2609087
C4058	-.0449208	4.14e-12	-1.1e+10	0.000	-.0449208	-.0449208
C4066	-.1184162	4.14e-12	-2.9e+10	0.000	-.1184162	-.1184162
C4090	.2413273	4.14e-12	5.8e+10	0.000	.2413273	.2413273
C4098	.1032901	4.14e-12	2.5e+10	0.000	.1032901	.1032901
C4106	.2076439	4.14e-12	5.0e+10	0.000	.2076439	.2076439
C4110	-.2928245	4.14e-12	-7.1e+10	0.000	-.2928245	-.2928245
C4114	.216802	4.14e-12	5.2e+10	0.000	.216802	.216802
C4118	.2380925	4.14e-12	5.8e+10	0.000	.2380925	.2380925

C4142	.0530652	4.14e-12	1.3e+10	0.000	.0530652	.0530652
C4150	.1639106	4.14e-12	4.0e+10	0.000	.1639106	.1639106
C4154	-.0692841	4.14e-12	-1.7e+10	0.000	-.0692841	-.0692841
C4162	.0791191	4.14e-12	1.9e+10	0.000	.0791191	.0791191
C4166	-.1132817	4.14e-12	-2.7e+10	0.000	-.1132817	-.1132817
C4170	-1.939717	.7248467	-2.68	0.007	-3.36039	-.5190436
C4174	.2496815	4.14e-12	6.0e+10	0.000	.2496815	.2496815
C4186	-2.123428	.9438704	-2.25	0.024	-3.97338	-.2734757
C4190	-1.038124	4.14e-12	-2.5e+11	0.000	-1.038124	-1.038124
C4194	.4585318	4.14e-12	1.1e+11	0.000	.4585318	.4585318
C4198	-.6241004	4.14e-12	-1.5e+11	0.000	-.6241004	-.6241004
C4202	.1641389	4.14e-12	4.0e+10	0.000	.1641389	.1641389
C4210	.1621372	4.14e-12	3.9e+10	0.000	.1621372	.1621372
C4214	-.1750528	4.14e-12	-4.2e+10	0.000	-.1750528	-.1750528
C4220	.1660523	4.14e-12	4.0e+10	0.000	.1660523	.1660523
C4222	.2606028	4.14e-12	6.3e+10	0.000	.2606028	.2606028
C4234	-.0047592	4.14e-12	-1.2e+09	0.000	-.0047592	-.0047592
C4254	.0686509	4.14e-12	1.7e+10	0.000	.0686509	.0686509
C4266	.2743588	4.14e-12	6.6e+10	0.000	.2743588	.2743588
C4268	-.1238563	4.14e-12	-3.0e+10	0.000	-.1238563	-.1238563
C4270	-.3743417	4.14e-12	-9.1e+10	0.000	-.3743417	-.3743417
C4310	.0981711	4.14e-12	2.4e+10	0.000	.0981711	.0981711
C4330	.0381547	4.14e-12	9.2e+09	0.000	.0381547	.0381547
C4334	-.04939	4.14e-12	-1.2e+10	0.000	-.04939	-.04939
C4342	-.2017303	4.14e-12	-4.9e+10	0.000	-.2017303	-.2017303
C4358	.0931133	4.14e-12	2.3e+10	0.000	.0931133	.0931133
C4362	.0181837	4.14e-12	4.4e+09	0.000	.0181837	.0181837
C4378	.1267852	4.14e-12	3.1e+10	0.000	.1267852	.1267852
C4390	.0268112	4.14e-12	6.5e+09	0.000	.0268112	.0268112
C4406	.0068034	4.14e-12	1.6e+09	0.000	.0068034	.0068034
C4410	.1386821	4.14e-12	3.4e+10	0.000	.1386821	.1386821
C4414	.2632314	4.14e-12	6.4e+10	0.000	.2632314	.2632314
C4418	-.0965186	4.14e-12	-2.3e+10	0.000	-.0965186	-.0965186
C4422	-.0727614	4.14e-12	-1.8e+10	0.000	-.0727614	-.0727614
C4430	.0158827	4.14e-12	3.8e+09	0.000	.0158827	.0158827
C4442	-.1522478	4.14e-12	-3.7e+10	0.000	-.1522478	-.1522478
C4470	.1744649	4.14e-12	4.2e+10	0.000	.1744649	.1744649
C4494	-.053566	4.14e-12	-1.3e+10	0.000	-.053566	-.053566
C4506	.1683324	4.14e-12	4.1e+10	0.000	.1683324	.1683324
C4522	-.1178114	4.14e-12	-2.8e+10	0.000	-.1178114	-.1178114
C4530	.019411	4.14e-12	4.7e+09	0.000	.019411	.019411
C4546	.0731302	4.14e-12	1.8e+10	0.000	.0731302	.0731302
C4550	-.1768315	4.14e-12	-4.3e+10	0.000	-.1768315	-.1768315
C4554	-.155691	4.14e-12	-3.8e+10	0.000	-.155691	-.155691
C4578	.2700051	4.14e-12	6.5e+10	0.000	.2700051	.2700051
C4582	.0619793	4.14e-12	1.5e+10	0.000	.0619793	.0619793
C4594	-1.813878	.8050921	-2.25	0.024	-3.39183	-.2359265
C4606	-2.207349	.769188	-2.87	0.004	-3.71493	-.6997681
C4614	.0255969	4.14e-12	6.2e+09	0.000	.0255969	.0255969
C4622	-.0879027	4.14e-12	-2.1e+10	0.000	-.0879027	-.0879027
C4634	-.1042785	4.14e-12	-2.5e+10	0.000	-.1042785	-.1042785
C4652	.449595	4.14e-12	1.1e+11	0.000	.449595	.449595
C4654	.0485889	4.14e-12	1.2e+10	0.000	.0485889	.0485889
C4666	-.0134571	4.14e-12	-3.3e+09	0.000	-.0134571	-.0134571
C4670	.3375676	4.14e-12	8.2e+10	0.000	.3375676	.3375676
C4702	.0900637	4.14e-12	2.2e+10	0.000	.0900637	.0900637
C4722	.2856858	4.14e-12	6.9e+10	0.000	.2856858	.2856858
C4726	-2.234588	.8148009	-2.74	0.006	-3.831568	-.6376075
C4730	-.0105639	4.14e-12	-2.6e+09	0.000	-.0105639	-.0105639
C4738	-.1066232	4.14e-12	-2.6e+10	0.000	-.1066232	-.1066232
C4746	-.1400007	4.14e-12	-3.4e+10	0.000	-.1400007	-.1400007
C4758	-.0816476	4.14e-12	-2.0e+10	0.000	-.0816476	-.0816476
C4790	-2.26822	.9255946	-2.45	0.014	-4.082352	-.4540884
C4794	.0474272	4.14e-12	1.1e+10	0.000	.0474272	.0474272
C4806	.1277874	4.14e-12	3.1e+10	0.000	.1277874	.1277874
C4814	.1291561	4.14e-12	3.1e+10	0.000	.1291561	.1291561
C4826	.135136	4.14e-12	3.3e+10	0.000	.135136	.135136
C4830	-.0385273	4.14e-12	-9.3e+09	0.000	-.0385273	-.0385273
C4854	.1269445	4.14e-12	3.1e+10	0.000	.1269445	.1269445
C4862	-.0182198	4.14e-12	-4.4e+09	0.000	-.0182198	-.0182198
C4866	-.1492576	4.14e-12	-3.6e+10	0.000	-.1492576	-.1492576
C4870	.0365029	4.14e-12	8.8e+09	0.000	.0365029	.0365029

C4890	-.0241184	4.14e-12	-5.8e+09	0.000	-.0241184	-.0241184
C4902	-.0619852	4.14e-12	-1.5e+10	0.000	-.0619852	-.0619852
C4918	-.0666403	4.14e-12	-1.6e+10	0.000	-.0666403	-.0666403
C4934	.2891555	4.14e-12	7.0e+10	0.000	.2891555	.2891555
C4942	-.0966299	4.14e-12	-2.3e+10	0.000	-.0966299	-.0966299
C4962	.1730153	4.14e-12	4.2e+10	0.000	.1730153	.1730153
C4966	.0548093	4.14e-12	1.3e+10	0.000	.0548093	.0548093
C4970	.1327803	4.14e-12	3.2e+10	0.000	.1327803	.1327803
C4974	-.290144	4.14e-12	-7.0e+10	0.000	-.290144	-.290144
_cons	11.48379	4.14e-12	2.8e+12	0.000	11.48379	11.48379

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679 outreg2 using output/reg_construction.doc, append ctitle("IV defense instrument, Ave
  > rage annual pay (log-log)") keep(log_federal_funding) addtext(MSA FE, Yes, Year FE,
  > No, FFRDC count FE, No)
  output/reg_construction.doc
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  > ding_instrument i.msa_factor), robust cluster(msa_factor)
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Instrumental variables (2SLS) regression		Number of obs	=	7,372
		Wald chi2(**388**)	=	28.84
		Prob > chi2	=	1.0000
		R-squared	=	0.9034
		Root MSE	=	.40413

(Std. Err. adjusted for **388** clusters in msa_factor)

log_annual_avg_em~l	Coef.	Robust Std. Err.	z	P>|z|	[95% Conf. Interval]	
log_federal_funding	-.2164349	.0754768	-2.87	0.004	-.3643667	-.0685031
msa_factor						
C1038	-.4427221	7.60e-11	-5.8e+09	0.000	-.4427221	-.4427221
C1042	1.363436	7.60e-11	1.8e+10	0.000	1.363436	1.363436
C1050	-.1360438	7.60e-11	-1.8e+09	0.000	-.1360438	-.1360438
C1054	-.3499109	7.60e-11	-4.6e+09	0.000	-.3499109	-.3499109
C1058	1.680197	7.60e-11	2.2e+10	0.000	1.680197	1.680197
C1074	6.829528	1.687228	4.05	0.000	3.522622	10.13643
C1078	.2116308	7.60e-11	2.8e+09	0.000	.2116308	.2116308
C1090	1.402788	7.60e-11	1.8e+10	0.000	1.402788	1.402788
C1102	-.2464291	7.60e-11	-3.2e+09	0.000	-.2464291	-.2464291
C1110	.5805018	7.60e-11	7.6e+09	0.000	.5805018	.5805018
C1118	3.441908	1.368334	2.52	0.012	.7600227	6.123793
C1126	1.153818	7.60e-11	1.5e+10	0.000	1.153818	1.153818
C1146	.3021349	7.60e-11	4.0e+09	0.000	.3021349	.3021349
C1150	-1.073369	7.60e-11	-1.4e+10	0.000	-1.073369	-1.073369
C1154	.9235311	7.60e-11	1.2e+10	0.000	.9235311	.9235311
C1164	-1.192485	7.60e-11	-1.6e+10	0.000	-1.192485	-1.192485
C1170	1.021628	7.60e-11	1.3e+10	0.000	1.021628	1.021628
C1202	-.196237	7.60e-11	-2.6e+09	0.000	-.196237	-.196237
C1206	3.527937	7.60e-11	4.6e+10	0.000	3.527937	3.527937
C1210	.5425126	7.60e-11	7.1e+09	0.000	.5425126	.5425126
C1222	-.4577333	7.60e-11	-6.0e+09	0.000	-.4577333	-.4577333
C1226	1.288117	7.60e-11	1.7e+10	0.000	1.288117	1.288117
C1242	2.622497	7.60e-11	3.5e+10	0.000	2.622497	2.622497
C1254	1.581283	7.60e-11	2.1e+10	0.000	1.581283	1.581283
C1258	4.650712	.5354301	8.69	0.000	3.601288	5.700135
C1262	-.0913233	7.60e-11	-1.2e+09	0.000	-.0913233	-.0913233
C1270	.5204823	7.60e-11	6.9e+09	0.000	.5204823	.5204823
C1294	2.550257	7.60e-11	3.4e+10	0.000	2.550257	2.550257
C1298	-.5660063	7.60e-11	-7.5e+09	0.000	-.5660063	-.5660063
C1302	-.9573687	7.60e-11	-1.3e+10	0.000	-.9573687	-.9573687
C1314	1.649759	7.60e-11	2.2e+10	0.000	1.649759	1.649759
C1322	-.6106743	7.60e-11	-8.0e+09	0.000	-.6106743	-.6106743
C1338	.6280734	7.60e-11	8.3e+09	0.000	.6280734	.6280734
C1346	.4406017	7.60e-11	5.8e+09	0.000	.4406016	.4406017
C1374	.4434043	7.60e-11	5.8e+09	0.000	.4434043	.4434043
C1378	.2228757	7.60e-11	2.9e+09	0.000	.2228757	.2228757
C1382	2.1174	7.60e-11	2.8e+10	0.000	2.1174	2.1174
C1390	.1539352	7.60e-11	2.0e+09	0.000	.1539352	.1539352
C1398	-.449569	7.60e-11	-5.9e+09	0.000	-.449569	-.449569
C1401	-.0563492	7.60e-11	-7.4e+08	0.000	-.0563492	-.0563492
C1402	-.2208416	7.60e-11	-2.9e+09	0.000	-.2208416	-.2208416
C1410	-.9960396	7.60e-11	-1.3e+10	0.000	-.9960396	-.9960396
C1426	1.692537	7.60e-11	2.2e+10	0.000	1.692537	1.692537
C1446	7.994361	1.60422	4.98	0.000	4.850148	11.13858
C1450	4.772579	1.486526	3.21	0.001	1.859042	7.686116

C1454	-.0842862	7.60e-11	-1.1e+09	0.000	-.0842862	-.0842862
C1474	.2382551	7.60e-11	3.1e+09	0.000	.2382551	.2382551
C1486	-2.362748	7.60e-11	-3.1e+10	0.000	-2.362748	-2.362748
C1518	.1044243	7.60e-11	1.4e+09	0.000	.1044243	.1044243
C1526	-.4400128	7.60e-11	-5.8e+09	0.000	-.4400128	-.4400128
C1538	1.805896	7.60e-11	2.4e+10	0.000	1.805896	1.805896
C1550	-.0877366	7.60e-11	-1.2e+09	0.000	-.0877366	-.0877366
C1554	.5544041	7.60e-11	7.3e+09	0.000	.5544041	.5544041
C1568	-.6097875	7.60e-11	-8.0e+09	0.000	-.6097875	-.6097875
C1594	.8714657	7.60e-11	1.1e+10	0.000	.8714657	.8714657
C1598	1.971884	7.60e-11	2.6e+10	0.000	1.971884	1.971884
C1602	-.4625668	7.60e-11	-6.1e+09	0.000	-.4625668	-.4625668
C1606	-.6588774	7.60e-11	-8.7e+09	0.000	-.6588774	-.6588774
C1618	-5.514887	7.60e-11	-7.3e+10	0.000	-5.514887	-5.514887
C1622	-.1615052	7.60e-11	-2.1e+09	0.000	-.1615052	-.1615052
C1630	.8506799	7.60e-11	1.1e+10	0.000	.8506799	.8506799
C1654	-.3971336	7.60e-11	-5.2e+09	0.000	-.3971336	-.3971336
C1658	.129387	7.60e-11	1.7e+09	0.000	.129387	.129387
C1662	.3912432	7.60e-11	5.2e+09	0.000	.3912432	.3912432
C1670	1.651711	7.60e-11	2.2e+10	0.000	1.651711	1.651711
C1674	2.871782	7.60e-11	3.8e+10	0.000	2.871782	2.871782
C1682	4.671315	1.434981	3.26	0.001	1.858804	7.483826
C1686	1.059791	7.60e-11	1.4e+10	0.000	1.059791	1.059791
C1694	-.0941535	7.60e-11	-1.2e+09	0.000	-.0941535	-.0941535
C1698	8.654651	1.62215	5.34	0.000	5.475295	11.83401
C1702	-.0098477	7.60e-11	-1.3e+08	0.000	-.0098477	-.0098477
C1714	2.56742	7.60e-11	3.4e+10	0.000	2.56742	2.56742
C1730	-.1750301	7.60e-11	-2.3e+09	0.000	-.1750301	-.1750301
C1742	-.7419659	7.60e-11	-9.8e+09	0.000	-.7419659	-.7419659
C1746	2.437106	7.60e-11	3.2e+10	0.000	2.437106	2.437106
C1766	.2649002	7.60e-11	3.5e+09	0.000	.2649002	.2649002
C1778	.4031006	7.60e-11	5.3e+09	0.000	.4031006	.4031006
C1782	1.5316	7.60e-11	2.0e+10	0.000	1.5316	1.5316
C1786	.1040657	7.60e-11	1.4e+09	0.000	.1040657	.1040657
C1790	1.606617	7.60e-11	2.1e+10	0.000	1.606617	1.606617
C1798	.3947293	7.60e-11	5.2e+09	0.000	.3947293	.3947293
C1802	-.7219926	7.60e-11	-9.5e+09	0.000	-.7219926	-.7219926
C1814	2.405547	7.60e-11	3.2e+10	0.000	2.405547	2.405547
C1858	1.644775	7.60e-11	2.2e+10	0.000	1.644775	1.644775
C1870	-1.159042	7.60e-11	-1.5e+10	0.000	-1.159042	-1.159042
C1888	.6511143	7.60e-11	8.6e+09	0.000	.6511143	.6511143
C1906	-.7841893	7.60e-11	-1.0e+10	0.000	-.7841893	-.7841893
C1910	3.909312	7.60e-11	5.1e+10	0.000	3.909312	3.909312
C1914	-.9995881	7.60e-11	-1.3e+10	0.000	-.9995881	-.9995881
C1918	-1.608316	7.60e-11	-2.1e+10	0.000	-1.608316	-1.608316
C1930	.145487	7.60e-11	1.9e+09	0.000	.145487	.145487
C1934	.9884716	7.60e-11	1.3e+10	0.000	.9884716	.9884716
C1938	1.363778	7.60e-11	1.8e+10	0.000	1.363778	1.363778
C1946	.0904536	7.60e-11	1.2e+09	0.000	.0904536	.0904536
C1950	-.0205219	7.60e-11	-2.7e+08	0.000	-.0205219	-.0205219
C1966	1.263935	7.60e-11	1.7e+10	0.000	1.263935	1.263935
C1974	7.616415	1.531717	4.97	0.000	4.614305	10.61853
C1978	1.633008	7.60e-11	2.1e+10	0.000	1.633008	1.633008
C1982	3.03913	7.60e-11	4.0e+10	0.000	3.03913	3.03913
C2002	-.1398208	7.60e-11	-1.8e+09	0.000	-.1398208	-.1398208
C2010	-.1752702	7.60e-11	-2.3e+09	0.000	-.1752702	-.1752702
C2022	-.2994204	7.60e-11	-3.9e+09	0.000	-.2994204	-.2994204
C2026	.519657	7.60e-11	6.8e+09	0.000	.519657	.519657
C2050	.9274048	7.60e-11	1.2e+10	0.000	.9274048	.9274048
C2070	-.4672249	7.60e-11	-6.2e+09	0.000	-.4672249	-.4672249
C2074	-.021128	7.60e-11	-2.8e+08	0.000	-.021128	-.021128
C2094	-.712589	7.60e-11	-9.4e+09	0.000	-.712589	-.712589
C2106	-.4679498	7.60e-11	-6.2e+09	0.000	-.4679498	-.4679498
C2114	.115933	7.60e-11	1.5e+09	0.000	.115933	.115933
C2130	-.7902875	7.60e-11	-1.0e+10	0.000	-.7902875	-.7902875
C2134	1.458471	7.60e-11	1.9e+10	0.000	1.458471	1.458471
C2150	.2361222	7.60e-11	3.1e+09	0.000	.2361222	.2361222
C2166	.6928023	7.60e-11	9.1e+09	0.000	.6928023	.6928023
C2178	1.112878	7.60e-11	1.5e+10	0.000	1.112878	1.112878
C2182	-.1902022	7.60e-11	-2.5e+09	0.000	-.1902022	-.1902022
C2202	.8194727	7.60e-11	1.1e+10	0.000	.8194727	.8194727
C2214	.1740788	7.60e-11	2.3e+09	0.000	.1740788	.1740788

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C2218    .5207535    7.60e-11   6.9e+09   0.000    .5207535    .5207535
C2222   1.032921     7.60e-11   1.4e+10   0.000   1.032921    1.032921
C2238   -.2593204    7.60e-11  -3.4e+09   0.000   -.2593204   -.2593204
C2242    .4396403    7.60e-11   5.8e+09   0.000    .4396403    .4396403
C2250   -.0012225    7.60e-11  -1.6e+07   0.000   -.0012225   -.0012225
C2252   -.1178361    7.60e-11  -1.6e+09   0.000   -.1178361   -.1178361
C2254   -.2302148    7.60e-11  -3.0e+09   0.000   -.2302148   -.2302148
C2266   1.07899      7.60e-11   1.4e+10   0.000   1.07899     1.07899
C2290    .3167263    7.60e-11   4.2e+09   0.000    .3167263    .3167263
C2306   1.141602     7.60e-11   1.5e+10   0.000   1.141602    1.141602
C2342   1.631482     7.60e-11   2.1e+10   0.000   1.631482    1.631482
C2346   -.9406252    7.60e-11  -1.2e+10   0.000   -.9406252   -.9406252
C2354    .4439808    7.60e-11   5.8e+09   0.000    .4439808    .4439808
C2358    .1137478    7.60e-11   1.5e+09   0.000    .1137478    .1137478
C2390   -.7227233    7.60e-11  -9.5e+09   0.000   -.7227233   -.7227233
C2402   -.3821935    7.60e-11  -5.0e+09   0.000   -.3821935   -.3821935
C2414   -.455323     7.60e-11  -6.0e+09   0.000   -.455323    -.455323
C2422   -.2204552    7.60e-11  -2.9e+09   0.000   -.2204552   -.2204552
C2426   -.4604997    7.60e-11  -6.1e+09   0.000   -.4604997   -.4604997
C2430    .3029731    7.60e-11   4.0e+09   0.000    .3029731    .3029731
C2434   1.873915     7.60e-11   2.5e+10   0.000   1.873915    1.873915
C2442  -1.135429     7.60e-11  -1.5e+10   0.000  -1.135429   -1.135429
C2450   -.4391457    7.60e-11  -5.8e+09   0.000   -.4391457   -.4391457
C2454    .9211637    7.60e-11   1.2e+10   0.000    .9211637    .9211637
C2458    .873778     7.60e-11   1.2e+10   0.000    .873778     .873778
C2466   1.58574      7.60e-11   2.1e+10   0.000   1.58574     1.58574
C2478   -.0186108    7.60e-11  -2.4e+08   0.000   -.0186108   -.0186108
C2486   1.648873     7.60e-11   2.2e+10   0.000   1.648873    1.648873
C2502  -2.239789     7.60e-11  -2.9e+10   0.000  -2.239789   -2.239789
C2506    .8941229    7.60e-11   1.2e+10   0.000    .8941229    .8941229
C2518    .27548      7.60e-11   3.6e+09   0.000    .27548      .27548
C2522   -.8765042    7.60e-11  -1.2e+10   0.000   -.8765042   -.8765042
C2526  -1.137753     7.60e-11  -1.5e+10   0.000  -1.137753   -1.137753
C2542   1.233242     7.60e-11   1.6e+10   0.000   1.233242    1.233242
C2550    .026695     7.60e-11   3.5e+08   0.000    .026695     .026695
C2554   1.88766      7.60e-11   2.5e+10   0.000   1.88766     1.88766
C2562   -.3560718    7.60e-11  -4.7e+09   0.000   -.3560718   -.3560718
C2586    .2960113    7.60e-11   3.9e+09   0.000    .2960113    .2960113
C2594    .5014372    7.60e-11   6.6e+09   0.000    .5014372    .5014372
C2598  -2.215512     7.60e-11  -2.9e+10   0.000  -2.215512   -2.215512
C2614   -.1362509    7.60e-11  -1.8e+09   0.000   -.1362509   -.1362509
C2630   -.4951691    7.60e-11  -6.5e+09   0.000   -.4951691   -.4951691
C2638    .4462634    7.60e-11   5.9e+09   0.000    .4462634    .4462634
C2642   4.088555     7.60e-11   5.4e+10   0.000   4.088555    4.088555
C2658    .8869981    7.60e-11   1.2e+10   0.000    .8869981    .8869981
C2662    .7786564    7.60e-11   1.0e+10   0.000    .7786564    .7786564
C2682   4.528594    1.546587     2.93     0.003   1.49734     7.559848
C2690   2.671898     7.60e-11   3.5e+10   0.000   2.671898    2.671898
C2698    .0576819    7.60e-11   7.6e+08   0.000    .0576819    .0576819
C2706    .8946446   .7543365     1.19     0.236   -.5838277   2.373117
C2710   -.5382764    7.60e-11  -7.1e+09   0.000   -.5382764   -.5382764
C2714   1.16063      7.60e-11   1.5e+10   0.000   1.16063     1.16063
C2718   -.1205223    7.60e-11  -1.6e+09   0.000   -.1205223   -.1205223
C2726   2.421427     7.60e-11   3.2e+10   0.000   2.421427    2.421427
C2734   -.2095631    7.60e-11  -2.8e+09   0.000   -.2095631   -.2095631
C2750   -.1307954    7.60e-11  -1.7e+09   0.000   -.1307954   -.1307954
C2762    .088938     7.60e-11   1.2e+09   0.000    .088938     .088938
C2774   -.1709607    7.60e-11  -2.3e+09   0.000   -.1709607   -.1709607
C2778   -.5580928    7.60e-11  -7.3e+09   0.000   -.5580928   -.5580928
C2786   -.4951623    7.60e-11  -6.5e+09   0.000   -.4951623   -.4951623
C2790   -.1794985    7.60e-11  -2.4e+09   0.000   -.1794985   -.1794985
C2798    .0995129    7.60e-11   1.3e+09   0.000    .0995129    .0995129
C2802    .5593406    7.60e-11   7.4e+09   0.000    .5593406    .5593406
C2810   -.8220335    7.60e-11  -1.1e+10   0.000   -.8220335   -.8220335
C2814   2.660203     7.60e-11   3.5e+10   0.000   2.660203    2.660203
C2842   5.271505    1.616232     3.26     0.001   2.103749    8.439261
C2866    .5938588    7.60e-11   7.8e+09   0.000    .5938588    .5938588
C2870    .7136328    7.60e-11   9.4e+09   0.000    .7136328    .7136328
C2874   -.2948635    7.60e-11  -3.9e+09   0.000   -.2948635   -.2948635
C2894   6.342125    1.635651     3.88     0.000   3.136307    9.547943
C2902  -1.14252      7.60e-11  -1.5e+10   0.000  -1.14252    -1.14252
C2910   -.2813767    7.60e-11  -3.7e+09   0.000   -.2813767   -.2813767
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C2918	1.251511	7.60e-11	1.6e+10	0.000	1.251511	1.251511
C2920	.0017671	7.60e-11	2.3e+07	0.000	.0017671	.0017671
C2934	1.313689	7.60e-11	1.7e+10	0.000	1.313689	1.313689
C2942	.0768197	7.60e-11	1.0e+09	0.000	.0768197	.0768197
C2946	1.271909	7.60e-11	1.7e+10	0.000	1.271909	1.271909
C2954	1.548371	7.60e-11	2.0e+10	0.000	1.548371	1.548371
C2962	.776198	7.60e-11	1.0e+10	0.000	.776198	.776198
C2970	-.3647306	7.60e-11	-4.8e+09	0.000	-.3647306	-.3647306
C2974	.1587483	7.60e-11	2.1e+09	0.000	.1587483	.1587483
C2982	2.991384	7.60e-11	3.9e+10	0.000	2.991384	2.991384
C2994	-.4858017	7.60e-11	-6.4e+09	0.000	-.4858017	-.4858017
C3002	-.7006918	7.60e-11	-9.2e+09	0.000	-.7006918	-.7006917
C3014	-.6158835	7.60e-11	-8.1e+09	0.000	-.6158835	-.6158835
C3030	-.9758546	7.60e-11	-1.3e+10	0.000	-.9758546	-.9758546
C3034	-.2672777	7.60e-11	-3.5e+09	0.000	-.2672777	-.2672777
C3046	1.251187	7.60e-11	1.6e+10	0.000	1.251187	1.251187
C3062	-.4668531	7.60e-11	-6.1e+09	0.000	-.4668531	-.4668531
C3070	.9235903	7.60e-11	1.2e+10	0.000	.9235903	.9235903
C3078	1.554921	7.60e-11	2.0e+10	0.000	1.554921	1.554921
C3086	-.1848939	7.60e-11	-2.4e+09	0.000	-.1848939	-.1848939
C3098	.8661072	7.60e-11	1.1e+10	0.000	.8661072	.8661072
C3102	-.3155394	7.60e-11	-4.2e+09	0.000	-.3155394	-.3155394
C3108	9.075039	1.689942	5.37	0.000	5.762813	12.38726
C3114	2.147326	7.60e-11	2.8e+10	0.000	2.147326	2.147326
C3118	.5979972	7.60e-11	7.9e+09	0.000	.5979972	.5979972
C3134	.3661371	7.60e-11	4.8e+09	0.000	.3661371	.3661371
C3142	.1286172	7.60e-11	1.7e+09	0.000	.1286172	.1286172
C3146	-.6665436	7.60e-11	-8.8e+09	0.000	-.6665436	-.6665436
C3154	1.576527	7.60e-11	2.1e+10	0.000	1.576527	1.576527
C3170	.8212882	7.60e-11	1.1e+10	0.000	.8212882	.8212882
C3174	-.4126873	7.60e-11	-5.4e+09	0.000	-.4126873	-.4126873
C3186	-.4244652	7.60e-11	-5.6e+09	0.000	-.4244652	-.4244652
C3190	-.4796135	7.60e-11	-6.3e+09	0.000	-.4796135	-.4796135
C3242	-.60539	7.60e-11	-8.0e+09	0.000	-.60539	-.60539
C3258	.8790619	7.60e-11	1.2e+10	0.000	.8790619	.879062
C3278	.203287	7.60e-11	2.7e+09	0.000	.203287	.203287
C3282	1.952636	7.60e-11	2.6e+10	0.000	1.952636	1.952636
C3290	-.3367322	7.60e-11	-4.4e+09	0.000	-.3367322	-.3367322
C3310	3.586786	7.60e-11	4.7e+10	0.000	3.586786	3.586786
C3314	-.4681381	7.60e-11	-6.2e+09	0.000	-.4681381	-.4681381
C3322	-.2739347	7.60e-11	-3.6e+09	0.000	-.2739347	-.2739347
C3326	.2009804	7.60e-11	2.6e+09	0.000	.2009804	.2009804
C3334	2.245361	7.60e-11	3.0e+10	0.000	2.245361	2.245361
C3346	3.117814	7.60e-11	4.1e+10	0.000	3.117814	3.117814
C3354	-.1082958	7.60e-11	-1.4e+09	0.000	-.1082958	-.1082958
C3366	1.238819	7.60e-11	1.6e+10	0.000	1.238819	1.238819
C3370	1.042935	7.60e-11	1.4e+10	0.000	1.042935	1.042935
C3374	.1117593	7.60e-11	1.5e+09	0.000	.1117593	.1117593
C3378	-.4599838	7.60e-11	-6.1e+09	0.000	-.4599838	-.4599838
C3386	.7189033	7.60e-11	9.5e+09	0.000	.7189033	.7189033
C3406	-.0969753	7.60e-11	-1.3e+09	0.000	-.0969753	-.0969753
C3410	-1.027446	7.60e-11	-1.4e+10	0.000	-1.027446	-1.027446
C3458	-.0117052	7.60e-11	-1.5e+08	0.000	-.0117052	-.0117052
C3462	-.6231224	7.60e-11	-8.2e+09	0.000	-.6231224	-.6231224
C3474	-.465491	7.60e-11	-6.1e+09	0.000	-.465491	-.465491
C3482	1.046736	7.60e-11	1.4e+10	0.000	1.046736	1.046736
C3490	.1767595	7.60e-11	2.3e+09	0.000	.1767595	.1767595
C3494	1.463419	7.60e-11	1.9e+10	0.000	1.463419	1.463419
C3498	2.403479	7.60e-11	3.2e+10	0.000	2.403479	2.403479
C3510	-.5994066	7.60e-11	-7.9e+09	0.000	-.5994066	-.5994066
C3530	1.457737	7.60e-11	1.9e+10	0.000	1.457737	1.457737
C3538	2.261936	7.60e-11	3.0e+10	0.000	2.261936	2.261936
C3562	9.184114	1.576373	5.83	0.000	6.094479	12.27375
C3566	-.5319727	7.60e-11	-7.0e+09	0.000	-.5319727	-.5319727
C3584	1.830915	7.60e-11	2.4e+10	0.000	1.830915	1.830915
C3598	.1680151	7.60e-11	2.2e+09	0.000	.1680151	.1680151
C3610	.7949955	7.60e-11	1.0e+10	0.000	.7949955	.7949955
C3614	-.3687815	7.60e-11	-4.9e+09	0.000	-.3687815	-.3687815
C3622	.54233	7.60e-11	7.1e+09	0.000	.54233	.54233
C3626	1.577867	7.60e-11	2.1e+10	0.000	1.577867	1.577867
C3642	2.117927	7.60e-11	2.8e+10	0.000	2.117927	2.117927
C3650	.2819503	7.60e-11	3.7e+09	0.000	.2819503	.2819503

C3654	2.029396	7.60e-11	2.7e+10	0.000	2.029396	2.029396
C3674	2.965289	7.60e-11	3.9e+10	0.000	2.965289	2.965289
C3678	.2322551	7.60e-11	3.1e+09	0.000	.2322551	.2322551
C3698	-.2934305	7.60e-11	-3.9e+09	0.000	-.2934305	-.2934305
C3710	1.557172	7.60e-11	2.0e+10	0.000	1.557172	1.557172
C3734	1.297291	7.60e-11	1.7e+10	0.000	1.297291	1.297291
C3746	.4344368	7.60e-11	5.7e+09	0.000	.4344368	.4344368
C3762	-.533477	7.60e-11	-7.0e+09	0.000	-.533477	-.533477
C3786	1.224105	7.60e-11	1.6e+10	0.000	1.224105	1.224105
C3790	.897101	7.60e-11	1.2e+10	0.000	.897101	.897101
C3798	3.501219	7.60e-11	4.6e+10	0.000	3.501219	3.501219
C3806	3.60037	7.60e-11	4.7e+10	0.000	3.60037	3.60037
C3822	-1.119961	7.60e-11	-1.5e+10	0.000	-1.119961	-1.119961
C3830	6.941443	1.44376	4.81	0.000	4.111725	9.77116
C3834	-.1265909	7.60e-11	-1.7e+09	0.000	-.1265909	-.1265909
C3854	-.6618395	7.60e-11	-8.7e+09	0.000	-.6618395	-.6618395
C3866	-.0092793	7.60e-11	-1.2e+08	0.000	-.0092793	-.0092793
C3886	1.312853	7.60e-11	1.7e+10	0.000	1.312853	1.312853
C3890	2.856175	7.60e-11	3.8e+10	0.000	2.856175	2.856175
C3894	1.090247	7.60e-11	1.4e+10	0.000	1.090247	1.090247
C3914	.3695848	7.60e-11	4.9e+09	0.000	.3695848	.3695848
C3930	2.127946	7.60e-11	2.8e+10	0.000	2.127946	2.127946
C3934	1.548653	7.60e-11	2.0e+10	0.000	1.548653	1.548653
C3938	.0811106	7.60e-11	1.1e+09	0.000	.0811106	.0811106
C3946	.0742474	7.60e-11	9.8e+08	0.000	.0742474	.0742474
C3954	-.1098544	7.60e-11	-1.4e+09	0.000	-.1098544	-.1098544
C3958	2.344897	7.60e-11	3.1e+10	0.000	2.344897	2.344897
C3966	.3752397	7.60e-11	4.9e+09	0.000	.3752397	.3752397
C3974	.8351503	7.60e-11	1.1e+10	0.000	.8351503	.8351503
C3982	.0139123	7.60e-11	1.8e+08	0.000	.0139123	.0139123
C3990	1.524283	7.60e-11	2.0e+10	0.000	1.524283	1.524283
C4006	2.350416	7.60e-11	3.1e+10	0.000	2.350416	2.350416
C4014	3.320123	7.60e-11	4.4e+10	0.000	3.320123	3.320123
C4022	.3652262	7.60e-11	4.8e+09	0.000	.3652262	.3652262
C4034	.2945371	7.60e-11	3.9e+09	0.000	.2945371	.2945371
C4038	1.741734	7.60e-11	2.3e+10	0.000	1.741734	1.741734
C4042	.5906194	7.60e-11	7.8e+09	0.000	.5906194	.5906194
C4058	-.106202	7.60e-11	-1.4e+09	0.000	-.106202	-.106202
C4066	-1.207121	7.60e-11	-1.6e+10	0.000	-1.207121	-1.207121
C4090	2.843608	7.60e-11	3.7e+10	0.000	2.843608	2.843608
C4098	-.0026111	7.60e-11	-3.4e+07	0.000	-.0026111	-.0026111
C4106	.4390492	7.60e-11	5.8e+09	0.000	.4390492	.4390492
C4110	.509943	7.60e-11	6.7e+09	0.000	.509943	.509943
C4114	-.3368306	7.60e-11	-4.4e+09	0.000	-.3368306	-.3368306
C4118	2.93398	7.60e-11	3.9e+10	0.000	2.93398	2.93398
C4142	.9132253	7.60e-11	1.2e+10	0.000	.9132253	.9132253
C4150	.5711123	7.60e-11	7.5e+09	0.000	.5711123	.5711123
C4154	.9991643	7.60e-11	1.3e+10	0.000	.9991643	.9991643
C4162	2.392988	7.60e-11	3.1e+10	0.000	2.392988	2.392988
C4166	-.4144454	7.60e-11	-5.5e+09	0.000	-.4144454	-.4144454
C4170	6.394158	1.295119	4.94	0.000	3.855771	8.932544
C4174	3.131862	7.60e-11	4.1e+10	0.000	3.131862	3.131862
C4186	8.339989	1.686459	4.95	0.000	5.03459	11.64539
C4190	-1.398397	7.60e-11	-1.8e+10	0.000	-1.398397	-1.398397
C4194	2.583226	7.60e-11	3.4e+10	0.000	2.583226	2.583226
C4198	2.2068	7.60e-11	2.9e+10	0.000	2.2068	2.2068
C4202	.7198742	7.60e-11	9.5e+09	0.000	.7198742	.7198742
C4210	.263703	7.60e-11	3.5e+09	0.000	.263703	.263703
C4214	.0564699	7.60e-11	7.4e+08	0.000	.0564699	.0564699
C4220	.962826	7.60e-11	1.3e+10	0.000	.962826	.962826
C4222	1.33015	7.60e-11	1.8e+10	0.000	1.330149	1.33015
C4234	.8062582	7.60e-11	1.1e+10	0.000	.8062582	.8062582
C4254	1.057062	7.60e-11	1.4e+10	0.000	1.057062	1.057062
C4266	3.406774	7.60e-11	4.5e+10	0.000	3.406774	3.406774
C4268	.1311766	7.60e-11	1.7e+09	0.000	.1311766	.1311766
C4270	-.9340951	7.60e-11	-1.2e+10	0.000	-.9340951	-.9340951
C4310	-.3830865	7.60e-11	-5.0e+09	0.000	-.3830865	-.3830865
C4330	-.2158639	7.60e-11	-2.8e+09	0.000	-.2158639	-.2158639
C4334	1.023236	7.60e-11	1.3e+10	0.000	1.023236	1.023236
C4342	-.6405961	7.60e-11	-8.4e+09	0.000	-.6405961	-.6405961
C4358	.2187445	7.60e-11	2.9e+09	0.000	.2187445	.2187445
C4362	.8251971	7.60e-11	1.1e+10	0.000	.8251971	.8251971

C4378	.5246527	7.60e-11	6.9e+09	0.000	.5246527	.5246527
C4390	.6352327	7.60e-11	8.4e+09	0.000	.6352327	.6352327
C4406	1.232845	7.60e-11	1.6e+10	0.000	1.232845	1.232845
C4410	.255917	7.60e-11	3.4e+09	0.000	.255917	.255917
C4414	1.04071	7.60e-11	1.4e+10	0.000	1.04071	1.04071
C4418	.9361369	7.60e-11	1.2e+10	0.000	.9361369	.9361369
C4422	-.8995124	7.60e-11	-1.2e+10	0.000	-.8995124	-.8995124
C4430	-.0959211	7.60e-11	-1.3e+09	0.000	-.0959211	-.0959211
C4442	-.288314	7.60e-11	-3.8e+09	0.000	-.288314	-.288314
C4470	1.259731	7.60e-11	1.7e+10	0.000	1.259731	1.259731
C4494	-.3024278	7.60e-11	-4.0e+09	0.000	-.3024278	-.3024278
C4506	1.324562	7.60e-11	1.7e+10	0.000	1.324562	1.324562
C4522	.7995103	7.60e-11	1.1e+10	0.000	.7995103	.7995103
C4530	3.026821	7.60e-11	4.0e+10	0.000	3.026821	3.026821
C4546	-.0607054	7.60e-11	-8.0e+08	0.000	-.0607054	-.0607054
C4550	-.2318744	7.60e-11	-3.1e+09	0.000	-.2318744	-.2318744
C4554	-.4405124	7.60e-11	-5.8e+09	0.000	-.4405124	-.4405124
C4578	1.399243	7.60e-11	1.8e+10	0.000	1.399243	1.399243
C4582	.5156379	7.60e-11	6.8e+09	0.000	.5156379	.5156379
C4594	4.614386	1.438497	3.21	0.001	1.794983	7.433789
C4606	5.709502	1.374346	4.15	0.000	3.015834	8.40317
C4614	1.908358	7.60e-11	2.5e+10	0.000	1.908358	1.908358
C4622	.4425712	7.60e-11	5.8e+09	0.000	.4425712	.4425712
C4634	.2044071	7.60e-11	2.7e+09	0.000	.2044071	.2044071
C4652	1.971388	7.60e-11	2.6e+10	0.000	1.971388	1.971388
C4654	-.0158535	7.60e-11	-2.1e+08	0.000	-.0158535	-.0158535
C4666	-.2367685	7.60e-11	-3.1e+09	0.000	-.2367685	-.2367685
C4670	1.136743	7.60e-11	1.5e+10	0.000	1.136743	1.136743
C4702	-.3312679	7.60e-11	-4.4e+09	0.000	-.3312679	-.3312679
C4722	-.2561721	7.60e-11	-3.4e+09	0.000	-.2561721	-.2561721
C4726	6.592668	1.455844	4.53	0.000	3.739265	9.446071
C4730	.5339294	7.60e-11	7.0e+09	0.000	.5339294	.5339294
C4738	.6488159	7.60e-11	8.5e+09	0.000	.6488159	.6488159
C4746	-1.236281	7.60e-11	-1.6e+10	0.000	-1.236281	-1.236281
C4758	-.6840595	7.60e-11	-9.0e+09	0.000	-.6840595	-.6840595
C4790	8.620083	1.653805	5.21	0.000	5.378685	11.86148
C4794	.1364566	7.60e-11	1.8e+09	0.000	.1364566	.1364566
C4806	-.6297958	7.60e-11	-8.3e+09	0.000	-.6297958	-.6297958
C4814	-.2636225	7.60e-11	-3.5e+09	0.000	-.2636225	-.2636225
C4826	-1.527723	7.60e-11	-2.0e+10	0.000	-1.527723	-1.527723
C4830	-.3827934	7.60e-11	-5.0e+09	0.000	-.3827934	-.3827934
C4854	-.527587	7.60e-11	-6.9e+09	0.000	-.527587	-.527587
C4862	1.544856	7.60e-11	2.0e+10	0.000	1.544856	1.544856
C4866	-.4110877	7.60e-11	-5.4e+09	0.000	-.4110877	-.4110877
C4870	-.4500141	7.60e-11	-5.9e+09	0.000	-.4500141	-.4500141
C4890	.8790163	7.60e-11	1.2e+10	0.000	.8790163	.8790163
C4902	-.2868882	7.60e-11	-3.8e+09	0.000	-.2868882	-.2868882
C4918	1.205789	7.60e-11	1.6e+10	0.000	1.205789	1.205789
C4934	1.458723	7.60e-11	1.9e+10	0.000	1.458723	1.458723
C4942	-.0222083	7.60e-11	-2.9e+08	0.000	-.0222083	-.0222083
C4962	1.173161	7.60e-11	1.5e+10	0.000	1.173161	1.173161
C4966	1.024185	7.60e-11	1.3e+10	0.000	1.024185	1.024185
C4970	-.5155452	7.60e-11	-6.8e+09	0.000	-.5155452	-.5155452
C4974	-.0425611	7.60e-11	-5.6e+08	0.000	-.0425611	-.0425611
_cons	8.759223	7.60e-11	1.2e+11	0.000	8.759223	8.759223

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                  385.msa_factor 386.msa_factor
                  387.msa_factor 388.msa_factor
                  defense_funding_instrument
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681 outreg2 using output/reg_construction.doc, append ctitle("IV defense instrument, Ave
  > rage employment (log-log)") keep(log_federal_funding) addtext(MSA FE, Yes, Year FE,
  > No, FFRDC count FE, No)
  output/reg_construction.doc
  dir : seeout

682
683
684
685
686 //retail
687 use data/intermediate/merged_MetroMSAs_retail_private_post01_scaled, clear

688
689 estimates clear

690 eststo: estpost summarize log_avg_annual_pay log_annual_avg_emplvl log_federal_fundi
  > ng

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             |   e(count)    e(sum_w)     e(mean)      e(Var)       e(sd)      e(min)       e(
  > max)        e(sum)
  ─────────────┼────────────────────────────────────────────────────────────────────────────────
  log_avg_an~y |       7372        7372    10.96086    .0169799    .1303071    10.31858      12.0
  > 0391    80803.48
  log_annual~l |       7372        7372    10.34196      1.1538    1.074151    7.905442      14.4
  > 5121    76240.91
  log_federa~g |       7372        7372    1.039356    20.07219      4.4802           0      22.7
  > 9501    7662.133
```
  (**est1** stored)

691 esttab using output/summarystats_retail.csv, cells("mean(fmt(2)) sd(fmt(2)) min(fmt(
  > 2)) max(fmt(2))") label nodepvar replace
  (output written to output/summarystats_retail.csv)

692
693 //OLS, retail
694 encode msacode, gen(msa_factor)

```
695
696 reg log_avg_annual_pay log_federal_funding i.year i.msa_factor i.ffrdc_count, robust
 >  cluster(msa_factor)
note: 2.ffrdc_count omitted because of collinearity
note: 3.ffrdc_count omitted because of collinearity
note: 5.ffrdc_count omitted because of collinearity
note: 13.ffrdc_count omitted because of collinearity
```

Linear regression			Number of obs	=	7,372
			F(19, 387)	=	.
			Prob > F	=	.
			R-squared	=	0.9293
			Root MSE	=	.03566

(Std. Err. adjusted for **388** clusters in msa_factor)

log_avg_annual_pay	Coef.	Robust Std. Err.	t	P>|t|	[95% Conf. Interval]	
log_federal_funding	-.0022583	.0077199	-0.29	0.770	-.0174364	.0129198
year						
2002	.0159312	.0013292	11.99	0.000	.0133178	.0185446
2003	.0191538	.0017129	11.18	0.000	.015786	.0225216
2004	.0193986	.001948	9.96	0.000	.0155685	.0232286
2005	.0053843	.0023063	2.33	0.020	.0008499	.0099187
2006	-.0000745	.0026697	-0.03	0.978	-.0053235	.0051744
2007	-.005763	.0028311	-2.04	0.042	-.0113293	-.0001967
2008	-.0342942	.0027718	-12.37	0.000	-.039744	-.0288445
2009	-.023917	.002999	-7.98	0.000	-.0298133	-.0180207
2010	-.0239118	.0031227	-7.66	0.000	-.0300514	-.0177722
2011	-.040476	.0032934	-12.29	0.000	-.0469512	-.0340008
2012	-.0404999	.0034657	-11.69	0.000	-.0473139	-.033686
2013	-.0427827	.003526	-12.13	0.000	-.0497151	-.0358502
2014	-.0354418	.0036406	-9.74	0.000	-.0425997	-.0282839
2015	-.0054057	.0034964	-1.55	0.123	-.0122801	.0014686
2016	-.0005269	.0035802	-0.15	0.883	-.0075659	.006512
2017	.0031487	.0037631	0.84	0.403	-.0042499	.0105473
2018	.009626	.0040158	2.40	0.017	.0017305	.0175214
2019	.0250354	.0039909	6.27	0.000	.0171888	.0328819
msa_factor						
C1038	-.5978532	1.62e-13	-3.7e+12	0.000	-.5978532	-.5978532
C1042	.0448642	1.62e-13	2.8e+11	0.000	.0448642	.0448642
C1050	-.1218163	1.62e-13	-7.5e+11	0.000	-.1218163	-.1218163
C1054	-.0313913	1.62e-13	-1.9e+11	0.000	-.0313913	-.0313913
C1058	.0691685	1.62e-13	4.3e+11	0.000	.0691685	.0691685
C1074	.1300344	.031993	4.06	0.000	.0671326	.1929363
C1078	-.06767	1.62e-13	-4.2e+11	0.000	-.06767	-.06767
C1090	.0152355	1.62e-13	9.4e+10	0.000	.0152355	.0152355
C1102	-.1061897	1.62e-13	-6.6e+11	0.000	-.1061897	-.1061897
C1110	.0141464	1.62e-13	8.7e+10	0.000	.0141464	.0141464
C1118	-.0976676	.0021426	-45.58	0.000	-.1018802	-.093455
C1126	.1726004	1.62e-13	1.1e+12	0.000	.1726004	.1726004
C1146	.082948	1.62e-13	5.1e+11	0.000	.082948	.082948
C1150	-.1031702	1.62e-13	-6.4e+11	0.000	-.1031702	-.1031702
C1154	-.0808873	1.62e-13	-5.0e+11	0.000	-.0808873	-.0808873
C1164	-.4430665	1.62e-13	-2.7e+12	0.000	-.4430665	-.4430665
C1170	-.0327294	1.62e-13	-2.0e+11	0.000	-.0327294	-.0327294
C1202	-.0610256	1.62e-13	-3.8e+11	0.000	-.0610256	-.0610256
C1206	.1418422	1.62e-13	8.8e+11	0.000	.1418422	.1418422
C1210	.0432937	1.62e-13	2.7e+11	0.000	.0432937	.0432937
C1222	-.1268597	1.62e-13	-7.8e+11	0.000	-.1268597	-.1268597
C1226	-.0618682	1.62e-13	-3.8e+11	0.000	-.0618682	-.0618682
C1242	.1748275	1.62e-13	1.1e+12	0.000	.1748275	.1748275
C1254	.067175	1.62e-13	4.2e+11	0.000	.067175	.067175
C1258	.136787	.0030419	44.97	0.000	.1308064	.1427677
C1262	-.0428133	1.62e-13	-2.6e+11	0.000	-.0428133	-.0428133
C1270	.1317443	1.62e-13	8.1e+11	0.000	.1317443	.1317443
C1294	-.0259912	1.62e-13	-1.6e+11	0.000	-.0259912	-.0259912
C1298	-.0534208	1.62e-13	-3.3e+11	0.000	-.0534208	-.0534208
C1302	-.0664136	1.62e-13	-4.1e+11	0.000	-.0664136	-.0664136

C1314	.0607423	1.62e-13	3.8e+11	0.000	.0607423	.0607423
C1322	-.0350448	1.62e-13	-2.2e+11	0.000	-.0350448	-.0350448
C1338	.0256901	1.62e-13	1.6e+11	0.000	.0256901	.0256901
C1346	.0724086	1.62e-13	4.5e+11	0.000	.0724086	.0724086
C1374	.0593781	1.62e-13	3.7e+11	0.000	.0593781	.0593781
C1378	-.115238	1.62e-13	-7.1e+11	0.000	-.115238	-.115238
C1382	.0639702	1.62e-13	4.0e+11	0.000	.0639702	.0639702
C1390	.0522315	1.62e-13	3.2e+11	0.000	.0522315	.0522315
C1398	-.1561306	1.62e-13	-9.7e+11	0.000	-.1561306	-.1561306
C1401	-.0822023	1.62e-13	-5.1e+11	0.000	-.0822023	-.0822023
C1402	-.1677877	1.62e-13	-1.0e+12	0.000	-.1677877	-.1677877
C1410	-.1345354	1.62e-13	-8.3e+11	0.000	-.1345354	-.1345354
C1426	.0983017	1.62e-13	6.1e+11	0.000	.0983017	.0983017
C1446	.2407736	.0235262	10.23	0.000	.1945185	.2870287
C1450	.203979	.0115798	17.62	0.000	.1812119	.2267461
C1454	-.1222774	1.62e-13	-7.6e+11	0.000	-.1222774	-.1222774
C1474	.0932689	1.62e-13	5.8e+11	0.000	.0932689	.0932689
C1486	.4102737	1.62e-13	2.5e+12	0.000	.4102737	.4102737
C1518	-.141432	1.62e-13	-8.7e+11	0.000	-.141432	-.141432
C1526	-.0967511	1.62e-13	-6.0e+11	0.000	-.0967511	-.0967511
C1538	-.07498	1.62e-13	-4.6e+11	0.000	-.07498	-.07498
C1550	-.0930305	1.62e-13	-5.8e+11	0.000	-.0930305	-.0930305
C1554	.0614351	1.62e-13	3.8e+11	0.000	.0614351	.0614351
C1568	-.0663382	1.62e-13	-4.1e+11	0.000	-.0663382	-.0663382
C1594	-.07784	1.62e-13	-4.8e+11	0.000	-.07784	-.07784
C1598	.1093883	1.62e-13	6.8e+11	0.000	.1093883	.1093883
C1602	-.1490061	1.62e-13	-9.2e+11	0.000	-.1490061	-.1490061
C1606	-.1355776	1.62e-13	-8.4e+11	0.000	-.1355776	-.1355776
C1618	.2408713	1.62e-13	1.5e+12	0.000	.2408713	.2408713
C1622	.0530397	1.62e-13	3.3e+11	0.000	.0530397	.0530397
C1630	.0051068	1.62e-13	3.2e+10	0.000	.0051068	.0051068
C1654	-.0940741	1.62e-13	-5.8e+11	0.000	-.0940741	-.0940741
C1658	-.129677	1.62e-13	-8.0e+11	0.000	-.129677	-.129677
C1662	-.0229426	1.62e-13	-1.4e+11	0.000	-.0229426	-.0229426
C1670	.0506503	1.62e-13	3.1e+11	0.000	.0506503	.0506503
C1674	.0754565	1.62e-13	4.7e+11	0.000	.0754565	.0754565
C1682	.0683955	.0064557	10.59	0.000	.0557029	.0810882
C1686	.0331065	1.62e-13	2.0e+11	0.000	.0331065	.0331065
C1694	.0088232	1.62e-13	5.5e+10	0.000	.0088232	.0088232
C1698	.1713581	.1659153	1.03	0.302	-.1548501	.4975663
C1702	.0935443	1.62e-13	5.8e+11	0.000	.0935443	.0935443
C1714	.0293973	1.62e-13	1.8e+11	0.000	.0293973	.0293973
C1730	-.0397278	1.62e-13	-2.5e+11	0.000	-.0397278	-.0397278
C1742	.0122985	1.62e-13	7.6e+10	0.000	.0122985	.0122985
C1746	.0109372	1.62e-13	6.8e+10	0.000	.0109372	.0109372
C1766	.0576611	1.62e-13	3.6e+11	0.000	.0576611	.0576611
C1778	-.053868	1.62e-13	-3.3e+11	0.000	-.053868	-.053868
C1782	.0753582	1.62e-13	4.7e+11	0.000	.0753582	.0753582
C1786	-.0480738	1.62e-13	-3.0e+11	0.000	-.0480738	-.0480738
C1790	.0225751	1.62e-13	1.4e+11	0.000	.0225751	.0225751
C1798	-.0818144	1.62e-13	-5.1e+11	0.000	-.0818144	-.0818144
C1802	-.1636723	1.62e-13	-1.0e+12	0.000	-.1636723	-.1636723
C1814	.0997466	1.62e-13	6.2e+11	0.000	.0997466	.0997466
C1858	.0302492	1.62e-13	1.9e+11	0.000	.0302492	.0302492
C1870	-.0965623	1.62e-13	-6.0e+11	0.000	-.0965623	-.0965623
C1888	-.0261866	1.62e-13	-1.6e+11	0.000	-.0261866	-.0261866
C1906	-.1703799	1.62e-13	-1.1e+12	0.000	-.1703799	-.1703799
C1910	.2176657	1.62e-13	1.3e+12	0.000	.2176657	.2176657
C1914	.0101919	1.62e-13	6.3e+10	0.000	.0101919	.0101919
C1918	-.1739238	1.62e-13	-1.1e+12	0.000	-.1739238	-.1739238
C1930	-.051577	1.62e-13	-3.2e+11	0.000	-.051577	-.051577
C1934	-.0114987	1.62e-13	-7.1e+10	0.000	-.0114987	-.0114987
C1938	-.0542685	1.62e-13	-3.4e+11	0.000	-.0542685	-.0542685
C1946	-.0566818	1.62e-13	-3.5e+11	0.000	-.0566818	-.0566818
C1950	-.0329284	1.62e-13	-2.0e+11	0.000	-.0329284	-.0329284
C1966	-.0208979	1.62e-13	-1.3e+11	0.000	-.0208979	-.0208979
C1974	.2087021	.0161508	12.92	0.000	.1769479	.2404564
C1978	.0378617	1.62e-13	2.3e+11	0.000	.0378617	.0378617
C1982	.1170195	1.62e-13	7.2e+11	0.000	.1170195	.1170195
C2002	-.0267999	1.62e-13	-1.7e+11	0.000	-.0267999	-.0267999
C2010	.019001	1.62e-13	1.2e+11	0.000	.019001	.019001
C2022	-.1065973	1.62e-13	-6.6e+11	0.000	-.1065973	-.1065973

C2026	-.1190281	1.62e-13	-7.4e+11	0.000	-.1190281	-.1190281
C2050	-.0115162	1.62e-13	-7.1e+10	0.000	-.0115162	-.0115162
C2070	-.1098152	1.62e-13	-6.8e+11	0.000	-.1098152	-.1098152
C2074	-.0766562	1.62e-13	-4.7e+11	0.000	-.0766562	-.0766562
C2094	-.0674343	1.62e-13	-4.2e+11	0.000	-.0674343	-.0674343
C2106	-.0747158	1.62e-13	-4.6e+11	0.000	-.0747158	-.0747158
C2114	-.0301148	1.62e-13	-1.9e+11	0.000	-.0301148	-.0301148
C2130	-.0809928	1.62e-13	-5.0e+11	0.000	-.0809928	-.0809928
C2134	-.0767247	1.62e-13	-4.7e+11	0.000	-.0767247	-.0767247
C2150	-.0912435	1.62e-13	-5.6e+11	0.000	-.0912435	-.0912435
C2166	.0226751	1.62e-13	1.4e+11	0.000	.0226751	.0226751
C2178	-.0566488	1.62e-13	-3.5e+11	0.000	-.0566488	-.0566488
C2182	.1829446	1.62e-13	1.1e+12	0.000	.1829446	.1829446
C2202	.0010158	1.62e-13	6.3e+09	0.000	.0010158	.0010158
C2214	.0789296	1.62e-13	4.9e+11	0.000	.0789296	.0789296
C2218	-.0393971	1.62e-13	-2.4e+11	0.000	-.0393971	-.0393971
C2222	-.0343435	1.62e-13	-2.1e+11	0.000	-.0343435	-.0343435
C2238	-.0374354	1.62e-13	-2.3e+11	0.000	-.0374354	-.0374354
C2242	.000479	1.62e-13	3.0e+09	0.000	.000479	.000479
C2250	-.0924325	1.62e-13	-5.7e+11	0.000	-.0924325	-.0924325
C2252	-.0770966	1.62e-13	-4.8e+11	0.000	-.0770966	-.0770966
C2254	-.1127385	1.62e-13	-7.0e+11	0.000	-.1127385	-.1127385
C2266	.0024461	1.62e-13	1.5e+10	0.000	.0024461	.0024461
C2290	-.1244719	1.62e-13	-7.7e+11	0.000	-.1244719	-.1244719
C2306	-.0499445	1.62e-13	-3.1e+11	0.000	-.0499445	-.0499445
C2342	.0808905	1.62e-13	5.0e+11	0.000	.0808905	.0808905
C2346	-.1157851	1.62e-13	-7.2e+11	0.000	-.1157851	-.1157851
C2354	-.0849639	1.62e-13	-5.3e+11	0.000	-.0849639	-.0849639
C2358	.1158504	1.62e-13	7.2e+11	0.000	.1158504	.1158504
C2390	-.0418037	1.62e-13	-2.6e+11	0.000	-.0418037	-.0418037
C2402	.0114117	1.62e-13	7.1e+10	0.000	.0114117	.0114117
C2414	-.1209055	1.62e-13	-7.5e+11	0.000	-.1209055	-.1209055
C2422	-.0652323	1.62e-13	-4.0e+11	0.000	-.0652323	-.0652323
C2426	-.1582751	1.62e-13	-9.8e+11	0.000	-.1582751	-.1582751
C2430	.0453062	1.62e-13	2.8e+11	0.000	.0453062	.0453062
C2434	.0738152	1.62e-13	4.6e+11	0.000	.0738152	.0738152
C2442	-.0075193	1.62e-13	-4.6e+10	0.000	-.0075193	-.0075193
C2450	-.0454722	1.62e-13	-2.8e+11	0.000	-.0454722	-.0454722
C2454	.0784847	1.62e-13	4.9e+11	0.000	.0784847	.0784847
C2458	-.0834626	1.62e-13	-5.2e+11	0.000	-.0834626	-.0834626
C2466	.039808	1.62e-13	2.5e+11	0.000	.039808	.039808
C2478	-.0572013	1.62e-13	-3.5e+11	0.000	-.0572013	-.0572013
C2486	.0274233	1.62e-13	1.7e+11	0.000	.0274233	.0274233
C2502	-.5350649	1.62e-13	-3.3e+12	0.000	-.5350649	-.5350649
C2506	-.0671805	1.62e-13	-4.2e+11	0.000	-.0671805	-.0671805
C2518	-.0256975	1.62e-13	-1.6e+11	0.000	-.0256975	-.0256975
C2522	-.0448354	1.62e-13	-2.8e+11	0.000	-.0448354	-.0448354
C2526	-.0245466	1.62e-13	-1.5e+11	0.000	-.0245466	-.0245466
C2542	-.0036959	1.62e-13	-2.3e+10	0.000	-.0036959	-.0036959
C2550	-.0335154	1.62e-13	-2.1e+11	0.000	-.0335154	-.0335154
C2554	.1403121	1.62e-13	8.7e+11	0.000	.1403121	.1403121
C2562	-.1292967	1.62e-13	-8.0e+11	0.000	-.1292967	-.1292967
C2586	-.0493344	1.62e-13	-3.0e+11	0.000	-.0493344	-.0493344
C2594	.0040448	1.62e-13	2.5e+10	0.000	.0040448	.0040448
C2598	-.1511123	1.62e-13	-9.3e+11	0.000	-.1511123	-.1511123
C2614	-.0037748	1.62e-13	-2.3e+10	0.000	-.0037748	-.0037748
C2630	-.0732032	1.62e-13	-4.5e+11	0.000	-.0732032	-.0732032
C2638	-.0580095	1.62e-13	-3.6e+11	0.000	-.0580095	-.0580095
C2642	.1390056	1.62e-13	8.6e+11	0.000	.1390056	.1390056
C2658	-.1056536	1.62e-13	-6.5e+11	0.000	-.1056536	-.1056536
C2662	.0209658	1.62e-13	1.3e+11	0.000	.0209658	.0209658
C2682	.0264731	.0176606	1.50	0.135	-.0082496	.0611959
C2690	.0502835	1.62e-13	3.1e+11	0.000	.0502835	.0502835
C2698	-.0988619	1.62e-13	-6.1e+11	0.000	-.0988619	-.0988619
C2706	-.0435654	.0044291	-9.84	0.000	-.0522735	-.0348573
C2710	-.0298226	1.62e-13	-1.8e+11	0.000	-.0298226	-.0298226
C2714	-.0059574	1.62e-13	-3.7e+10	0.000	-.0059574	-.0059574
C2718	-.0389835	1.62e-13	-2.4e+11	0.000	-.0389835	-.0389835
C2726	.0759729	1.62e-13	4.7e+11	0.000	.0759729	.0759729
C2734	-.0885618	1.62e-13	-5.5e+11	0.000	-.0885618	-.0885618
C2750	-.0377952	1.62e-13	-2.3e+11	0.000	-.0377952	-.0377952
C2762	-.1466495	1.62e-13	-9.1e+11	0.000	-.1466495	-.1466495

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C2774  |  -.0810521   1.62e-13  -5.0e+11   0.000   -.0810521   -.0810521
C2778  |  -.1596374   1.62e-13  -9.9e+11   0.000   -.1596374   -.1596374
C2786  |  -.140937    1.62e-13  -8.7e+11   0.000   -.140937    -.140937
C2790  |  -.109908    1.62e-13  -6.8e+11   0.000   -.109908    -.109908
C2798  |   .1336161   1.62e-13   8.3e+11   0.000    .1336161    .1336161
C2802  |  -.029596    1.62e-13  -1.8e+11   0.000   -.029596    -.029596
C2810  |  -.0807281   1.62e-13  -5.0e+11   0.000   -.0807281   -.0807281
C2814  |   .043437    1.62e-13   2.7e+11   0.000    .043437     .043437
C2842  |   .1086758   .0247503    4.39     0.000    .0600138    .1573378
C2866  |  -.0105523   1.62e-13  -6.5e+10   0.000   -.0105523   -.0105523
C2870  |  -.1011839   1.62e-13  -6.3e+11   0.000   -.1011839   -.1011839
C2874  |   .0461388   1.62e-13   2.9e+11   0.000    .0461388    .0461388
C2894  |   .1304251   .0267304    4.88     0.000    .07787      .1829801
C2902  |  -.1394953   1.62e-13  -8.6e+11   0.000   -.1394953   -.1394953
C2910  |  -.167762    1.62e-13  -1.0e+12   0.000   -.167762    -.167762
C2918  |  -.0116696   1.62e-13  -7.2e+10   0.000   -.0116696   -.0116696
C2920  |  -.1305427   1.62e-13  -8.1e+11   0.000   -.1305427   -.1305427
C2934  |  -.0711235   1.62e-13  -4.4e+11   0.000   -.0711235   -.0711235
C2942  |   .0271256   1.62e-13   1.7e+11   0.000    .0271256    .0271256
C2946  |   .0293981   1.62e-13   1.8e+11   0.000    .0293981    .0293981
C2954  |  -.0290612   1.62e-13  -1.8e+11   0.000   -.0290612   -.0290612
C2962  |  -.0220191   1.62e-13  -1.4e+11   0.000   -.0220191   -.0220191
C2970  |  -.112349    1.62e-13  -6.9e+11   0.000   -.112349    -.112349
C2974  |  -.1315027   1.62e-13  -8.1e+11   0.000   -.1315027   -.1315027
C2982  |   .1503946   1.62e-13   9.3e+11   0.000    .1503946    .1503946
C2994  |  -.2006797   1.62e-13  -1.2e+12   0.000   -.2006797   -.2006797
C3002  |  -.1514055   1.62e-13  -9.4e+11   0.000   -.1514055   -.1514055
C3014  |  -.0527939   1.62e-13  -3.3e+11   0.000   -.0527939   -.0527939
C3030  |   .0509812   1.62e-13   3.2e+11   0.000    .0509812    .0509812
C3034  |  -.0248789   1.62e-13  -1.5e+11   0.000   -.0248789   -.0248789
C3046  |   .0083879   1.62e-13   5.2e+10   0.000    .0083879    .0083879
C3062  |  -.1063689   1.62e-13  -6.6e+11   0.000   -.1063689   -.1063689
C3070  |  -.0948182   1.62e-13  -5.9e+11   0.000   -.0948182   -.0948182
C3078  |  -.0071671   1.62e-13  -4.4e+10   0.000   -.0071671   -.0071671
C3086  |  -.2212763   1.62e-13  -1.4e+12   0.000   -.2212763   -.2212763
C3098  |   .0748555   1.62e-13   4.6e+11   0.000    .0748555    .0748555
C3102  |  -.0012217   1.62e-13  -7.6e+09   0.000   -.0012217   -.0012217
C3108  |   .3071634   .1728491    1.78     0.076   -.0326775    .6470043
C3114  |   .0132486   1.62e-13   8.2e+10   0.000    .0132486    .0132486
C3118  |   .0242938   1.62e-13   1.5e+11   0.000    .0242938    .0242938
C3134  |  -.1474188   1.62e-13  -9.1e+11   0.000   -.1474188   -.1474188
C3142  |  -.0705143   1.62e-13  -4.4e+11   0.000   -.0705143   -.0705143
C3146  |   .0693549   1.62e-13   4.3e+11   0.000    .0693549    .0693549
C3154  |   .0836203   1.62e-13   5.2e+11   0.000    .0836203    .0836203
C3170  |   .2012092   1.62e-13   1.2e+12   0.000    .2012092    .2012092
C3174  |  -.2296083   1.62e-13  -1.4e+12   0.000   -.2296083   -.2296083
C3186  |  -.1726561   1.62e-13  -1.1e+12   0.000   -.1726561   -.1726561
C3190  |  -.0861167   1.62e-13  -5.3e+11   0.000   -.0861167   -.0861167
C3242  |  -.4360565   1.62e-13  -2.7e+12   0.000   -.4360565   -.4360565
C3258  |  -.0785606   1.62e-13  -4.9e+11   0.000   -.0785606   -.0785606
C3278  |   .0834703   1.62e-13   5.2e+11   0.000    .0834703    .0834703
C3282  |   .1503835   1.62e-13   9.3e+11   0.000    .1503835    .1503835
C3290  |  -.0098661   1.62e-13  -6.1e+10   0.000   -.0098661   -.0098661
C3310  |   .1520225   1.62e-13   9.4e+11   0.000    .1520225    .1520225
C3314  |  -.1603978   1.62e-13  -9.9e+11   0.000   -.1603978   -.1603978
C3322  |  -.1173227   1.62e-13  -7.3e+11   0.000   -.1173227   -.1173227
C3326  |   .1123373   1.62e-13   6.9e+11   0.000    .1123373    .1123373
C3334  |  -.0242317   1.62e-13  -1.5e+11   0.000   -.0242317   -.0242317
C3346  |   .0922346   1.62e-13   5.7e+11   0.000    .0922346    .0922346
C3354  |  -.0274806   1.62e-13  -1.7e+11   0.000   -.0274806   -.0274806
C3366  |   .018642    1.62e-13   1.2e+11   0.000    .018642     .018642
C3370  |   .097797    1.62e-13   6.0e+11   0.000    .097797     .097797
C3374  |  -.1055572   1.62e-13  -6.5e+11   0.000   -.1055572   -.1055572
C3378  |  -.0466318   1.62e-13  -2.9e+11   0.000   -.0466318   -.0466318
C3386  |  -.0032761   1.62e-13  -2.0e+10   0.000   -.0032761   -.0032761
C3406  |  -.173336    1.62e-13  -1.1e+12   0.000   -.173336    -.173336
C3410  |  -.0314524   1.62e-13  -1.9e+11   0.000   -.0314524   -.0314524
C3458  |   .1072957   1.62e-13   6.6e+11   0.000    .1072957    .1072957
C3462  |  -.149517    1.62e-13  -9.2e+11   0.000   -.149517    -.149517
C3474  |  -.0559334   1.62e-13  -3.5e+11   0.000   -.0559334   -.0559334
C3482  |  -.0835291   1.62e-13  -5.2e+11   0.000   -.0835291   -.0835291
C3490  |   .1761902   1.62e-13   1.1e+12   0.000    .1761902    .1761902
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C3494	.181088	1.62e-13	1.1e+12	0.000	.181088	.181088
C3498	.1591579	1.62e-13	9.8e+11	0.000	.1591579	.1591579
C3510	-.0719094	1.62e-13	-4.4e+11	0.000	-.0719094	-.0719094
C3530	.1242533	1.62e-13	7.7e+11	0.000	.1242533	.1242533
C3538	.0406939	1.62e-13	2.5e+11	0.000	.0406939	.0406939
C3562	.3396677	.02069	16.42	0.000	.2989888	.3803465
C3566	-.1028797	1.62e-13	-6.4e+11	0.000	-.1028797	-.1028797
C3584	.0809847	1.62e-13	5.0e+11	0.000	.0809847	.0809847
C3598	.0638878	1.62e-13	3.9e+11	0.000	.0638878	.0638878
C3610	.0043358	1.62e-13	2.7e+10	0.000	.0043358	.0043358
C3614	.0014009	1.62e-13	8.7e+09	0.000	.0014009	.0014009
C3622	.1424874	1.62e-13	8.8e+11	0.000	.1424874	.1424874
C3626	-.0458831	1.62e-13	-2.8e+11	0.000	-.0458831	-.0458831
C3642	.0316282	1.62e-13	2.0e+11	0.000	.0316282	.0316282
C3650	.1078635	1.62e-13	6.7e+11	0.000	.1078635	.1078635
C3654	.0056984	1.62e-13	3.5e+10	0.000	.0056984	.0056984
C3674	.0515404	1.62e-13	3.2e+11	0.000	.0515404	.0515404
C3678	-.1375381	1.62e-13	-8.5e+11	0.000	-.1375381	-.1375381
C3698	-.0985921	1.62e-13	-6.1e+11	0.000	-.0985921	-.0985921
C3710	.1781759	1.62e-13	1.1e+12	0.000	.1781759	.1781759
C3734	.0067698	1.62e-13	4.2e+10	0.000	.0067698	.0067698
C3746	-.0182046	1.62e-13	-1.1e+11	0.000	-.0182046	-.0182046
C3762	-.1182348	1.62e-13	-7.3e+11	0.000	-.1182348	-.1182348
C3786	-.0208025	1.62e-13	-1.3e+11	0.000	-.0208025	-.0208025
C3790	-.0380369	1.62e-13	-2.4e+11	0.000	-.0380369	-.0380369
C3798	.124899	1.62e-13	7.7e+11	0.000	.124899	.124899
C3806	.2057634	1.62e-13	1.3e+12	0.000	.2057634	.2057634
C3822	-.1216678	1.62e-13	-7.5e+11	0.000	-.1216678	-.1216678
C3830	.0661222	.0073136	9.04	0.000	.0517429	.0805015
C3834	.0425581	1.62e-13	2.6e+11	0.000	.0425581	.0425581
C3854	-.1096704	1.62e-13	-6.8e+11	0.000	-.1096704	-.1096704
C3866	-.5242362	1.62e-13	-3.2e+12	0.000	-.5242362	-.5242362
C3886	.0116447	1.62e-13	7.2e+10	0.000	.0116447	.0116447
C3890	.1288374	1.62e-13	8.0e+11	0.000	.1288374	.1288374
C3894	.0503717	1.62e-13	3.1e+11	0.000	.0503717	.0503717
C3914	.0185098	1.62e-13	1.1e+11	0.000	.0185098	.0185098
C3930	.0594508	1.62e-13	3.7e+11	0.000	.0594508	.0594508
C3934	-.0056695	1.62e-13	-3.5e+10	0.000	-.0056695	-.0056695
C3938	.0107444	1.62e-13	6.6e+10	0.000	.0107444	.0107444
C3946	-.018577	1.62e-13	-1.1e+11	0.000	-.018577	-.018577
C3954	-.1310073	1.62e-13	-8.1e+11	0.000	-.1310073	-.1310073
C3958	.0730085	1.62e-13	4.5e+11	0.000	.0730085	.0730085
C3966	-.0320274	1.62e-13	-2.0e+11	0.000	-.0320274	-.0320274
C3974	.0107076	1.62e-13	6.6e+10	0.000	.0107076	.0107076
C3982	.0868465	1.62e-13	5.4e+11	0.000	.0868465	.0868465
C3990	.1560749	1.62e-13	9.6e+11	0.000	.1560749	.1560749
C4006	.0183503	1.62e-13	1.1e+11	0.000	.0183503	.0183503
C4014	.1355139	1.62e-13	8.4e+11	0.000	.1355139	.1355139
C4022	-.0317059	1.62e-13	-2.0e+11	0.000	-.0317059	-.0317059
C4034	-.0878901	1.62e-13	-5.4e+11	0.000	-.0878901	-.0878901
C4038	-.0380764	1.62e-13	-2.4e+11	0.000	-.0380764	-.0380764
C4042	-.0167768	1.62e-13	-1.0e+11	0.000	-.0167768	-.0167768
C4058	-.0988934	1.62e-13	-6.1e+11	0.000	-.0988934	-.0988934
C4066	-.0941536	1.62e-13	-5.8e+11	0.000	-.0941536	-.0941536
C4090	.183987	1.62e-13	1.1e+12	0.000	.183987	.183987
C4098	-.0931466	1.62e-13	-5.8e+11	0.000	-.0931466	-.0931466
C4106	-.0449391	1.62e-13	-2.8e+11	0.000	-.0449391	-.0449391
C4110	-.0283451	1.62e-13	-1.8e+11	0.000	-.0283451	-.0283451
C4114	-.1335543	1.62e-13	-8.3e+11	0.000	-.1335543	-.1335543
C4118	.0411917	1.62e-13	2.5e+11	0.000	.0411917	.0411917
C4142	.009184	1.62e-13	5.7e+10	0.000	.009184	.009184
C4150	.1849309	1.62e-13	1.1e+12	0.000	.1849309	.1849309
C4154	-.0291501	1.62e-13	-1.8e+11	0.000	-.0291501	-.0291501
C4162	.1924208	1.62e-13	1.2e+12	0.000	.1924208	.1924208
C4166	-.0014498	1.62e-13	-9.0e+09	0.000	-.0014498	-.0014498
C4170	.1663745	.0084247	19.75	0.000	.1498105	.1829384
C4174	.1913976	1.62e-13	1.2e+12	0.000	.1913976	.1913976
C4186	.4409702	.1724929	2.56	0.011	.1018297	.7801108
C4190	-.6025055	1.62e-13	-3.7e+12	0.000	-.6025055	-.6025055
C4194	.4933332	1.62e-13	3.0e+12	0.000	.4933332	.4933332
C4198	-.2952877	1.62e-13	-1.8e+12	0.000	-.2952877	-.2952877
C4202	.0940181	1.62e-13	5.8e+11	0.000	.0940181	.0940181

C4210	.1618379	1.62e-13	1.0e+12	0.000	.1618379	.1618379
C4214	.1605536	1.62e-13	9.9e+11	0.000	.1605536	.1605536
C4220	.1964223	1.62e-13	1.2e+12	0.000	.1964223	.1964223
C4222	.2127826	1.62e-13	1.3e+12	0.000	.2127826	.2127826
C4234	.0048844	1.62e-13	3.0e+10	0.000	.0048844	.0048844
C4254	-.0834302	1.62e-13	-5.2e+11	0.000	-.0834302	-.0834302
C4266	.4521628	1.62e-13	2.8e+12	0.000	.4521628	.4521628
C4268	-.0010411	1.62e-13	-6.4e+09	0.000	-.0010411	-.0010411
C4270	-.0525565	1.62e-13	-3.2e+11	0.000	-.0525565	-.0525565
C4310	-.0958466	1.62e-13	-5.9e+11	0.000	-.0958466	-.0958466
C4330	-.0017414	1.62e-13	-1.1e+10	0.000	-.0017414	-.0017414
C4334	-.0090668	1.62e-13	-5.6e+10	0.000	-.0090668	-.0090668
C4342	-.1075316	1.62e-13	-6.6e+11	0.000	-.1075316	-.1075316
C4358	-.1171841	1.62e-13	-7.2e+11	0.000	-.1171841	-.1171841
C4362	.0237435	1.62e-13	1.5e+11	0.000	.0237435	.0237435
C4378	-.0818104	1.62e-13	-5.1e+11	0.000	-.0818104	-.0818104
C4390	-.0406379	1.62e-13	-2.5e+11	0.000	-.0406379	-.0406379
C4406	.0877363	1.62e-13	5.4e+11	0.000	.0877363	.0877363
C4410	-.0789228	1.62e-13	-4.9e+11	0.000	-.0789228	-.0789228
C4414	.047385	1.62e-13	2.9e+11	0.000	.047385	.047385
C4418	-.0196556	1.62e-13	-1.2e+11	0.000	-.0196556	-.0196556
C4422	-.0928834	1.62e-13	-5.7e+11	0.000	-.0928834	-.0928834
C4430	-.1403711	1.62e-13	-8.7e+11	0.000	-.1403711	-.1403711
C4442	-.0957953	1.62e-13	-5.9e+11	0.000	-.0957953	-.0957953
C4470	.0955062	1.62e-13	5.9e+11	0.000	.0955062	.0955062
C4494	-.1317755	1.62e-13	-8.1e+11	0.000	-.1317755	-.1317755
C4506	-.0171878	1.62e-13	-1.1e+11	0.000	-.0171878	-.0171878
C4522	-.0969211	1.62e-13	-6.0e+11	0.000	-.0969211	-.0969211
C4530	.122449	1.62e-13	7.6e+11	0.000	.122449	.122449
C4546	-.1305542	1.62e-13	-8.1e+11	0.000	-.1305542	-.1305542
C4550	-.0394915	1.62e-13	-2.4e+11	0.000	-.0394915	-.0394915
C4554	-.0921854	1.62e-13	-5.7e+11	0.000	-.0921854	-.0921854
C4578	-.0522841	1.62e-13	-3.2e+11	0.000	-.0522841	-.0522841
C4582	-.1150575	1.62e-13	-7.1e+11	0.000	-.1150575	-.1150575
C4594	.1629926	.0067981	23.98	0.000	.1496268	.1763583
C4606	.1190326	.0020304	58.63	0.000	.1150406	.1230246
C4614	.0183652	1.62e-13	1.1e+11	0.000	.0183652	.0183652
C4622	-.0682833	1.62e-13	-4.2e+11	0.000	-.0682833	-.0682833
C4634	.0819894	1.62e-13	5.1e+11	0.000	.0819894	.0819894
C4652	.1195078	1.62e-13	7.4e+11	0.000	.1195078	.1195078
C4654	-.0766416	1.62e-13	-4.7e+11	0.000	-.0766416	-.0766416
C4666	-.0975806	1.62e-13	-6.0e+11	0.000	-.0975806	-.0975806
C4670	.12005	1.62e-13	7.4e+11	0.000	.12005	.12005
C4702	.0318662	1.62e-13	2.0e+11	0.000	.0318662	.0318662
C4722	.0160857	1.62e-13	9.9e+10	0.000	.0160857	.0160857
C4726	-.0124339	.008508	-1.46	0.145	-.0291615	.0042937
C4730	-.011449	1.62e-13	-7.1e+10	0.000	-.011449	-.011449
C4738	-.0275617	1.62e-13	-1.7e+11	0.000	-.0275617	-.0275617
C4746	-.040079	1.62e-13	-2.5e+11	0.000	-.040079	-.040079
C4758	-.0610915	1.62e-13	-3.8e+11	0.000	-.0610915	-.0610915
C4790	.2194015	.1724008	1.27	0.204	-.1195579	.5583608
C4794	-.0929545	1.62e-13	-5.7e+11	0.000	-.0929545	-.0929545
C4806	-.0494362	1.62e-13	-3.1e+11	0.000	-.0494362	-.0494362
C4814	-.09054	1.62e-13	-5.6e+11	0.000	-.09054	-.09054
C4826	-.1827276	1.62e-13	-1.1e+12	0.000	-.1827276	-.1827276
C4830	.0170951	1.62e-13	1.1e+11	0.000	.0170951	.0170951
C4854	-.124453	1.62e-13	-7.7e+11	0.000	-.124453	-.124453
C4862	-.0054676	1.62e-13	-3.4e+10	0.000	-.0054676	-.0054676
C4866	-.0570154	1.62e-13	-3.5e+11	0.000	-.0570154	-.0570154
C4870	-.1359677	1.62e-13	-8.4e+11	0.000	-.1359677	-.1359677
C4890	-.0025239	1.62e-13	-1.6e+10	0.000	-.0025239	-.0025239
C4902	.0187933	1.62e-13	1.2e+11	0.000	.0187933	.0187933
C4918	-.0064859	1.62e-13	-4.0e+10	0.000	-.0064859	-.0064859
C4934	.0876597	1.62e-13	5.4e+11	0.000	.0876597	.0876597
C4942	.0388882	1.62e-13	2.4e+11	0.000	.0388882	.0388882
C4962	-.0513979	1.62e-13	-3.2e+11	0.000	-.0513979	-.0513979
C4966	-.0947327	1.62e-13	-5.9e+11	0.000	-.0947327	-.0947327
C4970	.0361752	1.62e-13	2.2e+11	0.000	.0361752	.0361752
C4974	.0433663	1.62e-13	2.7e+11	0.000	.0433663	.0433663
ffrdc_count						
1	-.0163464	.1406576	-0.12	0.908	-.292895	.2602022

2	0	(omitted)				
3	0	(omitted)				
5	0	(omitted)				
8	.0400897	.0094677	4.23	0.000	.021475	.0587044
9	.0328359	.0085826	3.83	0.000	.0159616	.0497102
10	.0117588	.0047062	2.50	0.013	.002506	.0210117
11	.0018504	.0024752	0.75	0.455	-.0030162	.0067169
12	.0046533	.0019591	2.38	0.018	.0008015	.0085051
13	0	(omitted)				
_cons	10.98309	.0024304	4519.10	0.000	10.97831	10.98786

```
697 outreg2 using output/reg_retail.doc, replace ctitle("OLS full controls, Average annu
> al pay (log-log)") keep(log_federal_funding) addtext(MSA FE, Yes, Year FE, Yes, FFRD
> C count FE, Yes)
output/reg_retail.doc
dir : seeout

698
699 reg log_annual_avg_emplvl log_federal_funding i.year i.msa_factor i.ffrdc_count, rob
> ust cluster(msa_factor)
note: 2.ffrdc_count omitted because of collinearity
note: 3.ffrdc_count omitted because of collinearity
note: 5.ffrdc_count omitted because of collinearity
note: 13.ffrdc_count omitted because of collinearity
```

Linear regression		Number of obs	=	7,372
		F(19, 387)	=	.
		Prob > F	=	.
		R-squared	=	0.9971
		Root MSE	=	.05982

(Std. Err. adjusted for 388 clusters in msa_factor)

log_annual_avg_em~l	Coef.	Robust Std. Err.	t	P>|t|	[95% Conf. Interval]	
log_federal_funding	-.0360482	.0176155	-2.05	0.041	-.0706822	-.0014141
year						
2002	-.0084224	.0017809	-4.73	0.000	-.0119239	-.004921
2003	-.0091245	.0026959	-3.38	0.001	-.0144248	-.0038242
2004	.0043676	.0033941	1.29	0.199	-.0023056	.0110409
2005	.0194528	.0042411	4.59	0.000	.0111143	.0277912
2006	.0312692	.0049924	6.26	0.000	.0214536	.0410847
2007	.0426181	.0056332	7.57	0.000	.0315426	.0536937
2008	.0311715	.0058168	5.36	0.000	.019735	.042608
2009	-.0151222	.0058571	-2.58	0.010	-.0266379	-.0036065
2010	-.0208716	.0059741	-3.49	0.001	-.0326173	-.0091259
2011	-.0097475	.0062015	-1.57	0.117	-.0219404	.0024453
2012	-.0002876	.0064917	-0.04	0.965	-.013051	.0124758
2013	.0117703	.0067872	1.73	0.084	-.001574	.0251146
2014	.0272763	.0072048	3.79	0.000	.0131109	.0414417
2015	.0452677	.0076091	5.95	0.000	.0303074	.0602281
2016	.0559897	.0078661	7.12	0.000	.0405241	.0714553
2017	.0529194	.0082042	6.45	0.000	.036789	.0690497
2018	.0492455	.0087215	5.65	0.000	.032098	.0663929
2019	.0369322	.0090921	4.06	0.000	.019056	.0548083
msa_factor						
C1038	-.0455011	1.71e-13	-2.7e+11	0.000	-.0455011	-.0455011
C1042	1.507919	1.71e-13	8.8e+12	0.000	1.507919	1.507919
C1050	-.072859	1.71e-13	-4.2e+11	0.000	-.072859	-.072859
C1054	-.5472352	1.71e-13	-3.2e+12	0.000	-.5472352	-.5472352
C1058	1.760985	1.71e-13	1.0e+13	0.000	1.760985	1.760985
C1074	1.795053	.0727098	24.69	0.000	1.652097	1.938009
C1078	-.0576416	1.71e-13	-3.4e+11	0.000	-.0576416	-.0576416
C1090	1.58882	1.71e-13	9.3e+12	0.000	1.58882	1.58882
C1102	.0400977	1.71e-13	2.3e+11	0.000	.0400977	.0400977
C1110	.5508478	1.71e-13	3.2e+12	0.000	.5508478	.5508478
C1118	-.5012896	.0121317	-41.32	0.000	-.5251419	-.4774373

C1126	.9214432	1.71e-13	5.4e+12	0.000	.9214432	.9214432
C1146	.718129	1.71e-13	4.2e+12	0.000	.718129	.718129
C1150	-.3263927	1.71e-13	-1.9e+12	0.000	-.3263927	-.3263927
C1154	.5572404	1.71e-13	3.2e+12	0.000	.5572404	.5572404
C1164	-.2965825	1.71e-13	-1.7e+12	0.000	-.2965825	-.2965825
C1170	1.045449	1.71e-13	6.1e+12	0.000	1.045449	1.045449
C1202	.1459163	1.71e-13	8.5e+11	0.000	.1459163	.1459163
C1206	3.463308	1.71e-13	2.0e+13	0.000	3.463308	3.463308
C1210	.6327778	1.71e-13	3.7e+12	0.000	.6327778	.6327778
C1222	-.2705351	1.71e-13	-1.6e+12	0.000	-.2705351	-.2705351
C1226	1.122314	1.71e-13	6.5e+12	0.000	1.122314	1.122314
C1242	2.340629	1.71e-13	1.4e+13	0.000	2.340629	2.340629
C1254	1.231185	1.71e-13	7.2e+12	0.000	1.231185	1.231185
C1258	2.841031	.0076751	370.16	0.000	2.825941	2.856121
C1262	.3008289	1.71e-13	1.8e+12	0.000	.3008289	.3008289
C1270	.6522367	1.71e-13	3.8e+12	0.000	.6522367	.6522367
C1294	1.596624	1.71e-13	9.3e+12	0.000	1.596624	1.596624
C1298	-.2739105	1.71e-13	-1.6e+12	0.000	-.2739105	-.2739105
C1302	-.3872358	1.71e-13	-2.3e+12	0.000	-.3872358	-.3872358
C1314	.8912615	1.71e-13	5.2e+12	0.000	.8912615	.8912615
C1322	-.2102438	1.71e-13	-1.2e+12	0.000	-.2102438	-.2102438
C1338	.2110765	1.71e-13	1.2e+12	0.000	.2110765	.2110765
C1346	.1786161	1.71e-13	1.0e+12	0.000	.1786161	.1786161
C1374	.2521055	1.71e-13	1.5e+12	0.000	.2521055	.2521055
C1378	.4158528	1.71e-13	2.4e+12	0.000	.4158528	.4158528
C1382	1.973193	1.71e-13	1.2e+13	0.000	1.973193	1.973193
C1390	-.0228938	1.71e-13	-1.3e+11	0.000	-.0228938	-.0228938
C1398	-.0175176	1.71e-13	-1.0e+11	0.000	-.0175176	-.0175176
C1401	.1593464	1.71e-13	9.3e+11	0.000	.1593464	.1593464
C1402	-.1030712	1.71e-13	-6.0e+11	0.000	-.1030712	-.1030712
C1410	-.7005251	1.71e-13	-4.1e+12	0.000	-.7005251	-.7005251
C1426	1.355693	1.71e-13	7.9e+12	0.000	1.355693	1.355693
C1446	3.53082	.0536875	65.77	0.000	3.425264	3.636375
C1450	.7689543	.0275669	27.89	0.000	.7147547	.823154
C1454	-.013466	1.71e-13	-7.9e+10	0.000	-.013466	-.013466
C1474	.2632345	1.71e-13	1.5e+12	0.000	.2632345	.2632345
C1486	1.800024	1.71e-13	1.0e+13	0.000	1.800024	1.800024
C1518	.6941529	1.71e-13	4.0e+12	0.000	.6941529	.6941529
C1526	-.3849328	1.71e-13	-2.2e+12	0.000	-.3849328	-.3849328
C1538	2.013186	1.71e-13	1.2e+13	0.000	2.013186	2.013186
C1550	-.0288411	1.71e-13	-1.7e+11	0.000	-.0288411	-.0288411
C1554	.5953245	1.71e-13	3.5e+12	0.000	.5953245	.5953245
C1568	-.6216322	1.71e-13	-3.6e+12	0.000	-.6216322	-.6216322
C1594	.9386896	1.71e-13	5.5e+12	0.000	.9386896	.9386896
C1598	1.455792	1.71e-13	8.5e+12	0.000	1.455792	1.455792
C1602	-.2900086	1.71e-13	-1.7e+12	0.000	-.2900086	-.2900086
C1606	-.1638888	1.71e-13	-9.6e+11	0.000	-.1638888	-.1638888
C1618	-.9292743	1.71e-13	-5.4e+12	0.000	-.9292743	-.9292743
C1622	-.5321425	1.71e-13	-3.1e+12	0.000	-.5321425	-.5321425
C1630	.6550168	1.71e-13	3.8e+12	0.000	.6550168	.6550168
C1654	-.18787	1.71e-13	-1.1e+12	0.000	-.18787	-.18787
C1658	.24887	1.71e-13	1.5e+12	0.000	.24887	.24887
C1662	.4687032	1.71e-13	2.7e+12	0.000	.4687032	.4687032
C1670	1.486541	1.71e-13	8.7e+12	0.000	1.486541	1.486541
C1674	2.613984	1.71e-13	1.5e+13	0.000	2.613984	2.613984
C1682	.310679	.0174808	17.77	0.000	.2763097	.3450484
C1686	1.166713	1.71e-13	6.8e+12	0.000	1.166713	1.166713
C1694	-.4065584	1.71e-13	-2.4e+12	0.000	-.4065584	-.4065584
C1698	4.787252	.3785929	12.64	0.000	4.042895	5.531608
C1702	.2063701	1.71e-13	1.2e+12	0.000	.2063701	.2063701
C1714	2.5631	1.71e-13	1.5e+13	0.000	2.5631	2.5631
C1730	.2985358	1.71e-13	1.7e+12	0.000	.2985358	.2985358
C1742	-.5640627	1.71e-13	-3.3e+12	0.000	-.5640627	-.5640627
C1746	2.547567	1.71e-13	1.5e+13	0.000	2.547567	2.547567
C1766	-.0511439	1.71e-13	-3.0e+11	0.000	-.0511439	-.0511439
C1778	.2447725	1.71e-13	1.4e+12	0.000	.2447725	.2447725
C1782	1.295506	1.71e-13	7.6e+12	0.000	1.295506	1.295506
C1786	.2526867	1.71e-13	1.5e+12	0.000	.2526867	.2526867
C1790	1.553194	1.71e-13	9.1e+12	0.000	1.553194	1.553194
C1798	.486441	1.71e-13	2.8e+12	0.000	.486441	.486441
C1802	-.6191163	1.71e-13	-3.6e+12	0.000	-.6191163	-.6191163
C1814	2.548528	1.71e-13	1.5e+13	0.000	2.548528	2.548528

C1858	.9089983	1.71e-13	5.3e+12	0.000	.9089983	.9089983
C1870	-.9048144	1.71e-13	-5.3e+12	0.000	-.9048144	-.9048144
C1888	.6067043	1.71e-13	3.5e+12	0.000	.6067043	.6067043
C1906	-.520446	1.71e-13	-3.0e+12	0.000	-.520446	-.520446
C1910	3.685437	1.71e-13	2.1e+13	0.000	3.685437	3.685437
C1914	-.1465568	1.71e-13	-8.5e+11	0.000	-.1465568	-.1465568
C1918	-.8586824	1.71e-13	-5.0e+12	0.000	-.8586824	-.8586824
C1930	.3618624	1.71e-13	2.1e+12	0.000	.3618624	.3618624
C1934	1.006709	1.71e-13	5.9e+12	0.000	1.006709	1.006709
C1938	1.59733	1.71e-13	9.3e+12	0.000	1.59733	1.59733
C1946	-.2502027	1.71e-13	-1.5e+12	0.000	-.2502027	-.2502027
C1950	-.3759438	1.71e-13	-2.2e+12	0.000	-.3759438	-.3759438
C1966	1.209429	1.71e-13	7.1e+12	0.000	1.209429	1.209429
C1974	2.830689	.0373685	75.75	0.000	2.757218	2.904159
C1978	1.517952	1.71e-13	8.9e+12	0.000	1.517952	1.517952
C1982	3.220434	1.71e-13	1.9e+13	0.000	3.220434	3.220434
C2002	.0905958	1.71e-13	5.3e+11	0.000	.0905958	.0905958
C2010	.0769941	1.71e-13	4.5e+11	0.000	.0769941	.0769941
C2022	-.1561156	1.71e-13	-9.1e+11	0.000	-.1561156	-.1561156
C2026	.63696	1.71e-13	3.7e+12	0.000	.63696	.63696
C2050	1.042178	1.71e-13	6.1e+12	0.000	1.042178	1.042178
C2070	.08587	1.71e-13	5.0e+11	0.000	.08587	.08587
C2074	.2622789	1.71e-13	1.5e+12	0.000	.2622789	.2622789
C2094	-.1110705	1.71e-13	-6.5e+11	0.000	-.1110705	-.1110705
C2106	-.208336	1.71e-13	-1.2e+12	0.000	-.208336	-.208336
C2114	.1222402	1.71e-13	7.1e+11	0.000	.1222402	.1222402
C2130	-.4413818	1.71e-13	-2.6e+12	0.000	-.4413818	-.4413818
C2134	1.463545	1.71e-13	8.5e+12	0.000	1.463545	1.463545
C2150	.6266504	1.71e-13	3.7e+12	0.000	.6266504	.6266504
C2166	.8427198	1.71e-13	4.9e+12	0.000	.8427198	.8427198
C2178	.7351535	1.71e-13	4.3e+12	0.000	.7351535	.7351535
C2182	-.5906253	1.71e-13	-3.4e+12	0.000	-.5906253	-.5906253
C2202	.5987744	1.71e-13	3.5e+12	0.000	.5987744	.5987744
C2214	-.3029732	1.71e-13	-1.8e+12	0.000	-.3029732	-.3029732
C2218	.6652543	1.71e-13	3.9e+12	0.000	.6652543	.6652543
C2222	.9897718	1.71e-13	5.8e+12	0.000	.9897718	.9897718
C2238	-.1632733	1.71e-13	-9.5e+11	0.000	-.1632733	-.1632733
C2242	.8957599	1.71e-13	5.2e+12	0.000	.8957599	.8957599
C2250	.2596732	1.71e-13	1.5e+12	0.000	.2596732	.2596732
C2252	-.053759	1.71e-13	-3.1e+11	0.000	-.053759	-.053759
C2254	-.4074261	1.71e-13	-2.4e+12	0.000	-.4074261	-.4074261
C2266	.739351	1.71e-13	4.3e+12	0.000	.739351	.739351
C2290	.4251927	1.71e-13	2.5e+12	0.000	.4251927	.4251927
C2306	1.009287	1.71e-13	5.9e+12	0.000	1.009287	1.009287
C2342	1.456485	1.71e-13	8.5e+12	0.000	1.456485	1.456485
C2346	-.5941387	1.71e-13	-3.5e+12	0.000	-.5941387	-.5941387
C2354	.5091915	1.71e-13	3.0e+12	0.000	.5091915	.5091915
C2358	-.0626621	1.71e-13	-3.7e+11	0.000	-.0626621	-.0626621
C2390	-.8404723	1.71e-13	-4.9e+12	0.000	-.8404723	-.8404723
C2402	-.1119211	1.71e-13	-6.5e+11	0.000	-.1119211	-.1119211
C2414	-.3773994	1.71e-13	-2.2e+12	0.000	-.3773994	-.3773994
C2422	-.0962488	1.71e-13	-5.6e+11	0.000	-.0962488	-.0962488
C2426	-.3513254	1.71e-13	-2.0e+12	0.000	-.3513254	-.3513254
C2430	-.0301679	1.71e-13	-1.8e+11	0.000	-.0301679	-.0301679
C2434	1.780067	1.71e-13	1.0e+13	0.000	1.780067	1.780067
C2442	-.7810514	1.71e-13	-4.6e+12	0.000	-.7810514	-.7810514
C2450	-.4743424	1.71e-13	-2.8e+12	0.000	-.4743424	-.4743424
C2454	.0497534	1.71e-13	2.9e+11	0.000	.0497534	.0497534
C2458	.7192731	1.71e-13	4.2e+12	0.000	.7192731	.7192731
C2466	1.516492	1.71e-13	8.8e+12	0.000	1.516492	1.516492
C2478	.0402687	1.71e-13	2.3e+11	0.000	.0402687	.0402687
C2486	1.668871	1.71e-13	9.7e+12	0.000	1.668871	1.668871
C2502	-1.382728	1.72e-13	-8.1e+12	0.000	-1.382728	-1.382728
C2506	.7408505	1.71e-13	4.3e+12	0.000	.7408505	.7408505
C2518	.5439057	1.71e-13	3.2e+12	0.000	.5439057	.5439057
C2522	-.2480062	1.71e-13	-1.4e+12	0.000	-.2480062	-.2480062
C2526	-.7279552	1.71e-13	-4.2e+12	0.000	-.7279552	-.7279552
C2542	1.365332	1.71e-13	8.0e+12	0.000	1.365332	1.365332
C2550	-.1208725	1.71e-13	-7.0e+11	0.000	-.1208725	-.1208725
C2554	2.022456	1.71e-13	1.2e+13	0.000	2.022456	2.022456
C2562	.0314648	1.71e-13	1.8e+11	0.000	.0314648	.0314648
C2586	.6826743	1.71e-13	4.0e+12	0.000	.6826743	.6826743

C2594	.2595945	1.71e-13	1.5e+12	0.000	.2595945	.2595945
C2598	-1.431273	1.71e-13	-8.3e+12	0.000	-1.431273	-1.431273
C2614	-.4290861	1.71e-13	-2.5e+12	0.000	-.4290861	-.4290861
C2630	-.3685491	1.71e-13	-2.1e+12	0.000	-.3685491	-.3685491
C2638	.261078	1.71e-13	1.5e+12	0.000	.261078	.261078
C2642	3.4948	1.71e-13	2.0e+13	0.000	3.4948	3.4948
C2658	.783005	1.71e-13	4.6e+12	0.000	.783005	.783005
C2662	1.013849	1.71e-13	5.9e+12	0.000	1.013849	1.013849
C2682	.0104589	.0406753	0.26	0.797	-.0695132	.0904311
C2690	2.501501	1.71e-13	1.5e+13	0.000	2.501501	2.501501
C2698	.1805316	1.71e-13	1.1e+12	0.000	.1805316	.1805316
C2706	-.5295671	.0124447	-42.55	0.000	-.5540348	-.5050994
C2710	-.1512342	1.71e-13	-8.8e+11	0.000	-.1512342	-.1512342
C2714	1.237134	1.71e-13	7.2e+12	0.000	1.237134	1.237134
C2718	-.084155	1.71e-13	-4.9e+11	0.000	-.084155	-.084155
C2726	2.181631	1.71e-13	1.3e+13	0.000	2.181631	2.181631
C2734	-.110521	1.71e-13	-6.4e+11	0.000	-.110521	-.110521
C2750	.0363669	1.71e-13	2.1e+11	0.000	.0363669	.0363669
C2762	.0566897	1.71e-13	3.3e+11	0.000	.0566897	.0566897
C2774	.152329	1.71e-13	8.9e+11	0.000	.152329	.152329
C2778	-.1365975	1.71e-13	-8.0e+11	0.000	-.1365975	-.1365975
C2786	-.2034512	1.71e-13	-1.2e+12	0.000	-.2034512	-.2034512
C2790	.2016767	1.71e-13	1.2e+12	0.000	.2016767	.2016767
C2798	.1258538	1.71e-13	7.3e+11	0.000	.1258538	.1258538
C2802	.630655	1.71e-13	3.7e+12	0.000	.630655	.630655
C2810	-.3642446	1.71e-13	-2.1e+12	0.000	-.3642446	-.3642446
C2814	2.561535	1.71e-13	1.5e+13	0.000	2.561535	2.561535
C2842	.447767	.0564253	7.94	0.000	.3368285	.5587056
C2866	.626016	1.71e-13	3.7e+12	0.000	.626016	.626016
C2870	.6071206	1.71e-13	3.5e+12	0.000	.6071206	.6071206
C2874	.082851	1.71e-13	4.8e+11	0.000	.082851	.082851
C2894	1.85155	.0608644	30.42	0.000	1.731884	1.971216
C2902	-.4933457	1.71e-13	-2.9e+12	0.000	-.4933457	-.4933457
C2910	.0605771	1.71e-13	3.5e+11	0.000	.0605771	.0605771
C2918	1.147229	1.71e-13	6.7e+12	0.000	1.147229	1.147229
C2920	.1787532	1.71e-13	1.0e+12	0.000	.1787532	.1787532
C2934	.2500709	1.71e-13	1.5e+12	0.000	.2500709	.2500709
C2942	.0358981	1.71e-13	2.1e+11	0.000	.0358981	.0358981
C2946	1.142911	1.71e-13	6.7e+12	0.000	1.142911	1.142911
C2954	1.273497	1.71e-13	7.4e+12	0.000	1.273497	1.273497
C2962	.9891718	1.71e-13	5.8e+12	0.000	.9891718	.9891718
C2970	.394572	1.71e-13	2.3e+12	0.000	.394572	.394572
C2974	-.1390206	1.71e-13	-8.1e+11	0.000	-.1390206	-.1390206
C2982	2.465861	1.71e-13	1.4e+13	0.000	2.465861	2.465861
C2994	-.3443771	1.71e-13	-2.0e+12	0.000	-.3443771	-.3443771
C3002	-.4398688	1.71e-13	-2.6e+12	0.000	-.4398688	-.4398688
C3014	-.2751698	1.71e-13	-1.6e+12	0.000	-.2751698	-.2751698
C3030	-.8412565	1.71e-13	-4.9e+12	0.000	-.8412565	-.8412565
C3034	-.2251081	1.71e-13	-1.3e+12	0.000	-.2251081	-.2251081
C3046	1.245739	1.71e-13	7.3e+12	0.000	1.245739	1.245739
C3062	-.2146494	1.71e-13	-1.3e+12	0.000	-.2146494	-.2146494
C3070	.7935127	1.71e-13	4.6e+12	0.000	.7935127	.7935127
C3078	1.496487	1.71e-13	8.7e+12	0.000	1.496487	1.496487
C3086	-.3101771	1.71e-13	-1.8e+12	0.000	-.3101771	-.3101771
C3098	.3015629	1.71e-13	1.8e+12	0.000	.3015629	.3015629
C3102	-.6072517	1.71e-13	-3.5e+12	0.000	-.6072517	-.6072517
C3108	5.02706	.3944147	12.75	0.000	4.251596	5.802524
C3114	2.043152	1.71e-13	1.2e+13	0.000	2.043152	2.043152
C3118	.6977204	1.71e-13	4.1e+12	0.000	.6977204	.6977204
C3134	.4502662	1.71e-13	2.6e+12	0.000	.4502662	.4502662
C3142	.409559	1.71e-13	2.4e+12	0.000	.409559	.409559
C3146	-.8369649	1.71e-13	-4.9e+12	0.000	-.8369649	-.8369649
C3154	1.59382	1.71e-13	9.3e+12	0.000	1.59382	1.59382
C3170	1.218428	1.71e-13	7.1e+12	0.000	1.218428	1.218428
C3174	-.5437377	1.71e-13	-3.2e+12	0.000	-.5437377	-.5437377
C3186	-.2063096	1.71e-13	-1.2e+12	0.000	-.2063096	-.2063096
C3190	-.1542879	1.71e-13	-9.0e+11	0.000	-.1542879	-.1542879
C3242	-.365754	1.71e-13	-2.1e+12	0.000	-.365754	-.365754
C3258	1.355131	1.71e-13	7.9e+12	0.000	1.355131	1.355131
C3278	.4805135	1.71e-13	2.8e+12	0.000	.4805135	.4805135
C3282	2.095957	1.71e-13	1.2e+13	0.000	2.095957	2.095957
C3290	-.0749909	1.71e-13	-4.4e+11	0.000	-.0749909	-.0749909

C3310	3.604708	1.71e-13	2.1e+13	0.000	3.604708	3.604708
C3314	-.389226	1.71e-13	-2.3e+12	0.000	-.389226	-.389226
C3322	-.7489092	1.71e-13	-4.4e+12	0.000	-.7489092	-.7489092
C3326	-.0342422	1.71e-13	-2.0e+11	0.000	-.0342422	-.0342422
C3334	2.279987	1.71e-13	1.3e+13	0.000	2.279987	2.279987
C3346	3.107264	1.71e-13	1.8e+13	0.000	3.107264	3.107264
C3354	-.0270307	1.71e-13	-1.6e+11	0.000	-.0270307	-.0270307
C3366	.9336584	1.71e-13	5.4e+12	0.000	.9336584	.9336584
C3370	.9667336	1.71e-13	5.6e+12	0.000	.9667336	.9667336
C3374	.1759944	1.71e-13	1.0e+12	0.000	.1759944	.1759944
C3378	-.4002175	1.71e-13	-2.3e+12	0.000	-.4002175	-.4002175
C3386	.8051355	1.71e-13	4.7e+12	0.000	.8051355	.8051355
C3406	-.2363743	1.71e-13	-1.4e+12	0.000	-.2363743	-.2363743
C3410	-.4249806	1.71e-13	-2.5e+12	0.000	-.4249806	-.4249806
C3458	-.1879396	1.71e-13	-1.1e+12	0.000	-.1879396	-.1879396
C3462	-.240368	1.71e-13	-1.4e+12	0.000	-.240368	-.240368
C3474	.2523687	1.71e-13	1.5e+12	0.000	.2523687	.2523687
C3482	1.086774	1.71e-13	6.3e+12	0.000	1.086774	1.086774
C3490	-.2907858	1.71e-13	-1.7e+12	0.000	-.2907858	-.2907858
C3494	.8309875	1.71e-13	4.8e+12	0.000	.8309875	.8309875
C3498	2.394912	1.71e-13	1.4e+13	0.000	2.394912	2.394912
C3510	-.4880222	1.71e-13	-2.8e+12	0.000	-.4880222	-.4880222
C3530	1.646666	1.71e-13	9.6e+12	0.000	1.646666	1.646666
C3538	2.016874	1.71e-13	1.2e+13	0.000	2.016874	2.016874
C3562	4.794544	.0473697	101.22	0.000	4.70141	4.887678
C3566	-.1801079	1.71e-13	-1.1e+12	0.000	-.1801079	-.1801079
C3584	1.542322	1.71e-13	9.0e+12	0.000	1.542322	1.542322
C3598	.5508034	1.71e-13	3.2e+12	0.000	.5508034	.5508034
C3610	.6288827	1.71e-13	3.7e+12	0.000	.6288827	.6288827
C3614	-.2050359	1.71e-13	-1.2e+12	0.000	-.2050359	-.2050359
C3622	-.1497627	1.71e-13	-8.7e+11	0.000	-.1497627	-.1497627
C3626	1.186748	1.71e-13	6.9e+12	0.000	1.186748	1.186748
C3642	2.038727	1.71e-13	1.2e+13	0.000	2.038727	2.038727
C3650	.3204461	1.71e-13	1.9e+12	0.000	.3204461	.3204461
C3654	1.852717	1.71e-13	1.1e+13	0.000	1.852717	1.852717
C3674	2.718643	1.71e-13	1.6e+13	0.000	2.718643	2.718643
C3678	.0001614	1.71e-13	9.4e+08	0.000	.0001614	.0001614
C3698	-.2816592	1.71e-13	-1.6e+12	0.000	-.2816592	-.2816592
C3710	1.505559	1.71e-13	8.8e+12	0.000	1.505559	1.505559
C3734	1.172028	1.71e-13	6.8e+12	0.000	1.172028	1.172028
C3746	.2710669	1.71e-13	1.6e+12	0.000	.2710669	.2710669
C3762	-.2171666	1.71e-13	-1.3e+12	0.000	-.2171666	-.2171666
C3786	.956944	1.71e-13	5.6e+12	0.000	.956944	.956944
C3790	.7954386	1.71e-13	4.6e+12	0.000	.7954386	.7954386
C3798	3.590937	1.71e-13	2.1e+13	0.000	3.590937	3.590937
C3806	3.265836	1.71e-13	1.9e+13	0.000	3.265836	3.265836
C3822	-.7786173	1.71e-13	-4.5e+12	0.000	-.7786173	-.7786173
C3830	2.798544	.0190398	146.98	0.000	2.76111	2.835978
C3834	.0352706	1.71e-13	2.1e+11	0.000	.0352706	.0352706
C3854	-.6354497	1.71e-13	-3.7e+12	0.000	-.6354497	-.6354497
C3866	.2705418	1.71e-13	1.6e+12	0.000	.2705418	.2705418
C3886	1.432761	1.71e-13	8.4e+12	0.000	1.432761	1.432761
C3890	2.570731	1.71e-13	1.5e+13	0.000	2.570731	2.570731
C3894	.84384	1.71e-13	4.9e+12	0.000	.84384	.84384
C3914	.0357257	1.71e-13	2.1e+11	0.000	.0357257	.0357257
C3930	2.306051	1.71e-13	1.3e+13	0.000	2.306051	2.306051
C3934	1.080975	1.71e-13	6.3e+12	0.000	1.080975	1.080975
C3938	-.105443	1.71e-13	-6.1e+11	0.000	-.105443	-.105443
C3946	.0220457	1.71e-13	1.3e+11	0.000	.0220457	.0220457
C3954	.0858001	1.71e-13	5.0e+11	0.000	.0858001	.0858001
C3958	1.985109	1.71e-13	1.2e+13	0.000	1.985109	1.985109
C3966	.1041107	1.71e-13	6.1e+11	0.000	.1041107	.1041107
C3974	.8636883	1.71e-13	5.0e+12	0.000	.8636883	.8636883
C3982	.1055061	1.71e-13	6.2e+11	0.000	.1055061	.1055061
C3990	1.011545	1.71e-13	5.9e+12	0.000	1.011545	1.011545
C4006	2.080256	1.71e-13	1.2e+13	0.000	2.080256	2.080256
C4014	2.985901	1.71e-13	1.7e+13	0.000	2.985901	2.985901
C4022	.8092819	1.71e-13	4.7e+12	0.000	.8092819	.8092819
C4034	.3784571	1.71e-13	2.2e+12	0.000	.3784571	.3784571
C4038	1.917914	1.71e-13	1.1e+13	0.000	1.917914	1.917914
C4042	.6616514	1.71e-13	3.9e+12	0.000	.6616514	.6616514
C4058	-.0671113	1.71e-13	-3.9e+11	0.000	-.0671113	-.0671113

C4066	-.5853991	1.71e-13	-3.4e+12	0.000	-.5853991	-.5853991
C4090	2.452064	1.71e-13	1.4e+13	0.000	2.452064	2.452064
C4098	.3718432	1.71e-13	2.2e+12	0.000	.3718432	.3718432
C4106	.4846556	1.71e-13	2.8e+12	0.000	.4846556	.4846556
C4110	-.0536984	1.71e-13	-3.1e+11	0.000	-.0536984	-.0536984
C4114	-.2327223	1.71e-13	-1.4e+12	0.000	-.2327223	-.2327223
C4118	2.846168	1.71e-13	1.7e+13	0.000	2.846168	2.846168
C4142	.7389388	1.71e-13	4.3e+12	0.000	.7389388	.7389388
C4150	.6907577	1.71e-13	4.0e+12	0.000	.6907577	.6907577
C4154	.9865988	1.71e-13	5.8e+12	0.000	.9865988	.9865988
C4162	2.094577	1.71e-13	1.2e+13	0.000	2.094577	2.094577
C4166	-.3651676	1.71e-13	-2.1e+12	0.000	-.3651676	-.3651676
C4170	2.468129	.0230423	107.11	0.000	2.422825	2.513433
C4174	2.848126	1.71e-13	1.7e+13	0.000	2.848126	2.848126
C4186	4.011792	.3936019	10.19	0.000	3.237926	4.785658
C4190	-1.147317	1.72e-13	-6.7e+12	0.000	-1.147317	-1.147317
C4194	2.332774	1.71e-13	1.4e+13	0.000	2.332774	2.332774
C4198	2.406281	1.71e-13	1.4e+13	0.000	2.406281	2.406281
C4202	.5104739	1.71e-13	3.0e+12	0.000	.5104739	.5104739
C4210	.4053708	1.71e-13	2.4e+12	0.000	.4053708	.4053708
C4214	.0436022	1.71e-13	2.5e+11	0.000	.0436022	.0436022
C4220	.8515104	1.71e-13	5.0e+12	0.000	.8515104	.8515104
C4222	1.054096	1.71e-13	6.1e+12	0.000	1.054096	1.054096
C4234	.8230049	1.71e-13	4.8e+12	0.000	.8230049	.8230049
C4254	1.361931	1.71e-13	7.9e+12	0.000	1.361931	1.361931
C4266	3.109443	1.71e-13	1.8e+13	0.000	3.109443	3.109443
C4268	-.022438	1.71e-13	-1.3e+11	0.000	-.022438	-.022438
C4270	-.6733006	1.71e-13	-3.9e+12	0.000	-.6733006	-.6733006
C4310	-.3206877	1.71e-13	-1.9e+12	0.000	-.3206877	-.3206877
C4330	-.3157492	1.71e-13	-1.8e+12	0.000	-.3157492	-.3157492
C4334	1.001481	1.71e-13	5.8e+12	0.000	1.001481	1.001481
C4342	-.5484244	1.71e-13	-3.2e+12	0.000	-.5484244	-.5484244
C4358	.2097938	1.71e-13	1.2e+12	0.000	.2097938	.2097938
C4362	.7339443	1.71e-13	4.3e+12	0.000	.7339443	.7339443
C4378	.6269434	1.71e-13	3.7e+12	0.000	.6269434	.6269434
C4390	.597656	1.71e-13	3.5e+12	0.000	.597656	.597656
C4406	1.181739	1.71e-13	6.9e+12	0.000	1.181739	1.181739
C4410	.3566491	1.71e-13	2.1e+12	0.000	.3566491	.3566491
C4414	1.307166	1.71e-13	7.6e+12	0.000	1.307166	1.307166
C4418	1.105544	1.71e-13	6.4e+12	0.000	1.105544	1.105544
C4422	-.3033466	1.71e-13	-1.8e+12	0.000	-.3033466	-.3033466
C4430	-.0717506	1.71e-13	-4.2e+11	0.000	-.0717506	-.0717506
C4442	-.3728153	1.71e-13	-2.2e+12	0.000	-.3728153	-.3728153
C4470	1.134969	1.71e-13	6.6e+12	0.000	1.134969	1.134969
C4494	-.622206	1.71e-13	-3.6e+12	0.000	-.622206	-.622206
C4506	1.455353	1.71e-13	8.5e+12	0.000	1.455353	1.455353
C4522	.7936245	1.71e-13	4.6e+12	0.000	.7936245	.7936245
C4530	2.883497	1.71e-13	1.7e+13	0.000	2.883497	2.883497
C4546	.1007382	1.71e-13	5.9e+11	0.000	.1007382	.1007382
C4550	-.0928171	1.71e-13	-5.4e+11	0.000	-.0928171	-.0928171
C4554	-1.031958	1.71e-13	-6.0e+12	0.000	-1.031958	-1.031958
C4578	1.400144	1.71e-13	8.2e+12	0.000	1.400144	1.400144
C4582	.3148563	1.71e-13	1.8e+12	0.000	.3148563	.3148563
C4594	.926896	.0180935	51.23	0.000	.8913221	.96247
C4606	1.627581	.0119	136.77	0.000	1.604184	1.650978
C4614	1.734936	1.71e-13	1.0e+13	0.000	1.734936	1.734936
C4622	.2739574	1.71e-13	1.6e+12	0.000	.2739574	.2739574
C4634	.4440144	1.71e-13	2.6e+12	0.000	.4440144	.4440144
C4652	1.731794	1.71e-13	1.0e+13	0.000	1.731794	1.731794
C4654	.5250079	1.71e-13	3.1e+12	0.000	.5250079	.5250079
C4666	-.0635111	1.71e-13	-3.7e+11	0.000	-.0635111	-.0635111
C4670	.7677385	1.71e-13	4.5e+12	0.000	.7677385	.7677385
C4702	-.3657403	1.71e-13	-2.1e+12	0.000	-.3657403	-.3657403
C4722	-.0841407	1.71e-13	-4.9e+11	0.000	-.0841407	-.0841407
C4726	2.409843	.0213218	113.02	0.000	2.367922	2.451764
C4730	.6132926	1.71e-13	3.6e+12	0.000	.6132926	.6132926
C4738	.3474117	1.71e-13	2.0e+12	0.000	.3474117	.3474117
C4746	-1.20368	1.71e-13	-7.0e+12	0.000	-1.20368	-1.20368
C4758	-.0628258	1.71e-13	-3.7e+11	0.000	-.0628258	-.0628258
C4790	4.281929	.3937238	10.88	0.000	3.507823	5.056034
C4794	.2593405	1.71e-13	1.5e+12	0.000	.2593405	.2593405
C4806	-.2387716	1.71e-13	-1.4e+12	0.000	-.2387716	-.2387716

C4814	.0528781	1.71e-13	3.1e+11	0.000	.0528781	.0528781
C4826	-.4839488	1.71e-13	-2.8e+12	0.000	-.4839488	-.4839488
C4830	-.3582517	1.71e-13	-2.1e+12	0.000	-.3582517	-.3582517
C4854	.0667716	1.71e-13	3.9e+11	0.000	.0667716	.0667716
C4862	1.353886	1.71e-13	7.9e+12	0.000	1.353886	1.353886
C4866	-.0552734	1.71e-13	-3.2e+11	0.000	-.0552734	-.0552734
C4870	-.188977	1.71e-13	-1.1e+12	0.000	-.188977	-.188977
C4890	.6316952	1.71e-13	3.7e+12	0.000	.6316952	.6316952
C4902	-.0277228	1.71e-13	-1.6e+11	0.000	-.0277228	-.0277228
C4918	1.233639	1.71e-13	7.2e+12	0.000	1.233639	1.233639
C4934	1.663394	1.71e-13	9.7e+12	0.000	1.663394	1.663394
C4942	.1817283	1.71e-13	1.1e+12	0.000	.1817283	.1817283
C4962	.966009	1.71e-13	5.6e+12	0.000	.966009	.966009
C4966	1.328388	1.71e-13	7.7e+12	0.000	1.328388	1.328388
C4970	-.3660786	1.71e-13	-2.1e+12	0.000	-.3660786	-.3660786
C4974	-.1166967	1.71e-13	-6.8e+11	0.000	-.1166967	-.1166967
ffrdc_count						
1	.6453322	.3222577	2.00	0.046	.0117373	1.278927
2	0	(omitted)				
3	0	(omitted)				
5	0	(omitted)				
8	-.0440953	.0219437	-2.01	0.045	-.0872391	-.0009516
9	-.0336946	.0194573	-1.73	0.084	-.0719499	.0045607
10	-.0258714	.0101373	-2.55	0.011	-.0458026	-.0059403
11	-.0076455	.0040041	-1.91	0.057	-.0155181	.0002271
12	.0036509	.0031912	1.14	0.253	-.0026234	.0099252
13	0	(omitted)				
_cons	9.688736	.0053686	1804.69	0.000	9.678181	9.699292

```
700 outreg2 using output/reg_retail.doc, append ctitle("OLS full controls, Average emplo
  > yment (log-log)") keep(log_federal_funding) addtext(MSA FE, Yes, Year FE, Yes, FFRDC
  >  count FE, Yes)
   output/reg_retail.doc
   dir : seeout

701
702
703 //defense instrument, retail
704
705 merge m:1 msacode msatitle using data/intermediate/defense_budget_ratios
```

Result	# of obs.	
not matched	7,011	
from master	7,011	(_merge==1)
from using	0	(_merge==2)
matched	361	(_merge==3)

```
706 recode avg_budget_ratio (. = 0)
  (avg_budget_ratio: 7011 changes made)

707 drop _merge

708
709 merge m:1 year using data/intermediate/total_us_military_spending
  (note: variable year was int, now float to accommodate using data's values)
```

Result	# of obs.	
not matched	41	
from master	0	(_merge==1)
from using	41	(_merge==2)
matched	7,372	(_merge==3)

```
710 keep if _merge == 3
   (41 observations deleted)

711 drop _merge

712
713 gen defense_funding_instrument = avg_budget_ratio * total_military_spending

714
715 reg log_federal_funding i.msa_factor, robust cluster(msa_factor)
```

Linear regression

Number of obs	=	7,372
$F_{(0, 387)}$	=	.
Prob > F	=	.
R-squared	=	0.9794
Root MSE	=	.6608

(Std. Err. adjusted for **388** clusters in msa_factor)

log_federa~g	Coef.	Robust Std. Err.	t	P>|t|	[95% Conf. Interval]	
msa_factor						
C1038	4.47e-14	4.59e-14	0.97	0.330	-4.55e-14	1.35e-13
C1042	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C1050	4.48e-14	4.59e-14	0.98	0.330	-4.54e-14	1.35e-13
C1054	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C1058	4.48e-14	4.59e-14	0.98	0.330	-4.54e-14	1.35e-13
C1074	22.35426	4.60e-14	4.9e+14	0.000	22.35426	22.35426
C1078	4.49e-14	4.59e-14	0.98	0.328	-4.53e-14	1.35e-13
C1090	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C1102	4.46e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C1110	4.45e-14	4.59e-14	0.97	0.333	-4.57e-14	1.35e-13
C1118	18.1292	4.59e-14	3.9e+14	0.000	18.1292	18.1292
C1126	4.50e-14	4.59e-14	0.98	0.328	-4.53e-14	1.35e-13
C1146	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C1150	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C1154	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C1164	4.46e-14	4.59e-14	0.97	0.332	-4.57e-14	1.35e-13
C1170	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C1202	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C1206	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C1210	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C1222	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C1226	4.46e-14	4.59e-14	0.97	0.332	-4.56e-14	1.35e-13
C1242	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C1254	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C1258	7.09397	4.59e-14	1.5e+14	0.000	7.09397	7.09397
C1262	4.46e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C1270	4.47e-14	4.59e-14	0.97	0.330	-4.55e-14	1.35e-13
C1294	4.46e-14	4.59e-14	0.97	0.332	-4.56e-14	1.35e-13
C1298	4.49e-14	4.59e-14	0.98	0.328	-4.53e-14	1.35e-13
C1302	4.49e-14	4.59e-14	0.98	0.328	-4.53e-14	1.35e-13
C1314	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C1322	4.50e-14	4.59e-14	0.98	0.328	-4.53e-14	1.35e-13
C1338	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C1346	4.48e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C1374	4.48e-14	4.59e-14	0.97	0.330	-4.55e-14	1.35e-13
C1378	4.46e-14	4.59e-14	0.97	0.332	-4.57e-14	1.35e-13
C1382	4.47e-14	4.59e-14	0.97	0.330	-4.55e-14	1.35e-13
C1390	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C1398	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C1401	4.47e-14	4.59e-14	0.97	0.330	-4.55e-14	1.35e-13
C1402	4.48e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C1410	4.47e-14	4.59e-14	0.97	0.330	-4.55e-14	1.35e-13
C1426	4.48e-14	4.59e-14	0.97	0.330	-4.55e-14	1.35e-13
C1446	21.25448	4.60e-14	4.6e+14	0.000	21.25448	21.25448
C1450	19.69514	4.67e-14	4.2e+14	0.000	19.69514	19.69514
C1454	4.45e-14	4.59e-14	0.97	0.334	-4.58e-14	1.35e-13
C1474	4.47e-14	4.59e-14	0.97	0.331	-4.55e-14	1.35e-13
C1486	4.48e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C1518	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13

C1526	4.49e-14	4.59e-14	0.98	0.328	-4.53e-14	1.35e-13
C1538	4.47e-14	4.59e-14	0.97	0.330	-4.55e-14	1.35e-13
C1550	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C1554	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C1568	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C1594	4.49e-14	4.59e-14	0.98	0.328	-4.53e-14	1.35e-13
C1598	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C1602	4.45e-14	4.59e-14	0.97	0.333	-4.57e-14	1.35e-13
C1606	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C1618	4.48e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C1622	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C1630	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C1654	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C1658	4.48e-14	4.59e-14	0.98	0.330	-4.54e-14	1.35e-13
C1662	4.47e-14	4.59e-14	0.97	0.330	-4.55e-14	1.35e-13
C1670	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C1674	4.46e-14	4.59e-14	0.97	0.332	-4.57e-14	1.35e-13
C1682	19.01221	4.59e-14	4.1e+14	0.000	19.01221	19.01221
C1686	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C1694	4.46e-14	4.59e-14	0.97	0.332	-4.56e-14	1.35e-13
C1698	21.49204	4.60e-14	4.7e+14	0.000	21.49204	21.49204
C1702	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C1714	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C1730	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C1742	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C1746	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C1766	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C1778	4.47e-14	4.59e-14	0.97	0.330	-4.55e-14	1.35e-13
C1782	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C1786	4.48e-14	4.59e-14	0.97	0.330	-4.55e-14	1.35e-13
C1790	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C1798	4.46e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C1802	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C1814	4.46e-14	4.59e-14	0.97	0.332	-4.56e-14	1.35e-13
C1858	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C1870	4.47e-14	4.59e-14	0.97	0.330	-4.55e-14	1.35e-13
C1888	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C1906	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C1910	4.46e-14	4.59e-14	0.97	0.332	-4.56e-14	1.35e-13
C1914	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C1918	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C1930	4.48e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C1934	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C1938	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C1946	4.47e-14	4.59e-14	0.97	0.330	-4.55e-14	1.35e-13
C1950	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C1966	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C1974	20.29388	4.63e-14	4.4e+14	0.000	20.29388	20.29388
C1978	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C1982	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C2002	4.48e-14	4.59e-14	0.97	0.330	-4.55e-14	1.35e-13
C2010	4.47e-14	4.59e-14	0.97	0.330	-4.55e-14	1.35e-13
C2022	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C2026	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C2050	4.48e-14	4.59e-14	0.98	0.330	-4.54e-14	1.35e-13
C2070	4.47e-14	4.59e-14	0.97	0.330	-4.55e-14	1.35e-13
C2074	4.46e-14	4.59e-14	0.97	0.332	-4.56e-14	1.35e-13
C2094	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C2106	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C2114	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C2130	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C2134	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C2150	4.48e-14	4.59e-14	0.97	0.330	-4.55e-14	1.35e-13
C2166	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C2178	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C2182	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C2202	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C2214	4.47e-14	4.59e-14	0.97	0.331	-4.55e-14	1.35e-13
C2218	4.49e-14	4.59e-14	0.98	0.328	-4.53e-14	1.35e-13
C2222	4.46e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C2238	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C2242	4.46e-14	4.59e-14	0.97	0.332	-4.57e-14	1.35e-13

C2250	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C2252	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C2254	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C2266	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C2290	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C2306	4.47e-14	4.59e-14	0.97	0.330	-4.55e-14	1.35e-13
C2342	4.48e-14	4.59e-14	0.97	0.330	-4.55e-14	1.35e-13
C2346	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C2354	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C2358	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C2390	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C2402	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C2414	4.49e-14	4.59e-14	0.98	0.329	-4.53e-14	1.35e-13
C2422	4.46e-14	4.59e-14	0.97	0.332	-4.57e-14	1.35e-13
C2426	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C2430	4.48e-14	4.59e-14	0.97	0.330	-4.55e-14	1.35e-13
C2434	4.48e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C2442	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C2450	4.50e-14	4.59e-14	0.98	0.328	-4.53e-14	1.35e-13
C2454	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C2458	4.47e-14	4.59e-14	0.97	0.331	-4.55e-14	1.35e-13
C2466	4.46e-14	4.59e-14	0.97	0.332	-4.57e-14	1.35e-13
C2478	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C2486	4.46e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C2502	4.45e-14	4.59e-14	0.97	0.333	-4.57e-14	1.35e-13
C2506	4.46e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C2518	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C2522	4.48e-14	4.59e-14	0.97	0.330	-4.55e-14	1.35e-13
C2526	4.47e-14	4.59e-14	0.97	0.331	-4.55e-14	1.35e-13
C2542	4.47e-14	4.59e-14	0.97	0.330	-4.55e-14	1.35e-13
C2550	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C2554	4.50e-14	4.59e-14	0.98	0.327	-4.52e-14	1.35e-13
C2562	4.46e-14	4.59e-14	0.97	0.332	-4.56e-14	1.35e-13
C2586	4.46e-14	4.59e-14	0.97	0.332	-4.57e-14	1.35e-13
C2594	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C2598	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C2614	4.46e-14	4.59e-14	0.97	0.332	-4.56e-14	1.35e-13
C2630	4.48e-14	4.59e-14	0.97	0.330	-4.55e-14	1.35e-13
C2638	4.48e-14	4.59e-14	0.98	0.330	-4.54e-14	1.35e-13
C2642	4.47e-14	4.59e-14	0.97	0.331	-4.55e-14	1.35e-13
C2658	4.48e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C2662	4.50e-14	4.59e-14	0.98	0.328	-4.53e-14	1.35e-13
C2682	20.49089	4.60e-14	4.5e+14	0.000	20.49089	20.49089
C2690	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C2698	4.45e-14	4.59e-14	0.97	0.332	-4.57e-14	1.35e-13
C2706	9.994283	4.59e-14	2.2e+14	0.000	9.994283	9.994283
C2710	4.50e-14	4.59e-14	0.98	0.328	-4.53e-14	1.35e-13
C2714	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C2718	4.47e-14	4.59e-14	0.97	0.331	-4.55e-14	1.35e-13
C2726	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C2734	4.49e-14	4.59e-14	0.98	0.328	-4.53e-14	1.35e-13
C2750	4.47e-14	4.59e-14	0.97	0.331	-4.55e-14	1.35e-13
C2762	4.47e-14	4.59e-14	0.97	0.330	-4.55e-14	1.35e-13
C2774	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C2778	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C2786	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C2790	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C2798	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C2802	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C2810	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C2814	4.47e-14	4.59e-14	0.97	0.331	-4.55e-14	1.35e-13
C2842	21.41362	4.67e-14	4.6e+14	0.000	21.41362	21.41362
C2866	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C2870	4.50e-14	4.59e-14	0.98	0.328	-4.53e-14	1.35e-13
C2874	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C2894	21.67092	4.62e-14	4.7e+14	0.000	21.67092	21.67092
C2902	4.47e-14	4.59e-14	0.97	0.330	-4.55e-14	1.35e-13
C2910	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C2918	4.47e-14	4.59e-14	0.97	0.330	-4.55e-14	1.35e-13
C2920	4.48e-14	4.59e-14	0.97	0.330	-4.55e-14	1.35e-13
C2934	4.47e-14	4.59e-14	0.97	0.330	-4.55e-14	1.35e-13
C2942	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13

C2946	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C2954	4.46e-14	4.59e-14	0.97	0.332	-4.57e-14	1.35e-13
C2962	4.49e-14	4.59e-14	0.98	0.328	-4.53e-14	1.35e-13
C2970	4.46e-14	4.59e-14	0.97	0.332	-4.57e-14	1.35e-13
C2974	4.48e-14	4.59e-14	0.97	0.330	-4.55e-14	1.35e-13
C2982	4.47e-14	4.59e-14	0.97	0.331	-4.55e-14	1.35e-13
C2994	4.48e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C3002	4.49e-14	4.59e-14	0.98	0.328	-4.53e-14	1.35e-13
C3014	4.46e-14	4.59e-14	0.97	0.332	-4.57e-14	1.35e-13
C3030	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C3034	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C3046	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C3062	4.48e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C3070	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C3078	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C3086	4.47e-14	4.59e-14	0.97	0.330	-4.55e-14	1.35e-13
C3098	4.46e-14	4.59e-14	0.97	0.332	-4.57e-14	1.35e-13
C3102	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C3108	22.39022	4.62e-14	4.8e+14	0.000	22.39022	22.39022
C3114	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C3118	4.47e-14	4.59e-14	0.97	0.330	-4.55e-14	1.35e-13
C3134	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C3142	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C3146	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C3154	4.47e-14	4.59e-14	0.97	0.330	-4.55e-14	1.35e-13
C3170	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C3174	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C3186	4.46e-14	4.59e-14	0.97	0.332	-4.57e-14	1.35e-13
C3190	4.45e-14	4.59e-14	0.97	0.333	-4.57e-14	1.35e-13
C3242	4.47e-14	4.59e-14	0.97	0.330	-4.55e-14	1.35e-13
C3258	4.46e-14	4.59e-14	0.97	0.332	-4.56e-14	1.35e-13
C3278	4.48e-14	4.59e-14	0.98	0.330	-4.54e-14	1.35e-13
C3282	4.46e-14	4.59e-14	0.97	0.332	-4.56e-14	1.35e-13
C3290	4.46e-14	4.59e-14	0.97	0.332	-4.57e-14	1.35e-13
C3310	4.48e-14	4.59e-14	0.97	0.330	-4.55e-14	1.35e-13
C3314	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C3322	4.48e-14	4.59e-14	0.98	0.330	-4.54e-14	1.35e-13
C3326	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C3334	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C3346	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C3354	4.47e-14	4.59e-14	0.97	0.331	-4.55e-14	1.35e-13
C3366	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C3370	4.47e-14	4.59e-14	0.97	0.331	-4.55e-14	1.35e-13
C3374	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C3378	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C3386	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C3406	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C3410	4.46e-14	4.59e-14	0.97	0.332	-4.57e-14	1.35e-13
C3458	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C3462	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C3474	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C3482	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C3490	4.46e-14	4.59e-14	0.97	0.332	-4.56e-14	1.35e-13
C3494	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C3498	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C3510	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C3530	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C3538	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C3562	20.88553	4.59e-14	4.5e+14	0.000	20.88553	20.88553
C3566	4.47e-14	4.59e-14	0.97	0.330	-4.55e-14	1.35e-13
C3584	4.46e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C3598	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C3610	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C3614	4.48e-14	4.59e-14	0.98	0.330	-4.54e-14	1.35e-13
C3622	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C3626	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C3642	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C3650	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C3654	4.48e-14	4.59e-14	0.97	0.330	-4.55e-14	1.35e-13
C3674	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C3678	4.48e-14	4.59e-14	0.98	0.330	-4.54e-14	1.35e-13
C3698	4.46e-14	4.59e-14	0.97	0.332	-4.57e-14	1.35e-13

C3710	4.47e-14	4.59e-14	0.97	0.330	-4.55e-14	1.35e-13
C3734	4.48e-14	4.59e-14	0.98	0.330	-4.54e-14	1.35e-13
C3746	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C3762	4.46e-14	4.59e-14	0.97	0.332	-4.57e-14	1.35e-13
C3786	4.46e-14	4.59e-14	0.97	0.332	-4.56e-14	1.35e-13
C3790	4.45e-14	4.59e-14	0.97	0.333	-4.57e-14	1.35e-13
C3798	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C3806	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C3822	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C3830	19.12853	4.60e-14	4.2e+14	0.000	19.12853	19.12853
C3834	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C3854	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C3866	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C3886	4.48e-14	4.59e-14	0.97	0.330	-4.55e-14	1.35e-13
C3890	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C3894	4.46e-14	4.59e-14	0.97	0.332	-4.57e-14	1.35e-13
C3914	4.45e-14	4.59e-14	0.97	0.332	-4.57e-14	1.35e-13
C3930	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C3934	4.45e-14	4.59e-14	0.97	0.333	-4.57e-14	1.35e-13
C3938	4.48e-14	4.59e-14	0.98	0.330	-4.54e-14	1.35e-13
C3946	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C3954	4.49e-14	4.59e-14	0.98	0.328	-4.53e-14	1.35e-13
C3958	4.50e-14	4.59e-14	0.98	0.328	-4.53e-14	1.35e-13
C3966	4.47e-14	4.59e-14	0.97	0.331	-4.55e-14	1.35e-13
C3974	4.47e-14	4.59e-14	0.97	0.331	-4.55e-14	1.35e-13
C3982	4.46e-14	4.59e-14	0.97	0.332	-4.57e-14	1.35e-13
C3990	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C4006	4.46e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C4014	4.46e-14	4.59e-14	0.97	0.332	-4.57e-14	1.35e-13
C4022	4.50e-14	4.59e-14	0.98	0.328	-4.53e-14	1.35e-13
C4034	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C4038	4.47e-14	4.59e-14	0.97	0.331	-4.55e-14	1.35e-13
C4042	4.45e-14	4.59e-14	0.97	0.333	-4.57e-14	1.35e-13
C4058	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C4066	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C4090	4.45e-14	4.59e-14	0.97	0.333	-4.57e-14	1.35e-13
C4098	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C4106	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C4110	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C4114	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C4118	4.46e-14	4.59e-14	0.97	0.332	-4.57e-14	1.35e-13
C4142	4.48e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C4150	4.46e-14	4.59e-14	0.97	0.332	-4.56e-14	1.35e-13
C4154	4.47e-14	4.59e-14	0.97	0.331	-4.55e-14	1.35e-13
C4162	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C4166	4.45e-14	4.59e-14	0.97	0.333	-4.58e-14	1.35e-13
C4170	17.15917	4.59e-14	3.7e+14	0.000	17.15917	17.15917
C4174	4.45e-14	4.59e-14	0.97	0.333	-4.58e-14	1.35e-13
C4186	22.34408	4.61e-14	4.8e+14	0.000	22.34408	22.34408
C4190	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C4194	4.48e-14	4.59e-14	0.98	0.330	-4.54e-14	1.35e-13
C4198	4.46e-14	4.59e-14	0.97	0.332	-4.57e-14	1.35e-13
C4202	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C4210	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C4214	4.46e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C4220	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C4222	4.48e-14	4.59e-14	0.97	0.330	-4.55e-14	1.35e-13
C4234	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C4254	4.46e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C4266	4.49e-14	4.59e-14	0.98	0.328	-4.53e-14	1.35e-13
C4268	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C4270	4.50e-14	4.59e-14	0.98	0.327	-4.52e-14	1.35e-13
C4310	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C4330	4.50e-14	4.59e-14	0.98	0.328	-4.53e-14	1.35e-13
C4334	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C4342	4.50e-14	4.59e-14	0.98	0.328	-4.53e-14	1.35e-13
C4358	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C4362	4.47e-14	4.59e-14	0.97	0.331	-4.55e-14	1.35e-13
C4378	4.46e-14	4.59e-14	0.97	0.332	-4.57e-14	1.35e-13
C4390	4.50e-14	4.59e-14	0.98	0.327	-4.52e-14	1.35e-13
C4406	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C4410	4.49e-14	4.59e-14	0.98	0.329	-4.53e-14	1.35e-13

C4414	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C4418	4.50e-14	4.59e-14	0.98	0.328	-4.53e-14	1.35e-13
C4422	4.47e-14	4.59e-14	0.97	0.330	-4.55e-14	1.35e-13
C4430	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C4442	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C4470	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C4494	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C4506	4.49e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C4522	4.46e-14	4.59e-14	0.97	0.332	-4.57e-14	1.35e-13
C4530	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C4546	4.44e-14	4.59e-14	0.97	0.334	-4.58e-14	1.35e-13
C4550	4.50e-14	4.59e-14	0.98	0.328	-4.53e-14	1.35e-13
C4554	4.46e-14	4.59e-14	0.97	0.332	-4.57e-14	1.35e-13
C4578	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C4582	4.44e-14	4.59e-14	0.97	0.334	-4.59e-14	1.35e-13
C4594	19.0588	4.60e-14	4.1e+14	0.000	19.0588	19.0588
C4606	18.20885	4.59e-14	4.0e+14	0.000	18.20885	18.20885
C4614	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C4622	4.48e-14	4.59e-14	0.97	0.330	-4.55e-14	1.35e-13
C4634	4.48e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C4652	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C4654	4.46e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C4666	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C4670	4.45e-14	4.59e-14	0.97	0.333	-4.57e-14	1.35e-13
C4702	4.46e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C4722	4.50e-14	4.59e-14	0.98	0.328	-4.53e-14	1.35e-13
C4726	19.28864	4.59e-14	4.2e+14	0.000	19.28864	19.28864
C4730	4.48e-14	4.59e-14	0.98	0.330	-4.55e-14	1.35e-13
C4738	4.46e-14	4.59e-14	0.97	0.332	-4.57e-14	1.35e-13
C4746	4.46e-14	4.59e-14	0.97	0.332	-4.56e-14	1.35e-13
C4758	4.48e-14	4.59e-14	0.98	0.329	-4.54e-14	1.35e-13
C4790	21.91143	4.61e-14	4.8e+14	0.000	21.91143	21.91143
C4794	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C4806	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C4814	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C4826	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C4830	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C4854	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C4862	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C4866	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C4870	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C4890	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C4902	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C4918	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C4934	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C4942	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C4962	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C4966	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C4970	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
C4974	4.47e-14	4.59e-14	0.97	0.331	-4.56e-14	1.35e-13
_cons	-4.46e-14	4.59e-14	-0.97	0.332	-1.35e-13	4.56e-14

716 predict resid_log_federal_funding, residuals

717 reg defense_funding_instrument i.msa_factor, robust cluster(msa_factor)

Linear regression	Number of obs	=	7,372
	$F_{(313, 387)}$	=	.
	Prob > F	=	.
	R-squared	=	0.9622
	Root MSE	=	1.9e+07

(Std. Err. adjusted for **388** clusters in msa_factor)

defense_fu~t	Coef.	Robust Std. Err.	t	P>|t|	[95% Conf. Interval]	
msa_factor						
C1038	-3.99e-07	4.10e-07	-0.97	0.331	-1.20e-06	4.07e-07
C1042	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C1050	-3.97e-07	4.10e-07	-0.97	0.333	-1.20e-06	4.09e-07
C1054	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C1058	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C1074	7.99e+08	4.32e-07	1.8e+15	0.000	7.99e+08	7.99e+08
C1078	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C1090	-3.98e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C1102	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C1110	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C1118	4662.512	4.10e-07	1.1e+10	0.000	4662.512	4662.512
C1126	-4.00e-07	4.10e-07	-0.97	0.330	-1.21e-06	4.07e-07
C1146	-3.98e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C1150	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C1154	-3.98e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C1164	-4.01e-07	4.10e-07	-0.98	0.329	-1.21e-06	4.05e-07
C1170	-4.01e-07	4.10e-07	-0.98	0.329	-1.21e-06	4.05e-07
C1202	-3.98e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C1206	-4.01e-07	4.10e-07	-0.98	0.329	-1.21e-06	4.06e-07
C1210	-3.99e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C1222	-3.99e-07	4.10e-07	-0.97	0.331	-1.20e-06	4.07e-07
C1226	-4.01e-07	4.10e-07	-0.98	0.329	-1.21e-06	4.05e-07
C1242	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C1254	-4.01e-07	4.10e-07	-0.98	0.329	-1.21e-06	4.05e-07
C1258	-3.99e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C1262	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C1270	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C1294	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C1298	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C1302	-3.99e-07	4.10e-07	-0.97	0.331	-1.20e-06	4.07e-07
C1314	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C1322	-3.98e-07	4.10e-07	-0.97	0.333	-1.20e-06	4.09e-07
C1338	-3.98e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C1346	-3.98e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C1374	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C1378	-4.00e-07	4.10e-07	-0.97	0.330	-1.21e-06	4.06e-07
C1382	-3.98e-07	4.10e-07	-0.97	0.333	-1.20e-06	4.09e-07
C1390	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C1398	-3.98e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C1401	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C1402	-3.98e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C1410	-4.00e-07	4.10e-07	-0.97	0.330	-1.21e-06	4.06e-07
C1426	-3.98e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C1446	8.33e+08	4.14e-07	2.0e+15	0.000	8.33e+08	8.33e+08
C1450	5901519	4.10e-07	1.4e+13	0.000	5901519	5901519
C1454	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C1474	-4.00e-07	4.10e-07	-0.97	0.330	-1.21e-06	4.07e-07
C1486	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C1518	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C1526	-3.98e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C1538	-4.00e-07	4.10e-07	-0.97	0.330	-1.21e-06	4.07e-07
C1550	-3.99e-07	4.10e-07	-0.97	0.331	-1.20e-06	4.07e-07
C1554	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C1568	-4.00e-07	4.10e-07	-0.97	0.330	-1.21e-06	4.07e-07
C1594	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C1598	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C1602	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C1606	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C1618	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C1622	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C1630	-4.00e-07	4.10e-07	-0.98	0.329	-1.21e-06	4.06e-07
C1654	-4.00e-07	4.10e-07	-0.97	0.330	-1.21e-06	4.06e-07
C1658	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C1662	-3.99e-07	4.10e-07	-0.97	0.331	-1.20e-06	4.07e-07
C1670	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C1674	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07

C1682	988994.4	4.10e-07	2.4e+12	0.000	988994.4	988994.4
C1686	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C1694	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C1698	1.85e+07	4.10e-07	4.5e+13	0.000	1.85e+07	1.85e+07
C1702	-3.98e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C1714	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C1730	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C1742	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C1746	-3.98e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C1766	-4.00e-07	4.10e-07	-0.97	0.330	-1.21e-06	4.07e-07
C1778	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C1782	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C1786	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C1790	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C1798	-4.01e-07	4.10e-07	-0.98	0.329	-1.21e-06	4.05e-07
C1802	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C1814	-3.99e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C1858	-4.01e-07	4.10e-07	-0.98	0.329	-1.21e-06	4.06e-07
C1870	-4.01e-07	4.10e-07	-0.98	0.329	-1.21e-06	4.05e-07
C1888	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C1906	-3.98e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C1910	-4.00e-07	4.10e-07	-0.97	0.330	-1.21e-06	4.07e-07
C1914	-3.99e-07	4.10e-07	-0.97	0.331	-1.20e-06	4.07e-07
C1918	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C1930	-4.00e-07	4.10e-07	-0.97	0.330	-1.21e-06	4.07e-07
C1934	-4.00e-07	4.10e-07	-0.98	0.329	-1.21e-06	4.06e-07
C1938	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C1946	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C1950	-4.00e-07	4.10e-07	-0.97	0.330	-1.21e-06	4.07e-07
C1966	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C1974	6495448	4.10e-07	1.6e+13	0.000	6495448	6495448
C1978	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C1982	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C2002	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C2010	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C2022	-4.00e-07	4.10e-07	-0.97	0.330	-1.21e-06	4.07e-07
C2026	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C2050	-3.99e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C2070	-3.99e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C2074	-4.01e-07	4.10e-07	-0.98	0.328	-1.21e-06	4.05e-07
C2094	-3.98e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C2106	-3.99e-07	4.10e-07	-0.97	0.331	-1.20e-06	4.07e-07
C2114	-4.01e-07	4.10e-07	-0.98	0.328	-1.21e-06	4.05e-07
C2130	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C2134	-3.98e-07	4.10e-07	-0.97	0.333	-1.20e-06	4.08e-07
C2150	-4.01e-07	4.10e-07	-0.98	0.328	-1.21e-06	4.05e-07
C2166	-3.99e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.07e-07
C2178	-3.98e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C2182	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C2202	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C2214	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C2218	-3.98e-07	4.10e-07	-0.97	0.333	-1.20e-06	4.08e-07
C2222	-4.00e-07	4.10e-07	-0.98	0.329	-1.21e-06	4.06e-07
C2238	-4.01e-07	4.10e-07	-0.98	0.329	-1.21e-06	4.06e-07
C2242	-4.00e-07	4.10e-07	-0.97	0.330	-1.21e-06	4.06e-07
C2250	-4.01e-07	4.10e-07	-0.98	0.329	-1.21e-06	4.05e-07
C2252	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C2254	-4.00e-07	4.10e-07	-0.97	0.330	-1.21e-06	4.07e-07
C2266	-3.99e-07	4.10e-07	-0.97	0.331	-1.20e-06	4.07e-07
C2290	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C2306	-3.98e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C2342	-3.99e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C2346	-4.00e-07	4.10e-07	-0.97	0.330	-1.21e-06	4.07e-07
C2354	-3.99e-07	4.10e-07	-0.97	0.331	-1.20e-06	4.07e-07
C2358	-3.99e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C2390	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C2402	-3.99e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C2414	-3.97e-07	4.10e-07	-0.97	0.333	-1.20e-06	4.09e-07
C2422	-4.01e-07	4.10e-07	-0.98	0.329	-1.21e-06	4.05e-07
C2426	-3.97e-07	4.10e-07	-0.97	0.334	-1.20e-06	4.09e-07
C2430	-4.00e-07	4.10e-07	-0.98	0.329	-1.21e-06	4.06e-07
C2434	-3.98e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07

C2442	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C2450	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C2454	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C2458	-3.99e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C2466	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C2478	-3.99e-07	4.10e-07	-0.97	0.331	-1.20e-06	4.07e-07
C2486	-4.01e-07	4.10e-07	-0.98	0.329	-1.21e-06	4.05e-07
C2502	-3.98e-07	4.10e-07	-0.97	0.333	-1.20e-06	4.08e-07
C2506	-3.98e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C2518	-3.96e-07	4.10e-07	-0.97	0.334	-1.20e-06	4.10e-07
C2522	-3.99e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C2526	-4.01e-07	4.10e-07	-0.98	0.329	-1.21e-06	4.05e-07
C2542	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C2550	-3.98e-07	4.10e-07	-0.97	0.333	-1.20e-06	4.08e-07
C2554	-3.97e-07	4.10e-07	-0.97	0.333	-1.20e-06	4.09e-07
C2562	-4.02e-07	4.10e-07	-0.98	0.328	-1.21e-06	4.04e-07
C2586	-3.99e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C2594	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C2598	-3.98e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C2614	-4.01e-07	4.10e-07	-0.98	0.329	-1.21e-06	4.05e-07
C2630	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C2638	-3.98e-07	4.10e-07	-0.97	0.333	-1.20e-06	4.08e-07
C2642	-4.00e-07	4.10e-07	-0.98	0.329	-1.21e-06	4.06e-07
C2658	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C2662	-3.98e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C2682	3.80e+07	4.10e-07	9.3e+13	0.000	3.80e+07	3.80e+07
C2690	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C2698	-4.01e-07	4.10e-07	-0.98	0.329	-1.21e-06	4.05e-07
C2706	-4.01e-07	4.10e-07	-0.98	0.329	-1.21e-06	4.06e-07
C2710	-3.99e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C2714	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C2718	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C2726	-3.98e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C2734	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C2750	-3.99e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C2762	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C2774	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C2778	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C2786	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C2790	-4.01e-07	4.10e-07	-0.98	0.329	-1.21e-06	4.05e-07
C2798	-3.98e-07	4.10e-07	-0.97	0.333	-1.20e-06	4.09e-07
C2802	-3.98e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C2810	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C2814	-3.99e-07	4.10e-07	-0.97	0.331	-1.20e-06	4.07e-07
C2842	7.55e+07	4.10e-07	1.8e+14	0.000	7.55e+07	7.55e+07
C2866	-3.98e-07	4.10e-07	-0.97	0.333	-1.20e-06	4.08e-07
C2870	-3.97e-07	4.10e-07	-0.97	0.333	-1.20e-06	4.09e-07
C2874	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C2894	2.96e+07	4.10e-07	7.2e+13	0.000	2.96e+07	2.96e+07
C2902	-3.98e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C2910	-4.00e-07	4.10e-07	-0.98	0.329	-1.21e-06	4.06e-07
C2918	-3.99e-07	4.10e-07	-0.97	0.331	-1.20e-06	4.07e-07
C2920	-3.98e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C2934	-3.99e-07	4.10e-07	-0.97	0.331	-1.20e-06	4.07e-07
C2942	-3.98e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C2946	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C2954	-4.01e-07	4.10e-07	-0.98	0.329	-1.21e-06	4.05e-07
C2962	-3.98e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C2970	-4.02e-07	4.10e-07	-0.98	0.327	-1.21e-06	4.04e-07
C2974	-3.99e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C2982	-3.98e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C2994	-3.99e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C3002	-4.00e-07	4.10e-07	-0.97	0.330	-1.21e-06	4.07e-07
C3014	-4.01e-07	4.10e-07	-0.98	0.328	-1.21e-06	4.05e-07
C3030	-3.98e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C3034	-3.98e-07	4.10e-07	-0.97	0.333	-1.20e-06	4.08e-07
C3046	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C3062	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C3070	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C3078	-3.98e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C3086	-3.98e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C3098	-4.01e-07	4.10e-07	-0.98	0.329	-1.21e-06	4.05e-07

C3102	-3.97e-07	4.10e-07	-0.97	0.334	-1.20e-06	4.10e-07
C3108	9.59e+08	4.57e-07	2.1e+15	0.000	9.59e+08	9.59e+08
C3114	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C3118	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C3134	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C3142	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C3146	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C3154	-4.01e-07	4.10e-07	-0.98	0.328	-1.21e-06	4.05e-07
C3170	-3.97e-07	4.10e-07	-0.97	0.333	-1.20e-06	4.09e-07
C3174	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C3186	-3.99e-07	4.10e-07	-0.97	0.331	-1.20e-06	4.07e-07
C3190	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C3242	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C3258	-4.01e-07	4.10e-07	-0.98	0.328	-1.21e-06	4.05e-07
C3278	-3.99e-07	4.10e-07	-0.97	0.331	-1.20e-06	4.07e-07
C3282	-3.99e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.07e-07
C3290	-3.99e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C3310	-3.98e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C3314	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C3322	-3.98e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C3326	-4.00e-07	4.10e-07	-0.97	0.330	-1.21e-06	4.06e-07
C3334	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C3346	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C3354	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C3366	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C3370	-3.99e-07	4.10e-07	-0.97	0.331	-1.20e-06	4.07e-07
C3374	-4.00e-07	4.10e-07	-0.97	0.330	-1.21e-06	4.07e-07
C3378	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C3386	-4.00e-07	4.10e-07	-0.97	0.330	-1.21e-06	4.07e-07
C3406	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C3410	-4.01e-07	4.10e-07	-0.98	0.329	-1.21e-06	4.06e-07
C3458	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C3462	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C3474	-3.99e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C3482	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C3490	-3.99e-07	4.10e-07	-0.97	0.331	-1.20e-06	4.07e-07
C3494	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C3498	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C3510	-4.00e-07	4.10e-07	-0.97	0.330	-1.21e-06	4.06e-07
C3530	-3.99e-07	4.10e-07	-0.97	0.331	-1.20e-06	4.07e-07
C3538	-4.01e-07	4.10e-07	-0.98	0.329	-1.21e-06	4.06e-07
C3562	307419.8	4.10e-07	7.5e+11	0.000	307419.8	307419.8
C3566	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C3584	-3.98e-07	4.10e-07	-0.97	0.333	-1.20e-06	4.08e-07
C3598	-4.00e-07	4.10e-07	-0.97	0.330	-1.21e-06	4.07e-07
C3610	-4.01e-07	4.10e-07	-0.98	0.329	-1.21e-06	4.05e-07
C3614	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C3622	-3.98e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C3626	-3.98e-07	4.10e-07	-0.97	0.333	-1.20e-06	4.08e-07
C3642	-3.99e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C3650	-4.01e-07	4.10e-07	-0.98	0.329	-1.21e-06	4.06e-07
C3654	-3.99e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C3674	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C3678	-3.98e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C3698	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C3710	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C3734	-3.97e-07	4.10e-07	-0.97	0.333	-1.20e-06	4.09e-07
C3746	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C3762	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C3786	-4.01e-07	4.10e-07	-0.98	0.328	-1.21e-06	4.05e-07
C3790	-4.01e-07	4.10e-07	-0.98	0.328	-1.21e-06	4.05e-07
C3798	-4.00e-07	4.10e-07	-0.98	0.329	-1.21e-06	4.06e-07
C3806	-3.99e-07	4.10e-07	-0.97	0.331	-1.20e-06	4.07e-07
C3822	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C3830	7.58e+07	4.10e-07	1.8e+14	0.000	7.58e+07	7.58e+07
C3834	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C3854	-4.00e-07	4.10e-07	-0.98	0.329	-1.21e-06	4.06e-07
C3866	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C3886	-4.00e-07	4.10e-07	-0.97	0.330	-1.21e-06	4.06e-07
C3890	-4.00e-07	4.10e-07	-0.98	0.329	-1.21e-06	4.06e-07
C3894	-4.00e-07	4.10e-07	-0.97	0.330	-1.21e-06	4.07e-07
C3914	-4.01e-07	4.10e-07	-0.98	0.329	-1.21e-06	4.06e-07

C3930	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C3934	-4.00e-07	4.10e-07	-0.98	0.329	-1.21e-06	4.06e-07
C3938	-3.99e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C3946	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C3954	-4.00e-07	4.10e-07	-0.97	0.330	-1.21e-06	4.06e-07
C3958	-3.98e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C3966	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C3974	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C3982	-3.98e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C3990	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C4006	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C4014	-4.01e-07	4.10e-07	-0.98	0.328	-1.21e-06	4.05e-07
C4022	-3.97e-07	4.10e-07	-0.97	0.334	-1.20e-06	4.09e-07
C4034	-4.02e-07	4.10e-07	-0.98	0.328	-1.21e-06	4.04e-07
C4038	-4.01e-07	4.10e-07	-0.98	0.328	-1.21e-06	4.05e-07
C4042	-4.01e-07	4.10e-07	-0.98	0.329	-1.21e-06	4.06e-07
C4058	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C4066	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C4090	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C4098	-4.02e-07	4.10e-07	-0.98	0.328	-1.21e-06	4.04e-07
C4106	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C4110	-4.01e-07	4.10e-07	-0.98	0.329	-1.21e-06	4.06e-07
C4114	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C4118	-4.01e-07	4.10e-07	-0.98	0.329	-1.21e-06	4.05e-07
C4142	-3.95e-07	4.10e-07	-0.96	0.336	-1.20e-06	4.11e-07
C4150	-4.00e-07	4.10e-07	-0.97	0.330	-1.21e-06	4.06e-07
C4154	-3.99e-07	4.10e-07	-0.97	0.331	-1.20e-06	4.07e-07
C4162	-3.98e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C4166	-4.01e-07	4.10e-07	-0.98	0.328	-1.21e-06	4.05e-07
C4170	227.0006	4.10e-07	5.5e+08	0.000	227.0006	227.0006
C4174	-4.01e-07	4.10e-07	-0.98	0.329	-1.21e-06	4.06e-07
C4186	1.95e+08	4.19e-07	4.7e+14	0.000	1.95e+08	1.95e+08
C4190	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C4194	-4.00e-07	4.10e-07	-0.97	0.330	-1.21e-06	4.07e-07
C4198	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C4202	-4.01e-07	4.10e-07	-0.98	0.329	-1.21e-06	4.05e-07
C4210	-3.98e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C4214	-3.98e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C4220	-4.02e-07	4.10e-07	-0.98	0.328	-1.21e-06	4.05e-07
C4222	-4.02e-07	4.10e-07	-0.98	0.328	-1.21e-06	4.05e-07
C4234	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C4254	-4.02e-07	4.10e-07	-0.98	0.328	-1.21e-06	4.04e-07
C4266	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C4268	-3.99e-07	4.10e-07	-0.97	0.331	-1.20e-06	4.07e-07
C4270	-3.97e-07	4.10e-07	-0.97	0.333	-1.20e-06	4.09e-07
C4310	-3.99e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C4330	-4.00e-07	4.10e-07	-0.97	0.330	-1.21e-06	4.07e-07
C4334	-4.05e-07	4.10e-07	-0.99	0.324	-1.21e-06	4.02e-07
C4342	-4.01e-07	4.10e-07	-0.98	0.329	-1.21e-06	4.05e-07
C4358	-3.95e-07	4.10e-07	-0.96	0.335	-1.20e-06	4.11e-07
C4362	-4.00e-07	4.10e-07	-0.97	0.330	-1.21e-06	4.07e-07
C4378	-3.97e-07	4.10e-07	-0.97	0.333	-1.20e-06	4.09e-07
C4390	-3.97e-07	4.10e-07	-0.97	0.333	-1.20e-06	4.09e-07
C4406	-3.97e-07	4.10e-07	-0.97	0.333	-1.20e-06	4.09e-07
C4410	-3.97e-07	4.10e-07	-0.97	0.333	-1.20e-06	4.09e-07
C4414	-4.01e-07	4.10e-07	-0.98	0.329	-1.21e-06	4.06e-07
C4418	-3.98e-07	4.10e-07	-0.97	0.333	-1.20e-06	4.09e-07
C4422	-4.02e-07	4.10e-07	-0.98	0.328	-1.21e-06	4.04e-07
C4430	-4.02e-07	4.10e-07	-0.98	0.327	-1.21e-06	4.04e-07
C4442	-3.98e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.08e-07
C4470	-3.97e-07	4.10e-07	-0.97	0.333	-1.20e-06	4.09e-07
C4494	-3.94e-07	4.10e-07	-0.96	0.337	-1.20e-06	4.12e-07
C4506	-4.00e-07	4.10e-07	-0.97	0.330	-1.21e-06	4.06e-07
C4522	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C4530	-3.99e-07	4.10e-07	-0.97	0.331	-1.20e-06	4.07e-07
C4546	-4.00e-07	4.10e-07	-0.98	0.330	-1.21e-06	4.06e-07
C4550	-4.02e-07	4.10e-07	-0.98	0.327	-1.21e-06	4.04e-07
C4554	-3.99e-07	4.10e-07	-0.97	0.332	-1.20e-06	4.07e-07
C4578	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C4582	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C4594	192774.6	4.10e-07	4.7e+11	0.000	192774.6	192774.6
C4606	14185.14	4.10e-07	3.5e+10	0.000	14185.14	14185.14

C4614	-3.95e-07	4.10e-07	-0.96	0.336	-1.20e-06	4.11e-07
C4622	-3.94e-07	4.10e-07	-0.96	0.338	-1.20e-06	4.13e-07
C4634	-4.02e-07	4.10e-07	-0.98	0.327	-1.21e-06	4.04e-07
C4652	-3.99e-07	4.10e-07	-0.97	0.331	-1.21e-06	4.07e-07
C4654	-4.00e-07	4.10e-07	-0.97	0.330	-1.21e-06	4.07e-07
C4666	-3.97e-07	4.10e-07	-0.97	0.333	-1.20e-06	4.09e-07
C4670	-4.04e-07	4.10e-07	-0.99	0.325	-1.21e-06	4.02e-07
C4702	-3.97e-07	4.10e-07	-0.97	0.334	-1.20e-06	4.09e-07
C4722	-3.88e-07	4.10e-07	-0.94	0.345	-1.19e-06	4.19e-07
C4726	35348.64	4.10e-07	8.6e+10	0.000	35348.64	35348.64
C4730	-4.03e-07	4.10e-07	-0.98	0.327	-1.21e-06	4.03e-07
C4738	-4.01e-07	4.10e-07	-0.98	0.329	-1.21e-06	4.05e-07
C4746	-3.92e-07	4.10e-07	-0.96	0.339	-1.20e-06	4.14e-07
C4758	-3.97e-07	4.10e-07	-0.97	0.333	-1.20e-06	4.09e-07
C4790	1.08e+09	4.73e-07	2.3e+15	0.000	1.08e+09	1.08e+09
C4794	-3.95e-07	4.10e-07	-0.96	0.336	-1.20e-06	4.11e-07
C4806	-3.95e-07	4.10e-07	-0.96	0.336	-1.20e-06	4.11e-07
C4814	-3.95e-07	4.10e-07	-0.96	0.336	-1.20e-06	4.11e-07
C4826	-3.95e-07	4.10e-07	-0.96	0.336	-1.20e-06	4.11e-07
C4830	-3.95e-07	4.10e-07	-0.96	0.336	-1.20e-06	4.11e-07
C4854	-3.95e-07	4.10e-07	-0.96	0.336	-1.20e-06	4.11e-07
C4862	-3.95e-07	4.10e-07	-0.96	0.336	-1.20e-06	4.11e-07
C4866	-3.95e-07	4.10e-07	-0.96	0.336	-1.20e-06	4.11e-07
C4870	-3.95e-07	4.10e-07	-0.96	0.336	-1.20e-06	4.11e-07
C4890	-3.95e-07	4.10e-07	-0.96	0.336	-1.20e-06	4.11e-07
C4902	-3.95e-07	4.10e-07	-0.96	0.336	-1.20e-06	4.11e-07
C4918	-3.95e-07	4.10e-07	-0.96	0.336	-1.20e-06	4.11e-07
C4934	-3.95e-07	4.10e-07	-0.96	0.336	-1.20e-06	4.11e-07
C4942	-3.95e-07	4.10e-07	-0.96	0.336	-1.20e-06	4.11e-07
C4962	-3.95e-07	4.10e-07	-0.96	0.336	-1.20e-06	4.11e-07
C4966	-3.95e-07	4.10e-07	-0.96	0.336	-1.20e-06	4.11e-07
C4970	-3.95e-07	4.10e-07	-0.96	0.336	-1.20e-06	4.11e-07
C4974	-3.95e-07	4.10e-07	-0.96	0.336	-1.20e-06	4.11e-07
_cons	3.99e-07	4.10e-07	0.97	0.332	-4.08e-07	1.20e-06

718 predict resid_defense_funding_instrument, residuals

719
720 reg resid_log_federal_funding resid_defense_funding_instrument, robust cluster(msa_f
 > actor)

```
Linear regression                              Number of obs    =      7,372
                                               F(1, 387)        =       9.87
                                               Prob > F         =     0.0018
                                               R-squared        =     0.0015
                                               Root MSE         =     .64277

                                          (Std. Err. adjusted for 388 clusters in
 > msa_factor)
```

resid_log_federal_funding	Coef.	Robust Std. Err.	t	P>|t|	[95% Conf. Interval]
resid_defense_funding_instrument	1.35e-09	4.28e-10	3.14	0.002	5.03e-10 2.19e-09
_cons	2.76e-11	1.48e-10	0.19	0.852	-2.64e-10 3.19e-10

```
721 outreg2 using output/defense_first_stage_retail.doc, replace ctitle("With MSA FE") a
  > ddstat("F stat", e(F))
  output/defense_first_stage_retail.doc
  dir : seeout

722
723 ivregress 2sls log_avg_annual_pay i.msa_factor (log_federal_funding = defense_fundin
  > g_instrument i.msa_factor), robust cluster(msa_factor)
  note: 1b.msa_factor dropped because of collinearity
  note: 2.msa_factor dropped because of collinearity
  note: 3.msa_factor dropped because of collinearity
  note: 4.msa_factor dropped because of collinearity
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Instrumental variables (2SLS) regression

Number of obs	= 7,372
Wald chi2(388)	= 7.64
Prob > chi2	= 1.0000
R-squared	= 0.5194
Root MSE	= .09033

(Std. Err. adjusted for 388 clusters in msa_factor)

log_avg_annual_pay	Coef.	Robust Std. Err.	z	P>|z|	[95% Conf. Interval]	
log_federal_funding	-.1281782	.0505059	-2.54	0.011	-.227168	-.0291884
msa_factor						
C1038	-.5978532	1.76e-11	-3.4e+10	0.000	-.5978532	-.5978532
C1042	.0448642	1.76e-11	2.5e+09	0.000	.0448642	.0448642
C1050	-.1218163	1.76e-11	-6.9e+09	0.000	-.1218163	-.1218163
C1054	-.0313913	1.76e-11	-1.8e+09	0.000	-.0313913	-.0313913
C1058	.0691685	1.76e-11	3.9e+09	0.000	.0691685	.0691685
C1074	2.928534	1.129023	2.59	0.009	.7156895	5.141378
C1078	-.06767	1.76e-11	-3.8e+09	0.000	-.06767	-.06767
C1090	.0152355	1.76e-11	8.6e+08	0.000	.0152355	.0152355
C1102	-.1061897	1.76e-11	-6.0e+09	0.000	-.1061897	-.1061897
C1110	.0141464	1.76e-11	8.0e+08	0.000	.0141464	.0141464
C1118	2.168813	.9156324	2.37	0.018	.3742065	3.96342
C1126	.1726004	1.76e-11	9.8e+09	0.000	.1726004	.1726004
C1146	.082948	1.76e-11	4.7e+09	0.000	.082948	.082948
C1150	-.1031702	1.76e-11	-5.9e+09	0.000	-.1031702	-.1031702
C1154	-.0808873	1.76e-11	-4.6e+09	0.000	-.0808873	-.0808873
C1164	-.4430665	1.76e-11	-2.5e+10	0.000	-.4430665	-.4430665
C1170	-.0327294	1.76e-11	-1.9e+09	0.000	-.0327294	-.0327294
C1202	-.0610256	1.76e-11	-3.5e+09	0.000	-.0610256	-.0610256
C1206	.1418422	1.76e-11	8.1e+09	0.000	.1418422	.1418422
C1210	.0432937	1.76e-11	2.5e+09	0.000	.0432937	.0432937
C1222	-.1268597	1.76e-11	-7.2e+09	0.000	-.1268597	-.1268597

C1226	-.0618682	1.76e-11	-3.5e+09	0.000	-.0618682	-.0618682
C1242	.1748275	1.76e-11	9.9e+09	0.000	.1748275	.1748275
C1254	.067175	1.76e-11	3.8e+09	0.000	.067175	.067175
C1258	1.024037	.3582877	2.86	0.004	.3218057	1.726268
C1262	-.0428133	1.76e-11	-2.4e+09	0.000	-.0428133	-.0428133
C1270	.1317443	1.76e-11	7.5e+09	0.000	.1317443	.1317443
C1294	-.0259912	1.76e-11	-1.5e+09	0.000	-.0259912	-.0259912
C1298	-.0534208	1.76e-11	-3.0e+09	0.000	-.0534208	-.0534208
C1302	-.0664136	1.76e-11	-3.8e+09	0.000	-.0664136	-.0664136
C1314	.0607423	1.76e-11	3.4e+09	0.000	.0607423	.0607423
C1322	-.0350448	1.76e-11	-2.0e+09	0.000	-.0350448	-.0350448
C1338	.0256901	1.76e-11	1.5e+09	0.000	.0256901	.0256901
C1346	.0724086	1.76e-11	4.1e+09	0.000	.0724086	.0724086
C1374	.0593781	1.76e-11	3.4e+09	0.000	.0593781	.0593781
C1378	-.115238	1.76e-11	-6.5e+09	0.000	-.115238	-.115238
C1382	.0639702	1.76e-11	3.6e+09	0.000	.0639702	.0639702
C1390	.0522315	1.76e-11	3.0e+09	0.000	.0522315	.0522315
C1398	-.1561306	1.76e-11	-8.9e+09	0.000	-.1561306	-.1561306
C1401	-.0822023	1.76e-11	-4.7e+09	0.000	-.0822023	-.0822023
C1402	-.1677877	1.76e-11	-9.5e+09	0.000	-.1677877	-.1677877
C1410	-.1345354	1.76e-11	-7.6e+09	0.000	-.1345354	-.1345354
C1426	.0983017	1.76e-11	5.6e+09	0.000	.0983017	.0983017
C1446	2.900789	1.073478	2.70	0.007	.7968117	5.004767
C1450	2.667642	.9947216	2.68	0.007	.7180239	4.617261
C1454	-.1222774	1.76e-11	-6.9e+09	0.000	-.1222774	-.1222774
C1474	.0932689	1.76e-11	5.3e+09	0.000	.0932689	.0932689
C1486	.4102737	1.76e-11	2.3e+10	0.000	.4102737	.4102737
C1518	-.141432	1.76e-11	-8.0e+09	0.000	-.141432	-.141432
C1526	-.0967511	1.76e-11	-5.5e+09	0.000	-.0967511	-.0967511
C1538	-.07498	1.76e-11	-4.3e+09	0.000	-.07498	-.07498
C1550	-.0930305	1.76e-11	-5.3e+09	0.000	-.0930305	-.0930305
C1554	.0614351	1.76e-11	3.5e+09	0.000	.0614351	.0614351
C1568	-.0663382	1.76e-11	-3.8e+09	0.000	-.0663382	-.0663382
C1594	-.07784	1.76e-11	-4.4e+09	0.000	-.07784	-.07784
C1598	.1093883	1.76e-11	6.2e+09	0.000	.1093883	.1093883
C1602	-.1490061	1.76e-11	-8.5e+09	0.000	-.1490061	-.1490061
C1606	-.1355776	1.76e-11	-7.7e+09	0.000	-.1355776	-.1355776
C1618	.2408713	1.76e-11	1.4e+10	0.000	.2408713	.2408713
C1622	.0530397	1.76e-11	3.0e+09	0.000	.0530397	.0530397
C1630	.0051068	1.76e-11	2.9e+08	0.000	.0051068	.0051068
C1654	-.0940741	1.76e-11	-5.3e+09	0.000	-.0940741	-.0940741
C1658	-.129677	1.76e-11	-7.4e+09	0.000	-.129677	-.129677
C1662	-.0229426	1.76e-11	-1.3e+09	0.000	-.0229426	-.0229426
C1670	.0506503	1.76e-11	2.9e+09	0.000	.0506503	.0506503
C1674	.0754565	1.76e-11	4.3e+09	0.000	.0754565	.0754565
C1682	2.446065	.9602298	2.55	0.011	.5640492	4.328081
C1686	.0331065	1.76e-11	1.9e+09	0.000	.0331065	.0331065
C1694	.0088232	1.76e-11	5.0e+08	0.000	.0088232	.0088232
C1698	2.877633	1.085476	2.65	0.008	.75014	5.005126
C1702	.0935443	1.76e-11	5.3e+09	0.000	.0935443	.0935443
C1714	.0293973	1.76e-11	1.7e+09	0.000	.0293973	.0293973
C1730	-.0397278	1.76e-11	-2.3e+09	0.000	-.0397278	-.0397278
C1742	.0122985	1.76e-11	7.0e+08	0.000	.0122985	.0122985
C1746	.0109372	1.76e-11	6.2e+08	0.000	.0109372	.0109372
C1766	.0576611	1.76e-11	3.3e+09	0.000	.0576611	.0576611
C1778	-.053868	1.76e-11	-3.1e+09	0.000	-.053868	-.053868
C1782	.0753582	1.76e-11	4.3e+09	0.000	.0753582	.0753582
C1786	-.0480738	1.76e-11	-2.7e+09	0.000	-.0480738	-.0480738
C1790	.0225751	1.76e-11	1.3e+09	0.000	.0225751	.0225751
C1798	-.0818144	1.76e-11	-4.6e+09	0.000	-.0818144	-.0818144
C1802	-.1636723	1.76e-11	-9.3e+09	0.000	-.1636723	-.1636723
C1814	.0997466	1.76e-11	5.7e+09	0.000	.0997466	.0997466
C1858	.0302492	1.76e-11	1.7e+09	0.000	.0302492	.0302492
C1870	-.0965623	1.76e-11	-5.5e+09	0.000	-.0965623	-.0965623
C1888	-.0261866	1.76e-11	-1.5e+09	0.000	-.0261866	-.0261866
C1906	-.1703799	1.76e-11	-9.7e+09	0.000	-.1703799	-.1703799
C1910	.2176657	1.76e-11	1.2e+10	0.000	.2176657	.2176657
C1914	.0101919	1.76e-11	5.8e+08	0.000	.0101919	.0101919
C1918	-.1739238	1.76e-11	-9.9e+09	0.000	-.1739238	-.1739238
C1930	-.051577	1.76e-11	-2.9e+09	0.000	-.051577	-.051577
C1934	-.0114987	1.76e-11	-6.5e+08	0.000	-.0114987	-.0114987
C1938	-.0542685	1.76e-11	-3.1e+09	0.000	-.0542685	-.0542685

C1946	-.0566818	1.76e-11	-3.2e+09	0.000	-.0566818	-.0566818
C1950	-.0329284	1.76e-11	-1.9e+09	0.000	-.0329284	-.0329284
C1966	-.0208979	1.76e-11	-1.2e+09	0.000	-.0208979	-.0208979
C1974	2.747759	1.024962	2.68	0.007	.7388712	4.756647
C1978	.0378617	1.76e-11	2.1e+09	0.000	.0378617	.0378617
C1982	.1170195	1.76e-11	6.6e+09	0.000	.1170195	.1170195
C2002	-.0267999	1.76e-11	-1.5e+09	0.000	-.0267999	-.0267999
C2010	.019001	1.76e-11	1.1e+09	0.000	.019001	.019001
C2022	-.1065973	1.76e-11	-6.0e+09	0.000	-.1065973	-.1065973
C2026	-.1190281	1.76e-11	-6.8e+09	0.000	-.1190281	-.1190281
C2050	-.0115162	1.76e-11	-6.5e+08	0.000	-.0115162	-.0115162
C2070	-.1098152	1.76e-11	-6.2e+09	0.000	-.1098152	-.1098152
C2074	-.0766562	1.76e-11	-4.4e+09	0.000	-.0766562	-.0766562
C2094	-.0674343	1.76e-11	-3.8e+09	0.000	-.0674343	-.0674343
C2106	-.0747158	1.76e-11	-4.2e+09	0.000	-.0747158	-.0747158
C2114	-.0301148	1.76e-11	-1.7e+09	0.000	-.0301148	-.0301148
C2130	-.0809928	1.76e-11	-4.6e+09	0.000	-.0809928	-.0809928
C2134	-.0767247	1.76e-11	-4.4e+09	0.000	-.0767247	-.0767247
C2150	-.0912435	1.76e-11	-5.2e+09	0.000	-.0912435	-.0912435
C2166	.0226751	1.76e-11	1.3e+09	0.000	.0226751	.0226751
C2178	-.0566488	1.76e-11	-3.2e+09	0.000	-.0566488	-.0566488
C2182	.1829446	1.76e-11	1.0e+10	0.000	.1829446	.1829446
C2202	.0010158	1.76e-11	5.8e+07	0.000	.0010158	.0010158
C2214	.0789296	1.76e-11	4.5e+09	0.000	.0789296	.0789296
C2218	-.0393971	1.76e-11	-2.2e+09	0.000	-.0393971	-.0393971
C2222	-.0343435	1.76e-11	-1.9e+09	0.000	-.0343435	-.0343435
C2238	-.0374354	1.76e-11	-2.1e+09	0.000	-.0374354	-.0374354
C2242	.000479	1.76e-11	2.7e+07	0.000	.000479	.000479
C2250	-.0924325	1.76e-11	-5.2e+09	0.000	-.0924325	-.0924325
C2252	-.0770966	1.76e-11	-4.4e+09	0.000	-.0770966	-.0770966
C2254	-.1127385	1.76e-11	-6.4e+09	0.000	-.1127385	-.1127385
C2266	.0024461	1.76e-11	1.4e+08	0.000	.0024461	.0024461
C2290	-.1244719	1.76e-11	-7.1e+09	0.000	-.1244719	-.1244719
C2306	-.0499445	1.76e-11	-2.8e+09	0.000	-.0499445	-.0499445
C2342	.0808905	1.76e-11	4.6e+09	0.000	.0808905	.0808905
C2346	-.1157851	1.76e-11	-6.6e+09	0.000	-.1157851	-.1157851
C2354	-.0849639	1.76e-11	-4.8e+09	0.000	-.0849639	-.0849639
C2358	.1158504	1.76e-11	6.6e+09	0.000	.1158504	.1158504
C2390	-.0418037	1.76e-11	-2.4e+09	0.000	-.0418037	-.0418037
C2402	.0114117	1.76e-11	6.5e+08	0.000	.0114117	.0114117
C2414	-.1209055	1.76e-11	-6.9e+09	0.000	-.1209055	-.1209055
C2422	-.0652323	1.76e-11	-3.7e+09	0.000	-.0652323	-.0652323
C2426	-.1582751	1.76e-11	-9.0e+09	0.000	-.1582751	-.1582751
C2430	.0453062	1.76e-11	2.6e+09	0.000	.0453062	.0453062
C2434	.0738152	1.76e-11	4.2e+09	0.000	.0738152	.0738152
C2442	-.0075193	1.76e-11	-4.3e+08	0.000	-.0075193	-.0075193
C2450	-.0454722	1.76e-11	-2.6e+09	0.000	-.0454722	-.0454722
C2454	.0784847	1.76e-11	4.5e+09	0.000	.0784847	.0784847
C2458	-.0834626	1.76e-11	-4.7e+09	0.000	-.0834626	-.0834626
C2466	.039808	1.76e-11	2.3e+09	0.000	.039808	.039808
C2478	-.0572013	1.76e-11	-3.2e+09	0.000	-.0572013	-.0572013
C2486	.0274233	1.76e-11	1.6e+09	0.000	.0274233	.0274233
C2502	-.5350649	1.76e-11	-3.0e+10	0.000	-.5350649	-.5350649
C2506	-.0671805	1.76e-11	-3.8e+09	0.000	-.0671805	-.0671805
C2518	-.0256975	1.76e-11	-1.5e+09	0.000	-.0256975	-.0256975
C2522	-.0448354	1.76e-11	-2.5e+09	0.000	-.0448354	-.0448354
C2526	-.0245466	1.76e-11	-1.4e+09	0.000	-.0245466	-.0245466
C2542	-.0036959	1.76e-11	-2.1e+08	0.000	-.0036959	-.0036959
C2550	-.0335154	1.76e-11	-1.9e+09	0.000	-.0335154	-.0335154
C2554	.1403121	1.76e-11	8.0e+09	0.000	.1403121	.1403121
C2562	-.1292967	1.76e-11	-7.3e+09	0.000	-.1292967	-.1292967
C2586	-.0493344	1.76e-11	-2.8e+09	0.000	-.0493344	-.0493344
C2594	.0040448	1.76e-11	2.3e+08	0.000	.0040448	.0040448
C2598	-.1511123	1.76e-11	-8.6e+09	0.000	-.1511123	-.1511123
C2614	-.0037748	1.76e-11	-2.1e+08	0.000	-.0037748	-.0037748
C2630	-.0732032	1.76e-11	-4.2e+09	0.000	-.0732032	-.0732032
C2638	-.0580095	1.76e-11	-3.3e+09	0.000	-.0580095	-.0580095
C2642	.1390056	1.76e-11	7.9e+09	0.000	.1390056	.1390056
C2658	-.1056536	1.76e-11	-6.0e+09	0.000	-.1056536	-.1056536
C2662	.0209658	1.76e-11	1.2e+09	0.000	.0209658	.0209658
C2682	2.590337	1.034912	2.50	0.012	.5619476	4.618727
C2690	.0502835	1.76e-11	2.9e+09	0.000	.0502835	.0502835

C2698	-.0988619	1.76e-11	-5.6e+09	0.000	-.0988619	-.0988619
C2706	1.20545	.5047707	2.39	0.017	.2161176	2.194782
C2710	-.0298226	1.76e-11	-1.7e+09	0.000	-.0298226	-.0298226
C2714	-.0059574	1.76e-11	-3.4e+08	0.000	-.0059574	-.0059574
C2718	-.0389835	1.76e-11	-2.2e+09	0.000	-.0389835	-.0389835
C2726	.0759729	1.76e-11	4.3e+09	0.000	.0759729	.0759729
C2734	-.0885618	1.76e-11	-5.0e+09	0.000	-.0885618	-.0885618
C2750	-.0377952	1.76e-11	-2.1e+09	0.000	-.0377952	-.0377952
C2762	-.1466495	1.76e-11	-8.3e+09	0.000	-.1466495	-.1466495
C2774	-.0810521	1.76e-11	-4.6e+09	0.000	-.0810521	-.0810521
C2778	-.1596374	1.76e-11	-9.1e+09	0.000	-.1596374	-.1596374
C2786	-.140937	1.76e-11	-8.0e+09	0.000	-.140937	-.140937
C2790	-.109908	1.76e-11	-6.2e+09	0.000	-.109908	-.109908
C2798	.1336161	1.76e-11	7.6e+09	0.000	.1336161	.1336161
C2802	-.029596	1.76e-11	-1.7e+09	0.000	-.029596	-.029596
C2810	-.0807281	1.76e-11	-4.6e+09	0.000	-.0807281	-.0807281
C2814	.043437	1.76e-11	2.5e+09	0.000	.043437	.043437
C2842	2.78873	1.081515	2.58	0.010	.6689995	4.908461
C2866	-.0105523	1.76e-11	-6.0e+08	0.000	-.0105523	-.0105523
C2870	-.1011839	1.76e-11	-5.7e+09	0.000	-.1011839	-.1011839
C2874	.0461388	1.76e-11	2.6e+09	0.000	.0461388	.0461388
C2894	2.842878	1.09451	2.60	0.009	.6976778	4.988079
C2902	-.1394953	1.76e-11	-7.9e+09	0.000	-.1394953	-.1394953
C2910	-.167762	1.76e-11	-9.5e+09	0.000	-.167762	-.167762
C2918	-.0116696	1.76e-11	-6.6e+08	0.000	-.0116696	-.0116696
C2920	-.1305427	1.76e-11	-7.4e+09	0.000	-.1305427	-.1305427
C2934	-.0711235	1.76e-11	-4.0e+09	0.000	-.0711235	-.0711235
C2942	.0271256	1.76e-11	1.5e+09	0.000	.0271256	.0271256
C2946	.0293981	1.76e-11	1.7e+09	0.000	.0293981	.0293981
C2954	-.0290612	1.76e-11	-1.6e+09	0.000	-.0290612	-.0290612
C2962	-.0220191	1.76e-11	-1.2e+09	0.000	-.0220191	-.0220191
C2970	-.112349	1.76e-11	-6.4e+09	0.000	-.112349	-.112349
C2974	-.1315027	1.76e-11	-7.5e+09	0.000	-.1315027	-.1315027
C2982	.1503946	1.76e-11	8.5e+09	0.000	.1503946	.1503946
C2994	-.2006797	1.76e-11	-1.1e+10	0.000	-.2006797	-.2006797
C3002	-.1514055	1.76e-11	-8.6e+09	0.000	-.1514055	-.1514055
C3014	-.0527939	1.76e-11	-3.0e+09	0.000	-.0527939	-.0527939
C3030	.0509812	1.76e-11	2.9e+09	0.000	.0509812	.0509812
C3034	-.0248789	1.76e-11	-1.4e+09	0.000	-.0248789	-.0248789
C3046	.0083879	1.76e-11	4.8e+08	0.000	.0083879	.0083879
C3062	-.1063689	1.76e-11	-6.0e+09	0.000	-.1063689	-.1063689
C3070	-.0948182	1.76e-11	-5.4e+09	0.000	-.0948182	-.0948182
C3078	-.0071671	1.76e-11	-4.1e+08	0.000	-.0071671	-.0071671
C3086	-.2212763	1.76e-11	-1.3e+10	0.000	-.2212763	-.2212763
C3098	.0748555	1.76e-11	4.2e+09	0.000	.0748555	.0748555
C3102	-.0012217	1.76e-11	-6.9e+07	0.000	-.0012217	-.0012217
C3108	3.126537	1.130839	2.76	0.006	.9101333	5.342941
C3114	.0132486	1.76e-11	7.5e+08	0.000	.0132486	.0132486
C3118	.0242938	1.76e-11	1.4e+09	0.000	.0242938	.0242938
C3134	-.1474188	1.76e-11	-8.4e+09	0.000	-.1474188	-.1474188
C3142	-.0705143	1.76e-11	-4.0e+09	0.000	-.0705143	-.0705143
C3146	.0693549	1.76e-11	3.9e+09	0.000	.0693549	.0693549
C3154	.0836203	1.76e-11	4.7e+09	0.000	.0836203	.0836203
C3170	.2012092	1.76e-11	1.1e+10	0.000	.2012092	.2012092
C3174	-.2296083	1.76e-11	-1.3e+10	0.000	-.2296083	-.2296083
C3186	-.1726561	1.76e-11	-9.8e+09	0.000	-.1726561	-.1726561
C3190	-.0861167	1.76e-11	-4.9e+09	0.000	-.0861167	-.0861167
C3242	-.4360565	1.76e-11	-2.5e+10	0.000	-.4360565	-.4360565
C3258	-.0785606	1.76e-11	-4.5e+09	0.000	-.0785606	-.0785606
C3278	.0834703	1.76e-11	4.7e+09	0.000	.0834703	.0834703
C3282	.1503835	1.76e-11	8.5e+09	0.000	.1503835	.1503835
C3290	-.0098661	1.76e-11	-5.6e+08	0.000	-.0098661	-.0098661
C3310	.1520225	1.76e-11	8.6e+09	0.000	.1520225	.1520225
C3314	-.1603978	1.76e-11	-9.1e+09	0.000	-.1603978	-.1603978
C3322	-.1173227	1.76e-11	-6.7e+09	0.000	-.1173227	-.1173227
C3326	.1123373	1.76e-11	6.4e+09	0.000	.1123373	.1123373
C3334	-.0242317	1.76e-11	-1.4e+09	0.000	-.0242317	-.0242317
C3346	.0922346	1.76e-11	5.2e+09	0.000	.0922346	.0922346
C3354	-.0274806	1.76e-11	-1.6e+09	0.000	-.0274806	-.0274806
C3366	.018642	1.76e-11	1.1e+09	0.000	.018642	.018642
C3370	.097797	1.76e-11	5.6e+09	0.000	.097797	.097797
C3374	-.1055572	1.76e-11	-6.0e+09	0.000	-.1055572	-.1055572

C3378	-.0466318	1.76e-11	-2.6e+09	0.000	-.0466318	-.0466318
C3386	-.0032761	1.76e-11	-1.9e+08	0.000	-.0032761	-.0032761
C3406	-.173336	1.76e-11	-9.8e+09	0.000	-.173336	-.173336
C3410	-.0314524	1.76e-11	-1.8e+09	0.000	-.0314524	-.0314524
C3458	.1072957	1.76e-11	6.1e+09	0.000	.1072957	.1072957
C3462	-.149517	1.76e-11	-8.5e+09	0.000	-.149517	-.149517
C3474	-.0559334	1.76e-11	-3.2e+09	0.000	-.0559334	-.0559334
C3482	-.0835291	1.76e-11	-4.7e+09	0.000	-.0835291	-.0835291
C3490	.1761902	1.76e-11	1.0e+10	0.000	.1761902	.1761902
C3494	.181088	1.76e-11	1.0e+10	0.000	.181088	.181088
C3498	.1591579	1.76e-11	9.0e+09	0.000	.1591579	.1591579
C3510	-.0719094	1.76e-11	-4.1e+09	0.000	-.0719094	-.0719094
C3530	.1242533	1.76e-11	7.1e+09	0.000	.1242533	.1242533
C3538	.0406939	1.76e-11	2.3e+09	0.000	.0406939	.0406939
C3562	2.953225	1.054844	2.80	0.005	.8857699	5.020681
C3566	-.1028797	1.76e-11	-5.8e+09	0.000	-.1028797	-.1028797
C3584	.0809847	1.76e-11	4.6e+09	0.000	.0809847	.0809847
C3598	.0638878	1.76e-11	3.6e+09	0.000	.0638878	.0638878
C3610	.0043358	1.76e-11	2.5e+08	0.000	.0043358	.0043358
C3614	.0014009	1.76e-11	8.0e+07	0.000	.0014009	.0014009
C3622	.1424874	1.76e-11	8.1e+09	0.000	.1424874	.1424874
C3626	-.0458831	1.76e-11	-2.6e+09	0.000	-.0458831	-.0458831
C3642	.0316282	1.76e-11	1.8e+09	0.000	.0316282	.0316282
C3650	.1078635	1.76e-11	6.1e+09	0.000	.1078635	.1078635
C3654	.0056984	1.76e-11	3.2e+08	0.000	.0056984	.0056984
C3674	.0515404	1.76e-11	2.9e+09	0.000	.0515404	.0515404
C3678	-.1375381	1.76e-11	-7.8e+09	0.000	-.1375381	-.1375381
C3698	-.0985921	1.76e-11	-5.6e+09	0.000	-.0985921	-.0985921
C3710	.1781759	1.76e-11	1.0e+10	0.000	.1781759	.1781759
C3734	.0067698	1.76e-11	3.8e+08	0.000	.0067698	.0067698
C3746	-.0182046	1.76e-11	-1.0e+09	0.000	-.0182046	-.0182046
C3762	-.1182348	1.76e-11	-6.7e+09	0.000	-.1182348	-.1182348
C3786	-.0208025	1.76e-11	-1.2e+09	0.000	-.0208025	-.0208025
C3790	-.0380369	1.76e-11	-2.2e+09	0.000	-.0380369	-.0380369
C3798	.124899	1.76e-11	7.1e+09	0.000	.124899	.124899
C3806	.2057634	1.76e-11	1.2e+10	0.000	.2057634	.2057634
C3822	-.1216678	1.76e-11	-6.9e+09	0.000	-.1216678	-.1216678
C3830	2.458438	.9661044	2.54	0.011	.5649082	4.351968
C3834	.0425581	1.76e-11	2.4e+09	0.000	.0425581	.0425581
C3854	-.1096704	1.76e-11	-6.2e+09	0.000	-.1096704	-.1096704
C3866	-.5242362	1.76e-11	-3.0e+10	0.000	-.5242362	-.5242362
C3886	.0116447	1.76e-11	6.6e+08	0.000	.0116447	.0116447
C3890	.1288374	1.76e-11	7.3e+09	0.000	.1288374	.1288374
C3894	.0503717	1.76e-11	2.9e+09	0.000	.0503717	.0503717
C3914	.0185098	1.76e-11	1.1e+09	0.000	.0185098	.0185098
C3930	.0594508	1.76e-11	3.4e+09	0.000	.0594508	.0594508
C3934	-.0056695	1.76e-11	-3.2e+08	0.000	-.0056695	-.0056695
C3938	.0107444	1.76e-11	6.1e+08	0.000	.0107444	.0107444
C3946	-.018577	1.76e-11	-1.1e+09	0.000	-.018577	-.018577
C3954	-.1310073	1.76e-11	-7.4e+09	0.000	-.1310073	-.1310073
C3958	.0730085	1.76e-11	4.1e+09	0.000	.0730085	.0730085
C3966	-.0320274	1.76e-11	-1.8e+09	0.000	-.0320274	-.0320274
C3974	.0107076	1.76e-11	6.1e+08	0.000	.0107076	.0107076
C3982	.0868465	1.76e-11	4.9e+09	0.000	.0868465	.0868465
C3990	.1560749	1.76e-11	8.9e+09	0.000	.1560749	.1560749
C4006	.0183503	1.76e-11	1.0e+09	0.000	.0183503	.0183503
C4014	.1355139	1.76e-11	7.7e+09	0.000	.1355139	.1355139
C4022	-.0317059	1.76e-11	-1.8e+09	0.000	-.0317059	-.0317059
C4034	-.0878901	1.76e-11	-5.0e+09	0.000	-.0878901	-.0878901
C4038	-.0380764	1.76e-11	-2.2e+09	0.000	-.0380764	-.0380764
C4042	-.0167768	1.76e-11	-9.5e+08	0.000	-.0167768	-.0167768
C4058	-.0988934	1.76e-11	-5.6e+09	0.000	-.0988934	-.0988934
C4066	-.0941536	1.76e-11	-5.3e+09	0.000	-.0941536	-.0941536
C4090	.183987	1.76e-11	1.0e+10	0.000	.183987	.183987
C4098	-.0931466	1.76e-11	-5.3e+09	0.000	-.0931466	-.0931466
C4106	-.0449391	1.76e-11	-2.6e+09	0.000	-.0449391	-.0449391
C4110	-.0283451	1.76e-11	-1.6e+09	0.000	-.0283451	-.0283451
C4114	-.1335543	1.76e-11	-7.6e+09	0.000	-.1335543	-.1335543
C4118	.0411917	1.76e-11	2.3e+09	0.000	.0411917	.0411917
C4142	.009184	1.76e-11	5.2e+08	0.000	.009184	.009184
C4150	.1849309	1.76e-11	1.0e+10	0.000	.1849309	.1849309
C4154	-.0291501	1.76e-11	-1.7e+09	0.000	-.0291501	-.0291501

C4162	.1924208	1.76e-11	1.1e+10	0.000	.1924208	.1924208
C4166	-.0014498	1.76e-11	-8.2e+07	0.000	-.0014498	-.0014498
C4170	2.310709	.8666399	2.67	0.008	.6121255	4.009292
C4174	.1913976	1.76e-11	1.1e+10	0.000	.1913976	.1913976
C4186	3.254534	1.128509	2.88	0.004	1.042698	5.46637
C4190	-.6025055	1.76e-11	-3.4e+10	0.000	-.6025055	-.6025055
C4194	.4933332	1.76e-11	2.8e+10	0.000	.4933332	.4933332
C4198	-.2952877	1.76e-11	-1.7e+10	0.000	-.2952877	-.2952877
C4202	.0940181	1.76e-11	5.3e+09	0.000	.0940181	.0940181
C4210	.1618379	1.76e-11	9.2e+09	0.000	.1618379	.1618379
C4214	.1605536	1.76e-11	9.1e+09	0.000	.1605536	.1605536
C4220	.1964223	1.76e-11	1.1e+10	0.000	.1964223	.1964223
C4222	.2127826	1.76e-11	1.2e+10	0.000	.2127826	.2127826
C4234	.0048844	1.76e-11	2.8e+08	0.000	.0048844	.0048844
C4254	-.0834302	1.76e-11	-4.7e+09	0.000	-.0834302	-.0834302
C4266	.4521628	1.76e-11	2.6e+10	0.000	.4521628	.4521628
C4268	-.0010411	1.76e-11	-5.9e+07	0.000	-.0010411	-.0010411
C4270	-.0525565	1.76e-11	-3.0e+09	0.000	-.0525565	-.0525565
C4310	-.0958466	1.76e-11	-5.4e+09	0.000	-.0958466	-.0958466
C4330	-.0017414	1.76e-11	-9.9e+07	0.000	-.0017414	-.0017414
C4334	-.0090668	1.76e-11	-5.1e+08	0.000	-.0090668	-.0090668
C4342	-.1075316	1.76e-11	-6.1e+09	0.000	-.1075316	-.1075316
C4358	-.1171841	1.76e-11	-6.7e+09	0.000	-.1171841	-.1171841
C4362	.0237435	1.76e-11	1.3e+09	0.000	.0237435	.0237435
C4378	-.0818104	1.76e-11	-4.6e+09	0.000	-.0818104	-.0818104
C4390	-.0406379	1.76e-11	-2.3e+09	0.000	-.0406379	-.0406379
C4406	.0877363	1.76e-11	5.0e+09	0.000	.0877363	.0877363
C4410	-.0789228	1.76e-11	-4.5e+09	0.000	-.0789228	-.0789228
C4414	.047385	1.76e-11	2.7e+09	0.000	.047385	.047385
C4418	-.0196556	1.76e-11	-1.1e+09	0.000	-.0196556	-.0196556
C4422	-.0928834	1.76e-11	-5.3e+09	0.000	-.0928834	-.0928834
C4430	-.1403711	1.76e-11	-8.0e+09	0.000	-.1403711	-.1403711
C4442	-.0957953	1.76e-11	-5.4e+09	0.000	-.0957953	-.0957953
C4470	.0955062	1.76e-11	5.4e+09	0.000	.0955062	.0955062
C4494	-.1317755	1.76e-11	-7.5e+09	0.000	-.1317755	-.1317755
C4506	-.0171878	1.76e-11	-9.8e+08	0.000	-.0171878	-.0171878
C4522	-.0969211	1.76e-11	-5.5e+09	0.000	-.0969211	-.0969211
C4530	.122449	1.76e-11	7.0e+09	0.000	.122449	.122449
C4546	-.1305542	1.76e-11	-7.4e+09	0.000	-.1305542	-.1305542
C4550	-.0394915	1.76e-11	-2.2e+09	0.000	-.0394915	-.0394915
C4554	-.0921854	1.76e-11	-5.2e+09	0.000	-.0921854	-.0921854
C4578	-.0522841	1.76e-11	-3.0e+09	0.000	-.0522841	-.0522841
C4582	-.1150575	1.76e-11	-6.5e+09	0.000	-.1150575	-.1150575
C4594	2.546529	.9625828	2.65	0.008	.6599009	4.433156
C4606	2.395543	.9196552	2.60	0.009	.5930516	4.198034
C4614	.0183652	1.76e-11	1.0e+09	0.000	.0183652	.0183652
C4622	-.0682833	1.76e-11	-3.9e+09	0.000	-.0682833	-.0682833
C4634	.0819894	1.76e-11	4.7e+09	0.000	.0819894	.0819894
C4652	.1195078	1.76e-11	6.8e+09	0.000	.1195078	.1195078
C4654	-.0766416	1.76e-11	-4.3e+09	0.000	-.0766416	-.0766416
C4666	-.0975806	1.76e-11	-5.5e+09	0.000	-.0975806	-.0975806
C4670	.12005	1.76e-11	6.8e+09	0.000	.12005	.12005
C4702	.0318662	1.76e-11	1.8e+09	0.000	.0318662	.0318662
C4722	.0160857	1.76e-11	9.1e+08	0.000	.0160857	.0160857
C4726	2.400043	.9741908	2.46	0.014	.4906638	4.309422
C4730	-.011449	1.76e-11	-6.5e+08	0.000	-.011449	-.011449
C4738	-.0275617	1.76e-11	-1.6e+09	0.000	-.0275617	-.0275617
C4746	-.040079	1.76e-11	-2.3e+09	0.000	-.040079	-.040079
C4758	-.0610915	1.76e-11	-3.5e+09	0.000	-.0610915	-.0610915
C4790	2.993177	1.106658	2.70	0.007	.8241681	5.162187
C4794	-.0929545	1.76e-11	-5.3e+09	0.000	-.0929545	-.0929545
C4806	-.0494362	1.76e-11	-2.8e+09	0.000	-.0494362	-.0494362
C4814	-.09054	1.76e-11	-5.1e+09	0.000	-.09054	-.09054
C4826	-.1827276	1.76e-11	-1.0e+10	0.000	-.1827276	-.1827276
C4830	.0170951	1.76e-11	9.7e+08	0.000	.0170951	.0170951
C4854	-.124453	1.76e-11	-7.1e+09	0.000	-.124453	-.124453
C4862	-.0054676	1.76e-11	-3.1e+08	0.000	-.0054676	-.0054676
C4866	-.0570154	1.76e-11	-3.2e+09	0.000	-.0570154	-.0570154
C4870	-.1359677	1.76e-11	-7.7e+09	0.000	-.1359677	-.1359677
C4890	-.0025239	1.76e-11	-1.4e+08	0.000	-.0025239	-.0025239
C4902	.0187933	1.76e-11	1.1e+09	0.000	.0187933	.0187933
C4918	-.0064859	1.76e-11	-3.7e+08	0.000	-.0064859	-.0064859

C4934	.0876597	1.76e-11	5.0e+09	0.000	.0876597	.0876597
C4942	.0388882	1.76e-11	2.2e+09	0.000	.0388882	.0388882
C4962	-.0513979	1.76e-11	-2.9e+09	0.000	-.0513979	-.0513979
C4966	-.0947327	1.76e-11	-5.4e+09	0.000	-.0947327	-.0947327
C4970	.0361752	1.76e-11	2.1e+09	0.000	.0361752	.0361752
C4974	.0433663	1.76e-11	2.5e+09	0.000	.0433663	.0433663
_cons	10.97491	1.76e-11	6.2e+11	0.000	10.97491	10.97491

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  > RDC count FE, No)
  output/reg_retail.doc
  dir : seeout

725 ivregress 2sls log_annual_avg_emplvl i.msa_factor (log_federal_funding = defense_fun
  > ding_instrument i.msa_factor), robust cluster(msa_factor)
  note: 1b.msa_factor dropped because of collinearity
  note: 2.msa_factor dropped because of collinearity
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Instrumental variables (2SLS) regression        Number of obs   =      7,372
                                                 Wald chi2(388)  =     108.77
                                                 Prob > chi2     =     1.0000
                                                 R-squared       =     0.9965
                                                 Root MSE        =     .06356

                                    (Std. Err. adjusted for 388 clusters in msa_factor)
```

log_annual_avg_em~l	Coef.	Robust Std. Err.	z	P>|z|	[95% Conf. Interval]	
log_federal_funding	-.0123297	.0192534	-0.64	0.522	-.0500657	.0254063
msa_factor						
C1038	-.0455011	5.59e-11	-8.1e+08	0.000	-.0455011	-.0455011
C1042	1.507919	5.59e-11	2.7e+10	0.000	1.507919	1.507919
C1050	-.072859	5.59e-11	-1.3e+09	0.000	-.072859	-.072859
C1054	-.5472352	5.59e-11	-9.8e+09	0.000	-.5472352	-.5472352
C1058	1.760985	5.59e-11	3.2e+10	0.000	1.760985	1.760985
C1074	1.910177	.4303958	4.44	0.000	1.066616	2.753737
C1078	-.0576416	5.59e-11	-1.0e+09	0.000	-.0576416	-.0576416
C1090	1.58882	5.59e-11	2.8e+10	0.000	1.58882	1.58882
C1102	.0400977	5.59e-11	7.2e+08	0.000	.0400977	.0400977
C1110	.5508478	5.59e-11	9.9e+09	0.000	.5508478	.5508478
C1118	-.285954	.349049	-0.82	0.413	-.9700775	.3981695
C1126	.9214432	5.59e-11	1.6e+10	0.000	.9214432	.9214432
C1146	.718129	5.59e-11	1.3e+10	0.000	.718129	.718129
C1150	-.3263927	5.59e-11	-5.8e+09	0.000	-.3263927	-.3263927
C1154	.5572404	5.59e-11	1.0e+10	0.000	.5572404	.5572404
C1164	-.2965825	5.59e-11	-5.3e+09	0.000	-.2965825	-.2965825
C1170	1.045449	5.59e-11	1.9e+10	0.000	1.045449	1.045449
C1202	.1459163	5.59e-11	2.6e+09	0.000	.1459163	.1459163
C1206	3.463308	5.59e-11	6.2e+10	0.000	3.463308	3.463308
C1210	.6327778	5.59e-11	1.1e+10	0.000	.6327778	.6327778
C1222	-.2705351	5.59e-11	-4.8e+09	0.000	-.2705351	-.2705351
C1226	1.122314	5.59e-11	2.0e+10	0.000	1.122314	1.122314
C1242	2.340629	5.59e-11	4.2e+10	0.000	2.340629	2.340629
C1254	1.231185	5.59e-11	2.2e+10	0.000	1.231185	1.231185
C1258	2.910527	.1365832	21.31	0.000	2.642829	3.178225
C1262	.3008289	5.59e-11	5.4e+09	0.000	.3008289	.3008289
C1270	.6522367	5.59e-11	1.2e+10	0.000	.6522367	.6522367
C1294	1.596624	5.59e-11	2.9e+10	0.000	1.596624	1.596624
C1298	-.2739105	5.59e-11	-4.9e+09	0.000	-.2739105	-.2739105
C1302	-.3872358	5.59e-11	-6.9e+09	0.000	-.3872358	-.3872358
C1314	.8912615	5.59e-11	1.6e+10	0.000	.8912615	.8912615
C1322	-.2102438	5.59e-11	-3.8e+09	0.000	-.2102438	-.2102438
C1338	.2110765	5.59e-11	3.8e+09	0.000	.2110765	.2110765
C1346	.1786161	5.59e-11	3.2e+09	0.000	.1786161	.1786161
C1374	.2521055	5.59e-11	4.5e+09	0.000	.2521055	.2521055
C1378	.4158528	5.59e-11	7.4e+09	0.000	.4158528	.4158528
C1382	1.973193	5.59e-11	3.5e+10	0.000	1.973193	1.973193
C1390	-.0228938	5.59e-11	-4.1e+08	0.000	-.0228938	-.0228938
C1398	-.0175176	5.59e-11	-3.1e+08	0.000	-.0175176	-.0175176
C1401	.1593464	5.59e-11	2.9e+09	0.000	.1593464	.1593464
C1402	-.1030712	5.59e-11	-1.8e+09	0.000	-.1030712	-.1030712
C1410	-.7005251	5.59e-11	-1.3e+10	0.000	-.7005251	-.7005251
C1426	1.355693	5.59e-11	2.4e+10	0.000	1.355693	1.355693
C1446	3.672028	.4092214	8.97	0.000	2.869969	4.474088
C1450	.9471483	.3791987	2.50	0.012	.2039325	1.690364
C1454	-.013466	5.59e-11	-2.4e+08	0.000	-.013466	-.013466
C1474	.2632345	5.59e-11	4.7e+09	0.000	.2632345	.2632345
C1486	1.800024	5.59e-11	3.2e+10	0.000	1.800024	1.800024

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C1518   |    .6941529    5.59e-11   1.2e+10    0.000     .6941529     .6941529
C1526   |   -.3849328    5.59e-11  -6.9e+09    0.000    -.3849328    -.3849328
C1538   |    2.013186    5.59e-11   3.6e+10    0.000     2.013186     2.013186
C1550   |   -.0288411    5.59e-11  -5.2e+08    0.000    -.0288411    -.0288411
C1554   |    .5953245    5.59e-11   1.1e+10    0.000     .5953245     .5953245
C1568   |   -.6216322    5.59e-11  -1.1e+10    0.000    -.6216322    -.6216322
C1594   |    .9386896    5.59e-11   1.7e+10    0.000     .9386896     .9386896
C1598   |    1.455792    5.59e-11   2.6e+10    0.000     1.455792     1.455792
C1602   |   -.2900086    5.59e-11  -5.2e+09    0.000    -.2900086    -.2900086
C1606   |   -.1638888    5.59e-11  -2.9e+09    0.000    -.1638888    -.1638888
C1618   |   -.9292743    5.59e-11  -1.7e+10    0.000    -.9292743    -.9292743
C1622   |   -.5321425    5.59e-11  -9.5e+09    0.000    -.5321425    -.5321425
C1630   |    .6550168    5.59e-11   1.2e+10    0.000     .6550168     .6550168
C1654   |     -.18787    5.59e-11  -3.4e+09    0.000     -.18787      -.18787
C1658   |      .24887    5.59e-11   4.5e+09    0.000      .24887       .24887
C1662   |    .4687032    5.59e-11   8.4e+09    0.000     .4687032     .4687032
C1670   |    1.486541    5.59e-11   2.7e+10    0.000     1.486541     1.486541
C1674   |    2.613984    5.59e-11   4.7e+10    0.000     2.613984     2.613984
C1682   |    .5050709     .36605      1.38     0.168    -.212374     1.222516
C1686   |    1.166713    5.59e-11   2.1e+10    0.000     1.166713     1.166713
C1694   |   -.4065584    5.59e-11  -7.3e+09    0.000    -.4065584    -.4065584
C1698   |    4.277494   .4137951     10.34     0.000     3.46647     5.088517
C1702   |    .2063701    5.59e-11   3.7e+09    0.000     .2063701     .2063701
C1714   |      2.5631    5.59e-11   4.6e+10    0.000      2.5631       2.5631
C1730   |    .2985358    5.59e-11   5.3e+09    0.000     .2985358     .2985358
C1742   |   -.5640627    5.59e-11  -1.0e+10    0.000    -.5640627    -.5640627
C1746   |    2.547567    5.59e-11   4.6e+10    0.000     2.547567     2.547567
C1766   |   -.0511439    5.59e-11  -9.2e+08    0.000    -.0511439    -.0511439
C1778   |    .2447725    5.59e-11   4.4e+09    0.000     .2447725     .2447725
C1782   |    1.295506    5.59e-11   2.3e+10    0.000     1.295506     1.295506
C1786   |    .2526867    5.59e-11   4.5e+09    0.000     .2526867     .2526867
C1790   |    1.553194    5.59e-11   2.8e+10    0.000     1.553194     1.553194
C1798   |     .486441    5.59e-11   8.7e+09    0.000      .486441      .486441
C1802   |   -.6191163    5.59e-11  -1.1e+10    0.000    -.6191163    -.6191163
C1814   |    2.548528    5.59e-11   4.6e+10    0.000     2.548528     2.548528
C1858   |    .9089983    5.59e-11   1.6e+10    0.000     .9089983     .9089983
C1870   |   -.9048144    5.59e-11  -1.6e+10    0.000    -.9048144    -.9048144
C1888   |    .6067043    5.59e-11   1.1e+10    0.000     .6067043     .6067043
C1906   |    -.520446    5.59e-11  -9.3e+09    0.000     -.520446     -.520446
C1910   |    3.685437    5.59e-11   6.6e+10    0.000     3.685437     3.685437
C1914   |   -.1465568    5.59e-11  -2.6e+09    0.000    -.1465568    -.1465568
C1918   |   -.8586824    5.59e-11  -1.5e+10    0.000    -.8586824    -.8586824
C1930   |    .3618624    5.59e-11   6.5e+09    0.000     .3618624     .3618624
C1934   |    1.006709    5.59e-11   1.8e+10    0.000     1.006709     1.006709
C1938   |     1.59733    5.59e-11   2.9e+10    0.000      1.59733      1.59733
C1946   |   -.2502027    5.59e-11  -4.5e+09    0.000    -.2502027    -.2502027
C1950   |   -.3759438    5.59e-11  -6.7e+09    0.000    -.3759438    -.3759438
C1966   |    1.209429    5.59e-11   2.2e+10    0.000     1.209429     1.209429
C1974   |    2.994681   .3907265      7.66     0.000     2.228871     3.760491
C1978   |    1.517952    5.59e-11   2.7e+10    0.000     1.517952     1.517952
C1982   |    3.220434    5.59e-11   5.8e+10    0.000     3.220434     3.220434
C2002   |    .0905958    5.59e-11   1.6e+09    0.000     .0905958     .0905958
C2010   |    .0769941    5.59e-11   1.4e+09    0.000     .0769941     .0769941
C2022   |   -.1561156    5.59e-11  -2.8e+09    0.000    -.1561156    -.1561156
C2026   |      .63696    5.59e-11   1.1e+10    0.000      .63696       .63696
C2050   |    1.042178    5.59e-11   1.9e+10    0.000     1.042178     1.042178
C2070   |      .08587    5.59e-11   1.5e+09    0.000      .08587       .08587
C2074   |    .2622789    5.59e-11   4.7e+09    0.000     .2622789     .2622789
C2094   |   -.1110705    5.59e-11  -2.0e+09    0.000    -.1110705    -.1110705
C2106   |    -.208336    5.59e-11  -3.7e+09    0.000     -.208336     -.208336
C2114   |    .1222402    5.59e-11   2.2e+09    0.000     .1222402     .1222402
C2130   |   -.4413818    5.59e-11  -7.9e+09    0.000    -.4413818    -.4413818
C2134   |    1.463545    5.59e-11   2.6e+10    0.000     1.463545     1.463545
C2150   |    .6266504    5.59e-11   1.1e+10    0.000     .6266504     .6266504
C2166   |    .8427198    5.59e-11   1.5e+10    0.000     .8427198     .8427198
C2178   |    .7351535    5.59e-11   1.3e+10    0.000     .7351535     .7351535
C2182   |   -.5906253    5.59e-11  -1.1e+10    0.000    -.5906253    -.5906253
C2202   |    .5987744    5.59e-11   1.1e+10    0.000     .5987744     .5987744
C2214   |   -.3029732    5.59e-11  -5.4e+09    0.000    -.3029732    -.3029732
C2218   |    .6652543    5.59e-11   1.2e+10    0.000     .6652543     .6652543
C2222   |    .9897718    5.59e-11   1.8e+10    0.000     .9897718     .9897718
C2238   |   -.1632733    5.59e-11  -2.9e+09    0.000    -.1632733    -.1632733
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C2242	.8957599	5.59e-11	1.6e+10	0.000	.8957599	.8957599
C2250	.2596732	5.59e-11	4.6e+09	0.000	.2596732	.2596732
C2252	-.053759	5.59e-11	-9.6e+08	0.000	-.053759	-.053759
C2254	-.4074261	5.59e-11	-7.3e+09	0.000	-.4074261	-.4074261
C2266	.739351	5.59e-11	1.3e+10	0.000	.739351	.739351
C2290	.4251927	5.59e-11	7.6e+09	0.000	.4251927	.4251927
C2306	1.009287	5.59e-11	1.8e+10	0.000	1.009287	1.009287
C2342	1.456485	5.59e-11	2.6e+10	0.000	1.456485	1.456485
C2346	-.5941387	5.59e-11	-1.1e+10	0.000	-.5941387	-.5941387
C2354	.5091915	5.59e-11	9.1e+09	0.000	.5091915	.5091915
C2358	-.0626621	5.59e-11	-1.1e+09	0.000	-.0626621	-.0626621
C2390	-.8404723	5.59e-11	-1.5e+10	0.000	-.8404723	-.8404723
C2402	-.1119211	5.59e-11	-2.0e+09	0.000	-.1119211	-.1119211
C2414	-.3773994	5.59e-11	-6.8e+09	0.000	-.3773994	-.3773994
C2422	-.0962488	5.59e-11	-1.7e+09	0.000	-.0962488	-.0962488
C2426	-.3513254	5.59e-11	-6.3e+09	0.000	-.3513254	-.3513254
C2430	-.0301679	5.59e-11	-5.4e+08	0.000	-.0301679	-.0301679
C2434	1.780067	5.59e-11	3.2e+10	0.000	1.780067	1.780067
C2442	-.7810514	5.59e-11	-1.4e+10	0.000	-.7810514	-.7810514
C2450	-.4743424	5.59e-11	-8.5e+09	0.000	-.4743424	-.4743424
C2454	.0497534	5.59e-11	8.9e+08	0.000	.0497534	.0497534
C2458	.7192731	5.59e-11	1.3e+10	0.000	.7192731	.7192731
C2466	1.516492	5.59e-11	2.7e+10	0.000	1.516492	1.516492
C2478	.0402687	5.59e-11	7.2e+08	0.000	.0402687	.0402687
C2486	1.668871	5.59e-11	3.0e+10	0.000	1.668871	1.668871
C2502	-1.382728	5.59e-11	-2.5e+10	0.000	-1.382728	-1.382728
C2506	.7408505	5.59e-11	1.3e+10	0.000	.7408505	.7408505
C2518	.5439057	5.59e-11	9.7e+09	0.000	.5439057	.5439057
C2522	-.2480062	5.59e-11	-4.4e+09	0.000	-.2480062	-.2480062
C2526	-.7279552	5.59e-11	-1.3e+10	0.000	-.7279552	-.7279552
C2542	1.365332	5.59e-11	2.4e+10	0.000	1.365332	1.365332
C2550	-.1208725	5.59e-11	-2.2e+09	0.000	-.1208725	-.1208725
C2554	2.022456	5.59e-11	3.6e+10	0.000	2.022456	2.022456
C2562	.0314648	5.59e-11	5.6e+08	0.000	.0314648	.0314648
C2586	.6826743	5.59e-11	1.2e+10	0.000	.6826743	.6826743
C2594	.2595945	5.59e-11	4.6e+09	0.000	.2595945	.2595945
C2598	-1.431273	5.59e-11	-2.6e+10	0.000	-1.431273	-1.431273
C2614	-.4290861	5.59e-11	-7.7e+09	0.000	-.4290861	-.4290861
C2630	-.3685491	5.59e-11	-6.6e+09	0.000	-.3685491	-.3685491
C2638	.261078	5.59e-11	4.7e+09	0.000	.261078	.261078
C2642	3.4948	5.59e-11	6.3e+10	0.000	3.4948	3.4948
C2658	.783005	5.59e-11	1.4e+10	0.000	.783005	.783005
C2662	1.013849	5.59e-11	1.8e+10	0.000	1.013849	1.013849
C2682	.1697789	.3945196	0.43	0.667	-.6034654	.9430231
C2690	2.501501	5.59e-11	4.5e+10	0.000	2.501501	2.501501
C2698	.1805316	5.59e-11	3.2e+09	0.000	.1805316	.1805316
C2706	-.3930027	.1924241	-2.04	0.041	-.770147	-.0158584
C2710	-.1512342	5.59e-11	-2.7e+09	0.000	-.1512342	-.1512342
C2714	1.237134	5.59e-11	2.2e+10	0.000	1.237134	1.237134
C2718	-.084155	5.59e-11	-1.5e+09	0.000	-.084155	-.084155
C2726	2.181631	5.59e-11	3.9e+10	0.000	2.181631	2.181631
C2734	-.110521	5.59e-11	-2.0e+09	0.000	-.110521	-.110521
C2750	.0363669	5.59e-11	6.5e+08	0.000	.0363669	.0363669
C2762	.0566897	5.59e-11	1.0e+09	0.000	.0566897	.0566897
C2774	.152329	5.59e-11	2.7e+09	0.000	.152329	.152329
C2778	-.1365975	5.59e-11	-2.4e+09	0.000	-.1365975	-.1365975
C2786	-.2034512	5.59e-11	-3.6e+09	0.000	-.2034512	-.2034512
C2790	.2016767	5.59e-11	3.6e+09	0.000	.2016767	.2016767
C2798	.1258538	5.59e-11	2.3e+09	0.000	.1258538	.1258538
C2802	.630655	5.59e-11	1.1e+10	0.000	.630655	.630655
C2810	-.3642446	5.59e-11	-6.5e+09	0.000	-.3642446	-.3642446
C2814	2.561535	5.59e-11	4.6e+10	0.000	2.561535	2.561535
C2842	.5852012	.4122854	1.42	0.156	-.2228633	1.393266
C2866	.626016	5.59e-11	1.1e+10	0.000	.626016	.626016
C2870	.6071206	5.59e-11	1.1e+10	0.000	.6071206	.6071206
C2874	.082851	5.59e-11	1.5e+09	0.000	.082851	.082851
C2894	1.982882	.4172392	4.75	0.000	1.165108	2.800655
C2902	-.4933457	5.59e-11	-8.8e+09	0.000	-.4933457	-.4933457
C2910	.0605771	5.59e-11	1.1e+09	0.000	.0605771	.0605771
C2918	1.147229	5.59e-11	2.1e+10	0.000	1.147229	1.147229
C2920	.1787532	5.59e-11	3.2e+09	0.000	.1787532	.1787532
C2934	.2500709	5.59e-11	4.5e+09	0.000	.2500709	.2500709

C2942	.0358981	5.59e-11	6.4e+08	0.000	.0358981	.0358981
C2946	1.142911	5.59e-11	2.0e+10	0.000	1.142911	1.142911
C2954	1.273497	5.59e-11	2.3e+10	0.000	1.273497	1.273497
C2962	.9891718	5.59e-11	1.8e+10	0.000	.9891718	.9891718
C2970	.394572	5.59e-11	7.1e+09	0.000	.394572	.394572
C2974	-.1390206	5.59e-11	-2.5e+09	0.000	-.1390206	-.1390206
C2982	2.465861	5.59e-11	4.4e+10	0.000	2.465861	2.465861
C2994	-.3443771	5.59e-11	-6.2e+09	0.000	-.3443771	-.3443771
C3002	-.4398688	5.59e-11	-7.9e+09	0.000	-.4398688	-.4398688
C3014	-.2751698	5.59e-11	-4.9e+09	0.000	-.2751698	-.2751698
C3030	-.8412565	5.59e-11	-1.5e+10	0.000	-.8412565	-.8412565
C3034	-.2251081	5.59e-11	-4.0e+09	0.000	-.2251081	-.2251081
C3046	1.245739	5.59e-11	2.2e+10	0.000	1.245739	1.245739
C3062	-.2146494	5.59e-11	-3.8e+09	0.000	-.2146494	-.2146494
C3070	.7935127	5.59e-11	1.4e+10	0.000	.7935127	.7935127
C3078	1.496487	5.59e-11	2.7e+10	0.000	1.496487	1.496487
C3086	-.3101771	5.59e-11	-5.6e+09	0.000	-.3101771	-.310177
C3098	.3015629	5.59e-11	5.4e+09	0.000	.3015629	.3015629
C3102	-.6072517	5.59e-11	-1.1e+10	0.000	-.6072517	-.6072517
C3108	4.495999	.4310881	10.43	0.000	3.651082	5.340916
C3114	2.043152	5.59e-11	3.7e+10	0.000	2.043152	2.043152
C3118	.6977204	5.59e-11	1.2e+10	0.000	.6977204	.6977204
C3134	.4502662	5.59e-11	8.1e+09	0.000	.4502662	.4502662
C3142	.409559	5.59e-11	7.3e+09	0.000	.409559	.409559
C3146	-.8369649	5.59e-11	-1.5e+10	0.000	-.8369649	-.8369649
C3154	1.59382	5.59e-11	2.9e+10	0.000	1.59382	1.59382
C3170	1.218428	5.59e-11	2.2e+10	0.000	1.218428	1.218428
C3174	-.5437377	5.59e-11	-9.7e+09	0.000	-.5437377	-.5437377
C3186	-.2063096	5.59e-11	-3.7e+09	0.000	-.2063096	-.2063096
C3190	-.1542879	5.59e-11	-2.8e+09	0.000	-.1542879	-.1542879
C3242	-.365754	5.59e-11	-6.5e+09	0.000	-.365754	-.365754
C3258	1.355131	5.59e-11	2.4e+10	0.000	1.355131	1.355131
C3278	.4805135	5.59e-11	8.6e+09	0.000	.4805135	.4805135
C3282	2.095957	5.59e-11	3.8e+10	0.000	2.095957	2.095957
C3290	-.0749909	5.59e-11	-1.3e+09	0.000	-.0749909	-.0749909
C3310	3.604708	5.59e-11	6.5e+10	0.000	3.604708	3.604708
C3314	-.389226	5.59e-11	-7.0e+09	0.000	-.389226	-.389226
C3322	-.7489092	5.59e-11	-1.3e+10	0.000	-.7489092	-.7489092
C3326	-.0342422	5.59e-11	-6.1e+08	0.000	-.0342422	-.0342422
C3334	2.279987	5.59e-11	4.1e+10	0.000	2.279987	2.279987
C3346	3.107264	5.59e-11	5.6e+10	0.000	3.107264	3.107264
C3354	-.0270307	5.59e-11	-4.8e+08	0.000	-.0270307	-.0270307
C3366	.9336584	5.59e-11	1.7e+10	0.000	.9336584	.9336584
C3370	.9667336	5.59e-11	1.7e+10	0.000	.9667336	.9667336
C3374	.1759944	5.59e-11	3.2e+09	0.000	.1759944	.1759944
C3378	-.4002175	5.59e-11	-7.2e+09	0.000	-.4002175	-.4002175
C3386	.8051355	5.59e-11	1.4e+10	0.000	.8051355	.8051355
C3406	-.2363743	5.59e-11	-4.2e+09	0.000	-.2363743	-.2363743
C3410	-.4249806	5.59e-11	-7.6e+09	0.000	-.4249806	-.4249806
C3458	-.1879396	5.59e-11	-3.4e+09	0.000	-.1879396	-.1879396
C3462	-.240368	5.59e-11	-4.3e+09	0.000	-.240368	-.240368
C3474	.2523687	5.59e-11	4.5e+09	0.000	.2523687	.2523687
C3482	1.086774	5.59e-11	1.9e+10	0.000	1.086774	1.086774
C3490	-.2907858	5.59e-11	-5.2e+09	0.000	-.2907858	-.2907858
C3494	.8309875	5.59e-11	1.5e+10	0.000	.8309875	.8309875
C3498	2.394912	5.59e-11	4.3e+10	0.000	2.394912	2.394912
C3510	-.4880222	5.59e-11	-8.7e+09	0.000	-.4880222	-.4880222
C3530	1.646666	5.59e-11	2.9e+10	0.000	1.646666	1.646666
C3538	2.016874	5.59e-11	3.6e+10	0.000	2.016874	2.016874
C3562	4.944503	.4021178	12.30	0.000	4.156367	5.73264
C3566	-.1801079	5.59e-11	-3.2e+09	0.000	-.1801079	-.1801079
C3584	1.542322	5.59e-11	2.8e+10	0.000	1.542322	1.542322
C3598	.5508034	5.59e-11	9.9e+09	0.000	.5508034	.5508034
C3610	.6288827	5.59e-11	1.1e+10	0.000	.6288827	.6288827
C3614	-.2050359	5.59e-11	-3.7e+09	0.000	-.2050359	-.2050359
C3622	-.1497627	5.59e-11	-2.7e+09	0.000	-.1497627	-.1497627
C3626	1.186748	5.59e-11	2.1e+10	0.000	1.186748	1.186748
C3642	2.038727	5.59e-11	3.6e+10	0.000	2.038727	2.038727
C3650	.3204461	5.59e-11	5.7e+09	0.000	.3204461	.3204461
C3654	1.852717	5.59e-11	3.3e+10	0.000	1.852717	1.852717
C3674	2.718643	5.59e-11	4.9e+10	0.000	2.718643	2.718643
C3678	.0001614	5.59e-11	2.9e+06	0.000	.0001614	.0001614

C3698	-.2816592	5.59e-11	-5.0e+09	0.000	-.2816592	-.2816592
C3710	1.505559	5.59e-11	2.7e+10	0.000	1.505559	1.505559
C3734	1.172028	5.59e-11	2.1e+10	0.000	1.172028	1.172028
C3746	.2710669	5.59e-11	4.9e+09	0.000	.2710669	.2710669
C3762	-.2171666	5.59e-11	-3.9e+09	0.000	-.2171666	-.2171666
C3786	.956944	5.59e-11	1.7e+10	0.000	.956944	.956944
C3790	.7954386	5.59e-11	1.4e+10	0.000	.7954386	.7954386
C3798	3.590937	5.59e-11	6.4e+10	0.000	3.590937	3.590937
C3806	3.265836	5.59e-11	5.8e+10	0.000	3.265836	3.265836
C3822	-.7786173	5.59e-11	-1.4e+10	0.000	-.7786173	-.7786173
C3830	2.990177	.3682895	8.12	0.000	2.268343	3.712011
C3834	.0352706	5.59e-11	6.3e+08	0.000	.0352706	.0352706
C3854	-.6354497	5.59e-11	-1.1e+10	0.000	-.6354497	-.6354497
C3866	.2705418	5.59e-11	4.8e+09	0.000	.2705418	.2705418
C3886	1.432761	5.59e-11	2.6e+10	0.000	1.432761	1.432761
C3890	2.570731	5.59e-11	4.6e+10	0.000	2.570731	2.570731
C3894	.84384	5.59e-11	1.5e+10	0.000	.84384	.84384
C3914	.0357257	5.59e-11	6.4e+08	0.000	.0357257	.0357257
C3930	2.306051	5.59e-11	4.1e+10	0.000	2.306051	2.306051
C3934	1.080975	5.59e-11	1.9e+10	0.000	1.080975	1.080975
C3938	-.105443	5.59e-11	-1.9e+09	0.000	-.105443	-.105443
C3946	.0220457	5.59e-11	3.9e+08	0.000	.0220457	.0220457
C3954	.0858001	5.59e-11	1.5e+09	0.000	.0858001	.0858001
C3958	1.985109	5.59e-11	3.6e+10	0.000	1.985109	1.985109
C3966	.1041107	5.59e-11	1.9e+09	0.000	.1041107	.1041107
C3974	.8636883	5.59e-11	1.5e+10	0.000	.8636883	.8636883
C3982	.1055061	5.59e-11	1.9e+09	0.000	.1055061	.1055061
C3990	1.011545	5.59e-11	1.8e+10	0.000	1.011545	1.011545
C4006	2.080256	5.59e-11	3.7e+10	0.000	2.080256	2.080256
C4014	2.985901	5.59e-11	5.3e+10	0.000	2.985901	2.985901
C4022	.8092819	5.59e-11	1.4e+10	0.000	.8092819	.8092819
C4034	.3784571	5.59e-11	6.8e+09	0.000	.3784571	.3784571
C4038	1.917914	5.59e-11	3.4e+10	0.000	1.917914	1.917914
C4042	.6616514	5.59e-11	1.2e+10	0.000	.6616514	.6616514
C4058	-.0671113	5.59e-11	-1.2e+09	0.000	-.0671113	-.0671113
C4066	-.5853991	5.59e-11	-1.0e+10	0.000	-.5853991	-.5853991
C4090	2.452064	5.59e-11	4.4e+10	0.000	2.452064	2.452064
C4098	.3718432	5.59e-11	6.7e+09	0.000	.3718432	.3718432
C4106	.4846556	5.59e-11	8.7e+09	0.000	.4846556	.4846556
C4110	-.0536984	5.59e-11	-9.6e+08	0.000	-.0536984	-.0536984
C4114	-.2327223	5.59e-11	-4.2e+09	0.000	-.2327223	-.2327223
C4118	2.846168	5.59e-11	5.1e+10	0.000	2.846168	2.846168
C4142	.7389388	5.59e-11	1.3e+10	0.000	.7389388	.7389388
C4150	.6907577	5.59e-11	1.2e+10	0.000	.6907577	.6907577
C4154	.9865988	5.59e-11	1.8e+10	0.000	.9865988	.9865988
C4162	2.094577	5.59e-11	3.7e+10	0.000	2.094577	2.094577
C4166	-.3651676	5.59e-11	-6.5e+09	0.000	-.3651676	-.3651676
C4170	2.706472	.3303726	8.19	0.000	2.058954	3.353991
C4174	2.848126	5.59e-11	5.1e+10	0.000	2.848126	2.848126
C4186	3.481825	.4301998	8.09	0.000	2.638649	4.325001
C4190	-1.147317	5.59e-11	-2.1e+10	0.000	-1.147317	-1.147317
C4194	2.332774	5.59e-11	4.2e+10	0.000	2.332774	2.332774
C4198	2.406281	5.59e-11	4.3e+10	0.000	2.406281	2.406281
C4202	.5104739	5.59e-11	9.1e+09	0.000	.5104739	.5104739
C4210	.4053708	5.59e-11	7.3e+09	0.000	.4053708	.4053708
C4214	.0436022	5.59e-11	7.8e+08	0.000	.0436022	.0436022
C4220	.8515104	5.59e-11	1.5e+10	0.000	.8515104	.8515104
C4222	1.054096	5.59e-11	1.9e+10	0.000	1.054096	1.054096
C4234	.8230049	5.59e-11	1.5e+10	0.000	.8230049	.8230049
C4254	1.361931	5.59e-11	2.4e+10	0.000	1.361931	1.361931
C4266	3.109443	5.59e-11	5.6e+10	0.000	3.109443	3.109443
C4268	-.022438	5.59e-11	-4.0e+08	0.000	-.022438	-.022438
C4270	-.6733006	5.59e-11	-1.2e+10	0.000	-.6733006	-.6733006
C4310	-.3206877	5.59e-11	-5.7e+09	0.000	-.3206877	-.3206877
C4330	-.3157492	5.59e-11	-5.7e+09	0.000	-.3157492	-.3157492
C4334	1.001481	5.59e-11	1.8e+10	0.000	1.001481	1.001481
C4342	-.5484244	5.59e-11	-9.8e+09	0.000	-.5484244	-.5484244
C4358	.2097938	5.59e-11	3.8e+09	0.000	.2097938	.2097938
C4362	.7339443	5.59e-11	1.3e+10	0.000	.7339443	.7339443
C4378	.6269434	5.59e-11	1.1e+10	0.000	.6269434	.6269434
C4390	.597656	5.59e-11	1.1e+10	0.000	.597656	.597656
C4406	1.181739	5.59e-11	2.1e+10	0.000	1.181739	1.181739

C4410	.3566491	5.59e-11	6.4e+09	0.000	.3566491	.3566491
C4414	1.307166	5.59e-11	2.3e+10	0.000	1.307166	1.307166
C4418	1.105544	5.59e-11	2.0e+10	0.000	1.105544	1.105544
C4422	-.3033466	5.59e-11	-5.4e+09	0.000	-.3033466	-.3033466
C4430	-.0717506	5.59e-11	-1.3e+09	0.000	-.0717506	-.0717506
C4442	-.3728153	5.59e-11	-6.7e+09	0.000	-.3728153	-.3728153
C4470	1.134969	5.59e-11	2.0e+10	0.000	1.134969	1.134969
C4494	-.622206	5.59e-11	-1.1e+10	0.000	-.622206	-.622206
C4506	1.455353	5.59e-11	2.6e+10	0.000	1.455353	1.455353
C4522	.7936245	5.59e-11	1.4e+10	0.000	.7936245	.7936245
C4530	2.883497	5.59e-11	5.2e+10	0.000	2.883497	2.883497
C4546	.1007382	5.59e-11	1.8e+09	0.000	.1007382	.1007382
C4550	-.0928171	5.59e-11	-1.7e+09	0.000	-.0928171	-.0928171
C4554	-1.031958	5.59e-11	-1.8e+10	0.000	-1.031958	-1.031958
C4578	1.400144	5.59e-11	2.5e+10	0.000	1.400144	1.400144
C4582	.3148563	5.59e-11	5.6e+09	0.000	.3148563	.3148563
C4594	1.120183	.366947	3.05	0.002	.4009799	1.839386
C4606	1.841027	.3505826	5.25	0.000	1.153898	2.528157
C4614	1.734936	5.59e-11	3.1e+10	0.000	1.734936	1.734936
C4622	.2739574	5.59e-11	4.9e+09	0.000	.2739574	.2739574
C4634	.4440144	5.59e-11	7.9e+09	0.000	.4440144	.4440144
C4652	1.731794	5.59e-11	3.1e+10	0.000	1.731794	1.731794
C4654	.5250079	5.59e-11	9.4e+09	0.000	.5250079	.5250079
C4666	-.0635111	5.59e-11	-1.1e+09	0.000	-.0635111	-.0635111
C4670	.7677385	5.59e-11	1.4e+10	0.000	.7677385	.7677385
C4702	-.3657403	5.59e-11	-6.5e+09	0.000	-.3657403	-.3657403
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C4726	2.597678	.3713721	6.99	0.000	1.869802	3.325554
C4730	.6132926	5.59e-11	1.1e+10	0.000	.6132926	.6132926
C4738	.3474117	5.59e-11	6.2e+09	0.000	.3474117	.3474117
C4746	-1.20368	5.59e-11	-2.2e+10	0.000	-1.20368	-1.20368
C4758	-.0628258	5.59e-11	-1.1e+09	0.000	-.0628258	-.0628258
C4790	3.746086	.4218699	8.88	0.000	2.919237	4.572936
C4794	.2593405	5.59e-11	4.6e+09	0.000	.2593405	.2593405
C4806	-.2387716	5.59e-11	-4.3e+09	0.000	-.2387716	-.2387716
C4814	.0528781	5.59e-11	9.5e+08	0.000	.0528781	.0528781
C4826	-.4839488	5.59e-11	-8.7e+09	0.000	-.4839488	-.4839488
C4830	-.3582517	5.59e-11	-6.4e+09	0.000	-.3582517	-.3582517
C4854	.0667716	5.59e-11	1.2e+09	0.000	.0667716	.0667716
C4862	1.353886	5.59e-11	2.4e+10	0.000	1.353886	1.353886
C4866	-.0552734	5.59e-11	-9.9e+08	0.000	-.0552734	-.0552734
C4870	-.188977	5.59e-11	-3.4e+09	0.000	-.188977	-.188977
C4890	.6316952	5.59e-11	1.1e+10	0.000	.6316952	.6316952
C4902	-.0277228	5.59e-11	-5.0e+08	0.000	-.0277228	-.0277228
C4918	1.233639	5.59e-11	2.2e+10	0.000	1.233639	1.233639
C4934	1.663394	5.59e-11	3.0e+10	0.000	1.663394	1.663394
C4942	.1817283	5.59e-11	3.3e+09	0.000	.1817283	.1817283
C4962	.966009	5.59e-11	1.7e+10	0.000	.966009	.966009
C4966	1.328388	5.59e-11	2.4e+10	0.000	1.328388	1.328388
C4970	-.3660786	5.59e-11	-6.6e+09	0.000	-.3660786	-.3660786
C4974	-.1166967	5.59e-11	-2.1e+09	0.000	-.1166967	-.1166967
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