```
--------------------------------------------------------------------------------
      name:  <unnamed>
       log:  C:\Users\zxuyuan\Downloads\02. Datasets\Replication_v2.log
  log type:  text
 opened on:  27 Mar 2024, 09:33:48
```

```
.
. // before using the stata do file you need to install
. // esttab: ssc install estout
. // outreg2: ssc install outreg2
.
. use "ABChousehold.dta", clear

.
. /****************TABLE 0 *******************/
. // Export the label and variable name
.
. label variable age "age"

. // this code is to export the name and label for further use. (make table in p
> ython)
.
. preserve

.     describe, replace clear

.     list
```

```
     +--------------------------------------------------------------------------+
  1. | position |                     name | type | isnume~c | format | vallab  |
     |        1 |                codemenage | str8 |        0 |   %9s  |         |
     |--------------------------------------------------------------------------|
     |                                                                   varlab  |
     |                                                           Household Code  |
     +--------------------------------------------------------------------------+

     +--------------------------------------------------------------------------+
  2. | position |                     name | type | isnume~c | format | vallab  |
     |        2 |                codevillage | str4 |        0 |   %9s  |         |
     |--------------------------------------------------------------------------|
     |                                                                   varlab  |
     |                                                   Four-Digit Village Code |
     +--------------------------------------------------------------------------+

     +--------------------------------------------------------------------------+
  3. | position |                     name | type  | isnume~c | format | vallab |
     |        3 |                  village | str28 |        0 |  %28s  |         |
     |--------------------------------------------------------------------------|
     |                                                                   varlab  |
     |                                                            Village Name  |
     +--------------------------------------------------------------------------+

     +--------------------------------------------------------------------------+
  4. | position |                     name | type | isnume~c | format | vallab  |
     |        4 |                     year | int  |        1 |  %9.0g |         |
     |--------------------------------------------------------------------------|
     |                                                                   varlab  |
     |                                                       2009, 2010 or 2011  |
     +--------------------------------------------------------------------------+

     +--------------------------------------------------------------------------+
  5. | position |                     name | type | isnume~c | format | vallab  |
     |        5 |                     time | byte |        1 |  %9.0g |         |
```

```
       |-------------------------------------------------------------------------|
       |                                                                  varlab |
       |                                                                         |
       +-------------------------------------------------------------------------+

       +-------------------------------------------------------------------------+
  6. | position |                        name | type | isnume~c | format | vallab |
     |        6 |                        dept | byte |        1 | %12.0g |        |
       |-------------------------------------------------------------------------|
       |                                                                  varlab |
       |              id2 Dept, 31=Doutchi, 32=Loga, 71=Tanout, 72=Mirriah |
       +-------------------------------------------------------------------------+

       +-------------------------------------------------------------------------+
  7. | position |                        name | type | isnume~c | format | vallab |
     |        7 |                      region | byte |        1 |  %9.0g | region |
       |-------------------------------------------------------------------------|
       |                                                                  varlab |
       |                                    Region 3=Doutchi, 7=Zinder |
       +-------------------------------------------------------------------------+

       +-------------------------------------------------------------------------+
  8. | position |                        name | type | isnume~c | format | vallab |
     |        8 |                      avcode | byte |        1 |  %9.0g |        |
       |-------------------------------------------------------------------------|
       |                                                                  varlab |
       |                              Subdistrict;Extensiton worker id |
       +-------------------------------------------------------------------------+

       +-------------------------------------------------------------------------+
  9. | position |                        name | type | isnume~c | format | vallab |
     |        9 |                         abc | byte |        1 |  %9.0g |        |
       |-------------------------------------------------------------------------|
       |                                                                  varlab |
       |                                ABC Village in 2009 or 2010 |
       +-------------------------------------------------------------------------+

       +-------------------------------------------------------------------------+
 10. | position |                        name | type | isnume~c | format | vallab |
     |       10 |                      cohort |  int |        1 |  %9.0g |        |
       |-------------------------------------------------------------------------|
       |                                                                  varlab |
       |                                                          Cohort |
       +-------------------------------------------------------------------------+

       +-------------------------------------------------------------------------+
 11. | position |                        name | type | isnume~c | format | vallab |
     |       11 |                        post | byte |        1 |  %9.0g |        |
       |-------------------------------------------------------------------------|
       |                                                                  varlab |
       |                                      Post Literacy Programme |
       +-------------------------------------------------------------------------+

       +-------------------------------------------------------------------------+
 12. | position |                        name | type | isnume~c | format | vallab |
     |       12 |                      hhhead | byte |        1 | %12.0g |        |
       |-------------------------------------------------------------------------|
       |                                                                  varlab |
       |                              id11 Are you the household head? |
       +-------------------------------------------------------------------------+

       +-------------------------------------------------------------------------+
 13. | position |                        name | type | isnume~c | format | vallab |
```

```
|          13 |               age | byte |        1 | %8.0g  |          |
|-----------------------------------------------------------------------|
|                                                                varlab |
|                                                                   age |
+-----------------------------------------------------------------------+
```

```
     +-----------------------------------------------------------------------+
14.  | position |               name | type | isnume~c | format | vallab  |
     |       14 |          eth_hausa | byte |        1 | %9.0g  |          |
     |-----------------------------------------------------------------------|
     |                                                                varlab |
     |                                                     Respondent is Hausa |
     +-----------------------------------------------------------------------+
```

```
     +-----------------------------------------------------------------------+
15.  | position |               name | type | isnume~c | format | vallab  |
     |       15 |           hhmem_no | byte |        1 | %9.0g  |          |
     |-----------------------------------------------------------------------|
     |                                                                varlab |
     |                                            Number of household members |
     +-----------------------------------------------------------------------+
```

```
     +-----------------------------------------------------------------------+
16.  | position |               name | type  | isnume~c | format | vallab  |
     |       16 |     edchild_percent | float |        1 | %9.0g  |          |
     |-----------------------------------------------------------------------|
     |                                                                varlab |
     |              Percentage of children under 15 who have some education |
     +-----------------------------------------------------------------------+
```

```
     +-----------------------------------------------------------------------+
17.  | position |               name | type | isnume~c | format | vallab  |
     |       17 |             assets | byte |        1 | %9.0g  |          |
     |-----------------------------------------------------------------------|
     |                                                                varlab |
     |                          Number of asset categories owned by household |
     +-----------------------------------------------------------------------+
```

```
     +-----------------------------------------------------------------------+
18.  | position |               name | type | isnume~c | format | vallab  |
     |       18 |          cellphone | byte |        1 | %12.0g |          |
     |-----------------------------------------------------------------------|
     |                                                                varlab |
     |         s22q1_15a Household owns a cell phone (excluding group phone) |
     +-----------------------------------------------------------------------+
```

```
     +-----------------------------------------------------------------------+
19.  | position |               name | type | isnume~c | format | vallab  |
     |       19 |     cellphoneowner | byte |        1 | %12.0g |          |
     |-----------------------------------------------------------------------|
     |                                                                varlab |
     |             s23q1 Respondent is owner of household cell phone |
     +-----------------------------------------------------------------------+
```

```
     +-----------------------------------------------------------------------+
20.  | position |               name | type | isnume~c | format | vallab  |
     |       20 |     accesscellphone | byte |        1 | %9.0g  |          |
     |-----------------------------------------------------------------------|
     |                                                                varlab |
     |              Access to household or village-level cell phone |
     +-----------------------------------------------------------------------+
```

```
     +-----------------------------------------------------------------------+
```

```
21. | position |                     name | type | isnume~c | format | vallab |
    |       21 |              usecellphone | byte |        1 | %12.0g |        |
    |--------------------------------------------------------------------------|
    |                                                                  varlab |
    |              Respondent has used cell phone since last harvest |
    +--------------------------------------------------------------------------+


    +--------------------------------------------------------------------------+
22. | position |                     name | type | isnume~c | format | vallab |
    |       22 |                 makecall | byte |        1 | %12.0g |        |
    |--------------------------------------------------------------------------|
    |                                                                  varlab |
    |                            s23q9_1 Respondent has made call |
    +--------------------------------------------------------------------------+


    +--------------------------------------------------------------------------+
23. | position |                     name | type | isnume~c | format | vallab |
    |       23 |              receivecall | byte |        1 | %12.0g |        |
    |--------------------------------------------------------------------------|
    |                                                                  varlab |
    |                        s23q9_2 Respondent has received call |
    +--------------------------------------------------------------------------+


    +--------------------------------------------------------------------------+
24. | position |                     name | type | isnume~c | format | vallab |
    |       24 |                 writesms | byte |        1 | %12.0g |        |
    |--------------------------------------------------------------------------|
    |                                                                  varlab |
    |                         s23q9_3 Respondent has written SMS |
    +--------------------------------------------------------------------------+


    +--------------------------------------------------------------------------+
25. | position |                     name | type | isnume~c | format | vallab |
    |       25 |               receivesms | byte |        1 | %12.0g |        |
    |--------------------------------------------------------------------------|
    |                                                                  varlab |
    |                        s23q9_4 Respondent has received SMS |
    +--------------------------------------------------------------------------+


    +--------------------------------------------------------------------------+
26. | position |                     name | type | isnume~c | format | vallab |
    |       26 |                      bip | byte |        1 | %12.0g |        |
    |--------------------------------------------------------------------------|
    |                                                                  varlab |
    |                            s23q9_5 Respondent has sent bip |
    +--------------------------------------------------------------------------+


    +--------------------------------------------------------------------------+
27. | position |                     name | type | isnume~c | format | vallab |
    |       27 |                receivebip | byte |        1 | %12.0g |        |
    |--------------------------------------------------------------------------|
    |                                                                  varlab |
    |                        s23q9_6 Respondent has received bip |
    +--------------------------------------------------------------------------+


    +--------------------------------------------------------------------------+
28. | position |                     name | type | isnume~c | format | vallab |
    |       28 |           madetransferSMS | byte |        1 | %12.0g |        |
    |--------------------------------------------------------------------------|
    |                                                                  varlab |
    |                  s23q9_9 Respondent made transfer SMS 2010 |
    +--------------------------------------------------------------------------+
```

```
     +----------------------------------------------------------------------+
29.  | position |                   name | type | isnume~c | format | vallab |
     |       29 |     receivedtransferSMS | byte |        1 | %12.0g |        |
     |----------------------------------------------------------------------|
     |                                                               varlab |
     |              s23q9_10 Respondent received transfer SMS 2010 |
     +----------------------------------------------------------------------+


     +----------------------------------------------------------------------+
30.  | position |                   name | type | isnume~c | format | vallab |
     |       30 |          celltalkmigrant | byte |        1 | %12.0g |        |
     |----------------------------------------------------------------------|
     |                                                               varlab |
     |            s23q10_1 Respondent used cell phone to talk to migrant |
     +----------------------------------------------------------------------+


     +----------------------------------------------------------------------+
31.  | position |                   name | type | isnume~c | format | vallab |
     |       31 | celltalkrelativeniger | byte |        1 | %12.0g |        |
     |----------------------------------------------------------------------|
     |                                                               varlab |
     |       s23q10_2 Respondent used cell phone to talk to relative in Niger |
     +----------------------------------------------------------------------+


     +----------------------------------------------------------------------+
32.  | position |                   name | type | isnume~c | format | vallab |
     |       32 |    celltalktradeniger | byte |        1 | %12.0g |        |
     |----------------------------------------------------------------------|
     |                                                               varlab |
     |   s23q10_3 Respondent used cell phone to talk about trade within Niger |
     +----------------------------------------------------------------------+


     +----------------------------------------------------------------------+
33.  | position |                   name | type | isnume~c | format | vallab |
     |       33 |      whycell_ceremony | byte |        1 | %12.0g |        |
     |----------------------------------------------------------------------|
     |                                                               varlab |
     |                    s23q11_2 Use cell to communicate ceremony |
     +----------------------------------------------------------------------+


     +----------------------------------------------------------------------+
34.  | position |                   name | type | isnume~c | format | vallab |
     |       34 |      whycell_priceinfo | byte |        1 | %12.0g |        |
     |----------------------------------------------------------------------|
     |                                                               varlab |
     |                      s23q11_4 Use cell to get price info |
     +----------------------------------------------------------------------+


     +----------------------------------------------------------------------+
35.  | position |                   name | type | isnume~c | format | vallab |
     |       35 |          whycell_help | byte |        1 | %12.0g |        |
     |----------------------------------------------------------------------|
     |                                                               varlab |
     |                        s23q11_5 Use cell to ask for help |
     +----------------------------------------------------------------------+


     +----------------------------------------------------------------------+
36.  | position |                   name | type | isnume~c | format | vallab |
     |       36 |                 drought | byte |        1 | %12.0g |        |
     |----------------------------------------------------------------------|
     |                                                               varlab |
     |             s8q3_1 Household experienced drought in past year |
     +----------------------------------------------------------------------+
```

```
        +-----------------------------------------------------------------------+
  37. | position |                      name | type | isnume~c | format | vallab |
        |       37 |   communicate_migrant | byte |        1 |  %9.0g |        |
        |-----------------------------------------------------------------------|
        |                                                               varlab |
        | Household communicated with most recent migrant since the last harvest |
        +-----------------------------------------------------------------------+
```

.   export excel using variable__label_correspondence.xlsx, replace first(var)
file variable__label_correspondence.xlsx saved

. restore

.
. use "ABCteacher.dta", clear

.
. preserve

.   describe, replace clear

.   list

```
      +----------------------------------------------------------------+
  1. | position |             name | type | isnume~c | format | vallab |
     |        1 |   codevillage | float |        1 |  %9.0g |        |
     |----------------------------------------------------------------|
     |                                                         varlab |
     |                                                   Village Code |
     +----------------------------------------------------------------+

      +----------------------------------------------------------------+
  2. | position |             name | type | isnume~c | format | vallab |
     |        2 |          class | float |        1 |  %9.0g |        |
     |----------------------------------------------------------------|
     |                                                         varlab |
     |                                                     Class code |
     +----------------------------------------------------------------+

      +----------------------------------------------------------------+
  3. | position |             name | type | isnume~c | format | vallab |
     |        3 |           year |  int |        1 |  %8.0g |        |
     |----------------------------------------------------------------|
     |                                                         varlab |
     |                                                           Year |
     +----------------------------------------------------------------+

      +----------------------------------------------------------------+
  4. | position |             name | type | isnume~c | format | vallab |
     |        4 |    teacherage | byte |        1 |  %8.0g |        |
     |----------------------------------------------------------------|
     |                                                         varlab |
     |                                                  Age of Teacher |
     +----------------------------------------------------------------+

      +----------------------------------------------------------------+
  5. | position |             name | type | isnume~c | format | vallab |
     |        5 |        levelno | byte |        1 |  %8.0g |        |
     |----------------------------------------------------------------|
     |                                                         varlab |
     |                                Level of Instruction of Teacher |
     +----------------------------------------------------------------+
```

```
       +--------------------------------------------------------------+
   6.  | position |          name | type | isnume~c | format | vallab |
       |        6 | femaleteacher | byte |        1 | %8.0g  |        |
       |--------------------------------------------------------------|
       |                              varlab                          |
       |                         Female Teacher                       |
       +--------------------------------------------------------------+


       +--------------------------------------------------------------+
   7.  | position |          name | type | isnume~c | format | vallab |
       |        7 |  femalecenter | byte |        1 | %8.0g  |        |
       |--------------------------------------------------------------|
       |                              varlab                          |
       |                         Female Class                        |
       +--------------------------------------------------------------+


       +--------------------------------------------------------------+
   8.  | position |          name | type | isnume~c | format | vallab |
       |        8 |         local | byte |        1 | %8.0g  |        |
       |--------------------------------------------------------------|
       |                              varlab                          |
       |                   Teacher from Same Village                  |
       +--------------------------------------------------------------+


       +--------------------------------------------------------------+
   9.  | position |          name | type | isnume~c | format | vallab |
       |        9 |        region | float|        1 | %9.0g  |        |
       |--------------------------------------------------------------|
       |                              varlab                          |
       |                   Dosso Region = 1 Zinder =0                 |
       +--------------------------------------------------------------+


       +--------------------------------------------------------------+
  10.  | position |          name | type | isnume~c | format | vallab |
       |       10 |        cohort | float|        1 | %9.0g  |        |
       |--------------------------------------------------------------|
       |                              varlab                          |
       |                             Cohort                          |
       +--------------------------------------------------------------+


       +--------------------------------------------------------------+
  11.  | position |          name | type | isnume~c | format | vallab |
       |       11 |           abc | byte |        1 | %9.0g  |        |
       |--------------------------------------------------------------|
       |                              varlab                          |
       |                          ABC village                        |
       +--------------------------------------------------------------+


       +--------------------------------------------------------------+
  12.  | position |          name | type | isnume~c | format | vallab |
       |       12 |        avcode | byte |        1 | %9.0g  |        |
       |--------------------------------------------------------------|
       |                              varlab                          |
       |                 Subdistrict;Extensiton worker id            |
       +--------------------------------------------------------------+

.      export excel using variable__label_correspondence_teacher.xlsx, replace fi
> rst(var)
file variable__label_correspondence_teacher.xlsx saved

. restore
```

```
.
. use "ABCtestscore.dta", clear

.
. preserve

.    describe, replace clear

.    list

     +--------------------------------------------------------------------------+
  1. | position |                name | type | isnume~c | format |    vallab |
     |        1 |         codevillage | double |       1 |  %9.0g |           |
     |--------------------------------------------------------------------------|
     |                                                   varlab                 |
     |                                              Village Code                |
     +--------------------------------------------------------------------------+


     +--------------------------------------------------------------------------+
  2. | position |                name | type | isnume~c | format |    vallab |
     |        2 |               class | float  |       1 |  %9.0g |           |
     |--------------------------------------------------------------------------|
     |                                                   varlab                 |
     |                                              Class code                  |
     +--------------------------------------------------------------------------+


     +--------------------------------------------------------------------------+
  3. | position |                name | type | isnume~c | format |    vallab |
     |        3 |               round | byte   |       1 |  %9.0g |           |
     |--------------------------------------------------------------------------|
     |                                                   varlab                 |
     |                                round of literacy data-collection         |
     +--------------------------------------------------------------------------+


     +--------------------------------------------------------------------------+
  4. | position |                name | type | isnume~c | format |    vallab |
     |        4 |    timesinceliteracy | byte   |       1 |  %9.0g | TIMESINCE |
     |--------------------------------------------------------------------------|
     |                                                   varlab                 |
     |                        timesince since literacy project started         |
     +--------------------------------------------------------------------------+


     +--------------------------------------------------------------------------+
  5. | position |                name | type | isnume~c | format |    vallab |
     |        5 |               write | double |       1 |  %9.0g |           |
     |--------------------------------------------------------------------------|
     |                                                   varlab                 |
     |                                Score on writing Test                     |
     +--------------------------------------------------------------------------+


     +--------------------------------------------------------------------------+
  6. | position |                name | type | isnume~c | format |    vallab |
     |        6 |                math | double |       1 |  %9.0g |           |
     |--------------------------------------------------------------------------|
     |                                                   varlab                 |
     |                                 Score on Math Test                       |
     +--------------------------------------------------------------------------+


     +--------------------------------------------------------------------------+
  7. | position |                name | type | isnume~c | format |    vallab |
     |        7 |              absent | byte   |       1 |  %9.0g |           |
     |--------------------------------------------------------------------------|
     |                                                   varlab                 |
```

```
      |                          Absent on date of test                     |
      +---------------------------------------------------------------------+


      +---------------------------------------------------------------------+
  8.  | position |              name | type | isnume~c | format |    vallab |
      |        8 |            region | byte |        1 |  %8.0g |           |
      |---------------------------------------------------------------------|
      |                                        varlab                       |
      |                                        Region                       |
      +---------------------------------------------------------------------+


      +---------------------------------------------------------------------+
  9.  | position |              name | type | isnume~c | format |    vallab |
      |        9 |             days1 | byte |        1 |  %9.0g |           |
      |---------------------------------------------------------------------|
      |                                        varlab                       |
      |                        Number of Class days in month 1              |
      +---------------------------------------------------------------------+


      +---------------------------------------------------------------------+
 10.  | position |              name | type | isnume~c | format |    vallab |
      |       10 |             days2 | byte |        1 |  %9.0g |           |
      |---------------------------------------------------------------------|
      |                                        varlab                       |
      |                        Number of Class days in month 2              |
      +---------------------------------------------------------------------+


      +---------------------------------------------------------------------+
 11.  | position |              name | type | isnume~c | format |    vallab |
      |       11 |             days3 | byte |        1 |  %9.0g |           |
      |---------------------------------------------------------------------|
      |                                        varlab                       |
      |                        Number of Class days in month 3              |
      +---------------------------------------------------------------------+


      +---------------------------------------------------------------------+
 12.  | position |              name | type | isnume~c | format |    vallab |
      |       12 |           attend1 | byte |        1 |  %9.0g |           |
      |---------------------------------------------------------------------|
      |                                        varlab                       |
      |                        # Class days attenden in month1              |
      +---------------------------------------------------------------------+


      +---------------------------------------------------------------------+
 13.  | position |              name | type | isnume~c | format |    vallab |
      |       13 |           attend2 | byte |        1 |  %9.0g |           |
      |---------------------------------------------------------------------|
      |                                        varlab                       |
      |                        # Class days attenden in month2              |
      +---------------------------------------------------------------------+


      +---------------------------------------------------------------------+
 14.  | position |              name | type | isnume~c | format |    vallab |
      |       14 |           attend3 | byte |        1 |  %9.0g |           |
      |---------------------------------------------------------------------|
      |                                        varlab                       |
      |                        # Class days attenden in month3              |
      +---------------------------------------------------------------------+


      +---------------------------------------------------------------------+
 15.  | position |              name | type | isnume~c | format |    vallab |
      |       15 |             days4 | byte |        1 |  %9.0g |           |
      |---------------------------------------------------------------------|
```

```
      |                                                               varlab      |
      |                    Number of Class days in month 4                        |
      +---------------------------------------------------------------------------+


      +---------------------------------------------------------------------------+
  16. | position |                 name |   type | isnume~c | format |    vallab |
      |       16 |              attend4 |   byte |        1 | %9.0g  |           |
      |---------------------------------------------------------------------------|
      |                                                               varlab      |
      |                    # Class days attenden in month4                        |
      +---------------------------------------------------------------------------+


      +---------------------------------------------------------------------------+
  17. | position |                 name |   type | isnume~c | format |    vallab |
      |       17 |               cohort |  float |        1 | %8.0g  |           |
      |---------------------------------------------------------------------------|
      |                                                               varlab      |
      |                    literacy cohort 09 or 10                                |
      +---------------------------------------------------------------------------+


      +---------------------------------------------------------------------------+
  18. | position |                 name |   type | isnume~c | format |    vallab |
      |       18 |               female |   byte |        1 | %9.0g  |           |
      |---------------------------------------------------------------------------|
      |                                                               varlab      |
      |                    Female                                                  |
      +---------------------------------------------------------------------------+


      +---------------------------------------------------------------------------+
  19. | position |                 name |   type | isnume~c | format |    vallab |
      |       19 |             district |   byte |        1 | %9.0g  |           |
      |---------------------------------------------------------------------------|
      |                                                               varlab      |
      |                    District                                                |
      +---------------------------------------------------------------------------+


      +---------------------------------------------------------------------------+
  20. | position |                 name |   type | isnume~c | format |    vallab |
      |       20 |             baseline |   byte |        1 | %8.0g  |           |
      |---------------------------------------------------------------------------|
      |                                                               varlab      |
      |                    Village is in Baseline Sample                           |
      +---------------------------------------------------------------------------+


      +---------------------------------------------------------------------------+
  21. | position |                 name |   type | isnume~c | format |    vallab |
      |       21 |                  abc |   byte |        1 | %9.0g  |           |
      |---------------------------------------------------------------------------|
      |                                                               varlab      |
      |                    ABC or non-ABC village                                  |
      +---------------------------------------------------------------------------+


      +---------------------------------------------------------------------------+
  22. | position |                 name |   type | isnume~c | format |    vallab |
      |       22 |               avcode |   byte |        1 | %9.0g  |           |
      |---------------------------------------------------------------------------|
      |                                                               varlab      |
      |                    Subdistrict;Extensiton worker id                        |
      +---------------------------------------------------------------------------+


      +---------------------------------------------------------------------------+
  23. | position |                 name |   type | isnume~c | format |    vallab |
      |       23 |              abc2009 |  float |        1 | %9.0g  |           |
```

```
     |-------------------------------------------------------------------|
     |                                            varlab                 |
     |                     ABC village in 2009 Cohort                    |
     +-------------------------------------------------------------------+


     +-------------------------------------------------------------------+
24.  | position |                 name | type | isnume~c | format |   vallab |
     |       24 |               abc2010 | float |        1 | %9.0g |        |
     |-------------------------------------------------------------------|
     |                                            varlab                 |
     |                     ABC village in 2010 Cohort                    |
     +-------------------------------------------------------------------+


     +-------------------------------------------------------------------+
25.  | position |                 name | type | isnume~c | format |   vallab |
     |       25 |               lit2009 | float |        1 | %9.0g |        |
     |-------------------------------------------------------------------|
     |                                            varlab                 |
     |                          2009 Cohort                              |
     +-------------------------------------------------------------------+


     +-------------------------------------------------------------------+
26.  | position |                 name | type | isnume~c | format |   vallab |
     |       26 |               lit2010 | float |        1 | %9.0g |        |
     |-------------------------------------------------------------------|
     |                                            varlab                 |
     |                          2010 Cohort                              |
     +-------------------------------------------------------------------+


     +-------------------------------------------------------------------+
27.  | position |                 name | type | isnume~c | format |   vallab |
     |       27 |               age2009 | byte |        1 | %9.0g |        |
     |-------------------------------------------------------------------|
     |                                            varlab                 |
     |                          Age in 2009                              |
     +-------------------------------------------------------------------+


     +-------------------------------------------------------------------+
28.  | position |                 name | type | isnume~c | format |   vallab |
     |       28 |                  year | float |        1 | %9.0g |        |
     |-------------------------------------------------------------------|
     |                                            varlab                 |
     |                     year of data-collection                       |
     +-------------------------------------------------------------------+


     +-------------------------------------------------------------------+
29.  | position |                 name | type | isnume~c | format |   vallab |
     |       29 |                 dosso | byte |        1 | %9.0g |        |
     |-------------------------------------------------------------------|
     |                                            varlab                 |
     |                    Dosso Region = 1 Zinder =0                     |
     +-------------------------------------------------------------------+


     +-------------------------------------------------------------------+
30.  | position |                 name | type | isnume~c | format |   vallab |
     |       30 |                 hausa | float |        1 | %9.0g |        |
     |-------------------------------------------------------------------|
     |                                            varlab                 |
     |                          Hausa village                            |
     +-------------------------------------------------------------------+


     +-------------------------------------------------------------------+
31.  | position |                 name | type | isnume~c | format |   vallab |
```

```
        |   31 |              zarma | float |        1 | %9.0g |           |
        |-----------------------------------------------------------------------|
        |                                 varlab                                |
        |                              Zarma village                            |
        +-----------------------------------------------------------------------+


  32.   +-----------------------------------------------------------------------+
        | position |               name |  type | isnume~c | format |    vallab |
        |   32 |             kanuri | float |        1 | %9.0g |           |
        |-----------------------------------------------------------------------|
        |                                 varlab                                |
        |                                 Kanuri                                |
        +-----------------------------------------------------------------------+


  33.   +-----------------------------------------------------------------------+
        | position |               name |  type | isnume~c | format |    vallab |
        |   33 |            village | str29 |        0 | %29s  |           |
        |-----------------------------------------------------------------------|
        |                                 varlab                                |
        |                              village name                             |
        +-----------------------------------------------------------------------+


  34.   +-----------------------------------------------------------------------+
        | position |               name |  type | isnume~c | format |    vallab |
        |   34 |        villagecode |  byte |        1 | %9.0g |           |
        |-----------------------------------------------------------------------|
        |                                 varlab                                |
        |                           2-digit villagecode                         |
        +-----------------------------------------------------------------------+


  35.   +-----------------------------------------------------------------------+
        | position |               name |  type | isnume~c | format |    vallab |
        |   35 |             langue | str5  |        0 |  %5s  |           |
        |-----------------------------------------------------------------------|
        |                                 varlab                                |
        |                                language                               |
        +-----------------------------------------------------------------------+


  36.   +-----------------------------------------------------------------------+
        | position |               name |  type | isnume~c | format |    vallab |
        |   36 |                age | float |        1 | %9.0g |           |
        |-----------------------------------------------------------------------|
        |                                 varlab                                |
        |                       Age - missing values imputed                    |
        +-----------------------------------------------------------------------+


  37.   +-----------------------------------------------------------------------+
        | position |               name |  type | isnume~c | format |    vallab |
        |   37 |             ageabc | float |        1 | %9.0g |           |
        |-----------------------------------------------------------------------|
        |                                 varlab                                |
        |                                                                       |
        +-----------------------------------------------------------------------+


  38.   +-----------------------------------------------------------------------+
        | position |               name |  type | isnume~c | format |    vallab |
        |   38 |              young | float |        1 | %9.0g |           |
        |-----------------------------------------------------------------------|
        |                                 varlab                                |
        |                            Age 19 and below                           |
        +-----------------------------------------------------------------------+


        +-----------------------------------------------------------------------+
```

```
39. | position |                name | type | isnume~c | format |    vallab |
    |       39 |          totalattend | float |        1 | %9.0g |           |
    |------------------------------------------------------------------------|
    |                                   varlab                               |
    |                         Number Classes Attended                        |
    +------------------------------------------------------------------------+


    +------------------------------------------------------------------------+
40. | position |                name | type | isnume~c | format |    vallab |
    |       40 |            totaldays | float |        1 | %9.0g |           |
    |------------------------------------------------------------------------|
    |                                   varlab                               |
    |                           Number Classes Held                          |
    +------------------------------------------------------------------------+


    +------------------------------------------------------------------------+
41. | position |                name | type | isnume~c | format |    vallab |
    |       41 |         percentattend | float |        1 | %9.0g |           |
    |------------------------------------------------------------------------|
    |                                   varlab                               |
    |                      Percentage of Classes Attended                    |
    +------------------------------------------------------------------------+


    +------------------------------------------------------------------------+
42. | position |                name | type | isnume~c | format |    vallab |
    |       42 |        totalattend12 | float |        1 | %9.0g |           |
    |------------------------------------------------------------------------|
    |                                   varlab                               |
    |                      # Classes Attended; Month 1&2                     |
    +------------------------------------------------------------------------+


    +------------------------------------------------------------------------+
43. | position |                name | type | isnume~c | format |    vallab |
    |       43 |        totalattend34 | float |        1 | %9.0g |           |
    |------------------------------------------------------------------------|
    |                                   varlab                               |
    |                      # Classes Attended; Month 3&4                     |
    +------------------------------------------------------------------------+


    +------------------------------------------------------------------------+
44. | position |                name | type | isnume~c | format |    vallab |
    |       44 |          totaldays12 | float |        1 | %9.0g |           |
    |------------------------------------------------------------------------|
    |                                   varlab                               |
    |                        # Classes Held; Month 1&2                       |
    +------------------------------------------------------------------------+


    +------------------------------------------------------------------------+
45. | position |                name | type | isnume~c | format |    vallab |
    |       45 |          totaldays34 | float |        1 | %9.0g |           |
    |------------------------------------------------------------------------|
    |                                   varlab                               |
    |                        # Classes Held; Month 3&4                       |
    +------------------------------------------------------------------------+


    +------------------------------------------------------------------------+
46. | position |                name | type | isnume~c | format |    vallab |
    |       46 |      percentattend12 | float |        1 | %9.0g |           |
    |------------------------------------------------------------------------|
    |                                   varlab                               |
    |                      % Classes Attended; Month 1&2                     |
    +------------------------------------------------------------------------+
```

```
    +---------------------------------------------------------------------+
47. | position |              name | type | isnume~c | format |    vallab |
    |       47 | percentattend34 | float |        1 | %9.0g |           |
    |---------------------------------------------------------------------|
    |                                 varlab                              |
    |                    % Classes Attended; Month 3&4                    |
    +---------------------------------------------------------------------+


    +---------------------------------------------------------------------+
48. | position |              name | type | isnume~c | format |    vallab |
    |       48 |            post | float |        1 | %9.0g |           |
    |---------------------------------------------------------------------|
    |                                 varlab                              |
    |                                  Post                               |
    +---------------------------------------------------------------------+


    +---------------------------------------------------------------------+
49. | position |              name | type | isnume~c | format |    vallab |
    |       49 |          abcpost | float |        1 | %9.0g |           |
    |---------------------------------------------------------------------|
    |                                 varlab                              |
    |                ABC treatment (i.e. ABC * Treatment)                 |
    +---------------------------------------------------------------------+


    +---------------------------------------------------------------------+
50. | position |              name | type | isnume~c | format |    vallab |
    |       50 |           post5m | float |        1 | %9.0g |           |
    |---------------------------------------------------------------------|
    |                                 varlab                              |
    |                           Post (5 months)                          |
    +---------------------------------------------------------------------+


    +---------------------------------------------------------------------+
51. | position |              name | type | isnume~c | format |    vallab |
    |       51 |         abcpost5m | float |        1 | %9.0g |           |
    |---------------------------------------------------------------------|
    |                                 varlab                              |
    |                         ABC*Post (5 months)                        |
    +---------------------------------------------------------------------+


    +---------------------------------------------------------------------+
52. | position |              name | type | isnume~c | format |    vallab |
    |       52 |          post11m | float |        1 | %9.0g |           |
    |---------------------------------------------------------------------|
    |                                 varlab                              |
    |                          Post (11 months)                          |
    +---------------------------------------------------------------------+


    +---------------------------------------------------------------------+
53. | position |              name | type | isnume~c | format |    vallab |
    |       53 |        abcpost11m | float |        1 | %9.0g |           |
    |---------------------------------------------------------------------|
    |                                 varlab                              |
    |                         ABC*Post (11 months)                       |
    +---------------------------------------------------------------------+


    +---------------------------------------------------------------------+
54. | position |              name | type | isnume~c | format |    vallab |
    |       54 |          post17m | float |        1 | %9.0g |           |
    |---------------------------------------------------------------------|
    |                                 varlab                              |
    |                          Post (17 months)                          |
    +---------------------------------------------------------------------+
```

```
      +--------------------------------------------------------------------+
 55.  | position |            name | type | isnume~c | format |    vallab |
      |       55 |       abcpost17m | float |        1 | %9.0g |           |
      |--------------------------------------------------------------------|
      |                                varlab                               |
      |                         ABC*Post (17 months)                        |
      +--------------------------------------------------------------------+


      +--------------------------------------------------------------------+
 56.  | position |            name | type | isnume~c | format |    vallab |
      |       56 |  post6monthafter | float |        1 | %9.0g |           |
      |--------------------------------------------------------------------|
      |                                varlab                               |
      |                                                                    |
      +--------------------------------------------------------------------+


      +--------------------------------------------------------------------+
 57.  | position |            name | type | isnume~c | format |    vallab |
      |       57 | abcpost6monthafter | float |        1 | %9.0g |         |
      |--------------------------------------------------------------------|
      |                                varlab                               |
      |                                                                    |
      +--------------------------------------------------------------------+


      +--------------------------------------------------------------------+
 58.  | position |            name | type | isnume~c | format |    vallab |
      |       58 |        femaleabc | float |        1 | %9.0g |           |
      |--------------------------------------------------------------------|
      |                                varlab                               |
      |                             Female * ABC                           |
      +--------------------------------------------------------------------+


      +--------------------------------------------------------------------+
 59.  | position |            name | type | isnume~c | format |    vallab |
      |       59 |       femalepost | float |        1 | %9.0g |           |
      |--------------------------------------------------------------------|
      |                                varlab                               |
      |                            Female * Post                           |
      +--------------------------------------------------------------------+


      +--------------------------------------------------------------------+
 60.  | position |            name | type | isnume~c | format |    vallab |
      |       60 |    abcfemalepost | float |        1 | %9.0g |           |
      |--------------------------------------------------------------------|
      |                                varlab                               |
      |                         Female * ABC * Post                        |
      +--------------------------------------------------------------------+


      +--------------------------------------------------------------------+
 61.  | position |            name | type | isnume~c | format |    vallab |
      |       61 |        regionabc | float |        1 | %9.0g |           |
      |--------------------------------------------------------------------|
      |                                varlab                               |
      |                        Region = Dosso * ABC                        |
      +--------------------------------------------------------------------+


      +--------------------------------------------------------------------+
 62.  | position |            name | type | isnume~c | format |    vallab |
      |       62 |       regionpost | float |        1 | %9.0g |           |
      |--------------------------------------------------------------------|
      |                                varlab                               |
      |                        Region = Dosso* Post                        |
```

```
      +--------------------------------------------------------------------------+

      +--------------------------------------------------------------------------+
  63. | position |            name | type | isnume~c | format |      vallab |
      |       63 |    abcregionpost | float |        1 |  %9.0g |             |
      |--------------------------------------------------------------------------|
      |                                                varlab                     |
      |                     Region = Dosso * ABC * Post                           |
      +--------------------------------------------------------------------------+


      +--------------------------------------------------------------------------+
  64. | position |            name | type | isnume~c | format |      vallab |
      |       64 |        youngabc | float |        1 |  %9.0g |             |
      |--------------------------------------------------------------------------|
      |                                                varlab                     |
      |                          Young * ABC                                      |
      +--------------------------------------------------------------------------+


      +--------------------------------------------------------------------------+
  65. | position |            name | type | isnume~c | format |      vallab |
      |       65 |        youngpost | float |        1 |  %9.0g |             |
      |--------------------------------------------------------------------------|
      |                                                varlab                     |
      |                          Young * Post                                     |
      +--------------------------------------------------------------------------+


      +--------------------------------------------------------------------------+
  66. | position |            name | type | isnume~c | format |      vallab |
      |       66 |    abcyoungpost | float |        1 |  %9.0g |             |
      |--------------------------------------------------------------------------|
      |                                                varlab                     |
      |                      Young * ABC * Post                                   |
      +--------------------------------------------------------------------------+


      +--------------------------------------------------------------------------+
  67. | position |            name | type | isnume~c | format |      vallab |
      |       67 |      cohort2009 | float |        1 |  %9.0g |             |
      |--------------------------------------------------------------------------|
      |                                                varlab                     |
      |                                                                           |
      +--------------------------------------------------------------------------+


      +--------------------------------------------------------------------------+
  68. | position |            name | type | isnume~c | format |      vallab |
      |       68 |      mathzscore | float |        1 |  %9.0g |             |
      |--------------------------------------------------------------------------|
      |                                                varlab                     |
      |                       Numeracy test Z-score                               |
      +--------------------------------------------------------------------------+


      +--------------------------------------------------------------------------+
  69. | position |            name | type | isnume~c | format |      vallab |
      |       69 |     writezscore | float |        1 |  %9.0g |             |
      |--------------------------------------------------------------------------|
      |                                                varlab                     |
      |                       Literacy test Z-score                               |
      +--------------------------------------------------------------------------+


      +--------------------------------------------------------------------------+
  70. | position |            name | type | isnume~c | format |      vallab |
      |       70 |           math1 | float |        1 |  %9.0g |             |
      |--------------------------------------------------------------------------|
      |                                                varlab                     |
```

```
      |                      Baseline numeracy test score                     |
      +-----------------------------------------------------------------------+


      +-----------------------------------------------------------------------+
 71.  | position |                name |  type | isnume~c | format |   vallab |
      |       71 |              mathz1 | float |        1 | %9.0g  |          |
      |-----------------------------------------------------------------------|
      |                                                     varlab             |
      |                   Baseline numeracy test Z-score                       |
      +-----------------------------------------------------------------------+


      +-----------------------------------------------------------------------+
 72.  | position |                name |  type | isnume~c | format |   vallab |
      |       72 |               math2 | float |        1 | %9.0g  |          |
      |-----------------------------------------------------------------------|
      |                                                     varlab             |
      |                     5-month numeracy test score                        |
      +-----------------------------------------------------------------------+


      +-----------------------------------------------------------------------+
 73.  | position |                name |  type | isnume~c | format |   vallab |
      |       73 |               math3 | float |        1 | %9.0g  |          |
      |-----------------------------------------------------------------------|
      |                                                     varlab             |
      |                    12-month numeracy test score                        |
      +-----------------------------------------------------------------------+


      +-----------------------------------------------------------------------+
 74.  | position |                name |  type | isnume~c | format |   vallab |
      |       74 |               math4 | float |        1 | %9.0g  |          |
      |-----------------------------------------------------------------------|
      |                                                     varlab             |
      |                    17 month numeracy test score                        |
      +-----------------------------------------------------------------------+


      +-----------------------------------------------------------------------+
 75.  | position |                name |  type | isnume~c | format |   vallab |
      |       75 |               math5 | float |        1 | %9.0g  |          |
      |-----------------------------------------------------------------------|
      |                                                     varlab             |
      |                    24 month numeracy test score                        |
      +-----------------------------------------------------------------------+


      +-----------------------------------------------------------------------+
 76.  | position |                name |  type | isnume~c | format |   vallab |
      |       76 |              write1 | float |        1 | %9.0g  |          |
      |-----------------------------------------------------------------------|
      |                                                     varlab             |
      |                    Baseline literacy test score                        |
      +-----------------------------------------------------------------------+


      +-----------------------------------------------------------------------+
 77.  | position |                name |  type | isnume~c | format |   vallab |
      |       77 |             writez1 | float |        1 | %9.0g  |          |
      |-----------------------------------------------------------------------|
      |                                                     varlab             |
      |                   Baseline literacy test Z-score                       |
      +-----------------------------------------------------------------------+


      +-----------------------------------------------------------------------+
 78.  | position |                name |  type | isnume~c | format |   vallab |
      |       78 |              write2 | float |        1 | %9.0g  |          |
      |-----------------------------------------------------------------------|
```

```
        |                                                      varlab |
        |                     5-month literacy test score             |
        +-------------------------------------------------------------+


        +-------------------------------------------------------------+
79. | position |              name |  type | isnume~c | format |   vallab |
    |       79 |            write3 | float |        1 | %9.0g  |          |
        |-------------------------------------------------------------|
        |                                                      varlab |
        |                    12-month literacy test score            |
        +-------------------------------------------------------------+


        +-------------------------------------------------------------+
80. | position |              name |  type | isnume~c | format |   vallab |
    |       80 |            write4 | float |        1 | %9.0g  |          |
        |-------------------------------------------------------------|
        |                                                      varlab |
        |                    17 month literacy test score            |
        +-------------------------------------------------------------+


        +-------------------------------------------------------------+
81. | position |              name |  type | isnume~c | format |   vallab |
    |       81 |            write5 | float |        1 | %9.0g  |          |
        |-------------------------------------------------------------|
        |                                                      varlab |
        |                    24 month literacy test score            |
        +-------------------------------------------------------------+
```

```
.     export excel using variable__label_correspondence_test_score.xlsx, replace
> first(var)
file variable__label_correspondence_test_score.xlsx saved

. restore


.
. /***************TABLE 1 ******************/
. // We test whether the treatment group is assigned via non-randomization manip
> ulation
.
. use "ABCtestscore.dta", clear


.
. reg writez1 abc i.avc, cluster(codev)

Linear regression                               Number of obs   =      5,982
                                                F(23, 112)      =       4.22
                                                Prob > F        =     0.0000
                                                R-squared       =     0.0224
                                                Root MSE        =      .9347

                        (Std. err. adjusted for 113 clusters in codevillage)
------------------------------------------------------------------------------
             |               Robust
     writez1 | Coefficient  std. err.      t    P>|t|     [95% conf. interval]
-------------+----------------------------------------------------------------
         abc |  -.0230921   .0399616    -0.58   0.565    -.1022709    .0560867
             |
      avcode |
          2  |  -.2052144   .1216767    -1.69   0.094    -.4463011    .0358723
          3  |  -.3711898   .0773765    -4.80   0.000    -.5245013   -.2178782
          4  |  -.3032091   .0811349    -3.74   0.000    -.4639674   -.1424508
          5  |  -.2361261   .0929439    -2.54   0.012    -.4202826   -.0519696
          6  |  -.3646186   .0790297    -4.61   0.000    -.5212059   -.2080313
```

```
        8 |  -.3464581    .083205    -4.16   0.000    -.5113182    -.181598
        9 |  -.2341432    .111874    -2.09   0.039    -.4558072   -.0124791
       10 |  -.0489395   .2207886    -0.22   0.825    -.4864039    .3885248
       11 |  -.3634914   .0869115    -4.18   0.000    -.5356955   -.1912874
       12 |    -.27556   .0900153    -3.06   0.003    -.4539138   -.0972062
       13 |  -.3252861   .0807738    -4.03   0.000     -.485329   -.1652432
       14 |  -.2848496   .0958569    -2.97   0.004    -.4747777   -.0949214
       15 |  -.1754577   .1762696    -1.00   0.322    -.5247133    .1737979
       16 |   .1108725   .1750943     0.63   0.528    -.2360545    .4577995
       17 |  -.3840173   .0773277    -4.97   0.000    -.5372323   -.2308023
       18 |  -.0624857   .1315787    -0.47   0.636    -.3231921    .1982207
       19 |  -.3935956   .0776814    -5.07   0.000    -.5475114   -.2396798
       20 |  -.3272519      .08237    -3.97   0.000    -.4904574   -.1640463
       21 |  -.3633844   .0784376    -4.63   0.000    -.5187985   -.2079702
       22 |  -.1000956   .1718358    -0.58   0.561    -.4405661     .240375
       23 |  -.3799316   .0744152    -5.11   0.000    -.5273757   -.2324874
       24 |  -.3851199   .0748474    -5.15   0.000    -.5334204   -.2368195
          |
    _cons |   .2450349   .0808129     3.03   0.003     .0849145    .4051553
------------------------------------------------------------------------------

. est store base_line_1

.
. reg writez1 abc female age dosso i.avc, cluster(codev)
note: 21.avcode omitted because of collinearity.

Linear regression                               Number of obs     =      5,675
                                                F(25, 112)        =       4.60
                                                Prob > F          =     0.0000
                                                R-squared         =     0.0278
                                                Root MSE          =     .94619

                      (Std. err. adjusted for 113 clusters in codevillage)
------------------------------------------------------------------------------
          |               Robust
  writez1 | Coefficient  std. err.      t    P>|t|     [95% conf. interval]
----------+-------------------------------------------------------------------
      abc |  -.0291124   .0420198    -0.69   0.490    -.1123693    .0541444
   female |  -.1334548   .0348153    -3.83   0.000     -.202437   -.0644727
      age |  -.0023578   .0010405    -2.27   0.025    -.0044195   -.0002962
    dosso |   .3588156    .084329     4.25   0.000     .1917286    .5259026
          |
   avcode |
        2 |   .1542814   .0995278     1.55   0.124    -.0429202     .351483
        3 |  -.3674662   .0828107    -4.44   0.000    -.5315449   -.2033874
        4 |  -.2926411   .0857275    -3.41   0.001    -.4624992    -.122783
        5 |  -.2384126   .0969158    -2.46   0.015    -.4304388   -.0463864
        6 |  -.0092147   .0337783    -0.27   0.786    -.0761421    .0577126
        8 |   .0091788   .0435093     0.21   0.833    -.0770293    .0953869
        9 |    .113174   .0922615     1.23   0.223    -.0696304    .2959784
       10 |    .297619   .2343227     1.27   0.207    -.1666615    .7618995
       11 |  -.0102384   .0601511    -0.17   0.865    -.1294202    .1089433
       12 |   .0902157   .0561096     1.61   0.111    -.0209583    .2013897
       13 |  -.3181553   .0860715    -3.70   0.000    -.4886949   -.1476157
       14 |  -.2914032   .0995354    -2.93   0.004    -.4886199   -.0941866
       15 |  -.1725761   .1792665    -0.96   0.338    -.5277696    .1826175
       16 |   .1170906   .1779624     0.66   0.512     -.235519    .4697002
       17 |  -.0548059    .028267    -1.94   0.055    -.1108132    .0012014
       18 |   .3245622   .1093285     2.97   0.004     .1079417    .5411827
       19 |  -.3930823   .0831724    -4.73   0.000    -.5578777   -.2282869
       20 |   .0254368   .0483266     0.53   0.600    -.0703161    .1211898
       21 |          0  (omitted)
```

```
        22 |  -.1052079   .1740995    -0.60   0.547    -.4501637    .2397479
        23 |  -.3819689   .0795201    -4.80   0.000    -.5395278     -.22441
        24 |  -.3764139   .0802293    -4.69   0.000     -.535378   -.2174498
           |
      _cons |   .0421313   .0509929     0.83   0.410    -.0589046    .1431672
-------------------------------------------------------------------------------
```

. est store base_line_2

.
. reg mathz1 abc i.avc, cluster(codev)

```
Linear regression                               Number of obs     =      5,982
                                                F(23, 112)        =       8.16
                                                Prob > F          =     0.0000
                                                R-squared         =     0.0199
                                                Root MSE          =     .90412
```

```
                    (Std. err. adjusted for 113 clusters in codevillage)
-------------------------------------------------------------------------------
           |               Robust
    mathz1 | Coefficient  std. err.      t    P>|t|     [95% conf. interval]
-----------+-------------------------------------------------------------------
       abc |  -.0593326   .0468961    -1.27   0.208    -.1522512     .033586
           |
    avcode |
         2 |   .0625439   .0924042     0.68   0.500    -.1205432     .245631
         3 |  -.0176523   .1308971    -0.13   0.893    -.2770082    .2417035
         4 |  -.0692193   .1275946    -0.54   0.589    -.3220315     .183593
         5 |  -.1202344   .0840566    -1.43   0.155    -.2867818     .046313
         6 |  -.2029252   .0670745    -3.03   0.003    -.3358247   -.0700256
         8 |   -.186536   .0744624    -2.51   0.014    -.3340736   -.0389983
         9 |  -.0735696   .1021616    -0.72   0.473    -.2759897    .1288505
        10 |   .1028629   .1989149     0.52   0.606    -.2912615    .4969873
        11 |  -.2015216   .0855893    -2.35   0.020    -.3711059   -.0319373
        12 |  -.1222683   .0767666    -1.59   0.114    -.2743715     .029835
        13 |  -.0344487   .1303188    -0.26   0.792    -.2926587    .2237613
        14 |  -.2170937   .0755794    -2.87   0.005    -.3668447   -.0673428
        15 |   .0899308   .2432233     0.37   0.712    -.3919851    .5718466
        16 |    .080392   .1371445     0.59   0.559    -.1913423    .3521263
        17 |   -.211454   .0705392    -3.00   0.003    -.3512185   -.0716895
        18 |   .1173407   .1053573     1.11   0.268    -.0914114    .3260927
        19 |  -.2039475   .1308492    -1.56   0.122    -.4632085    .0553135
        20 |  -.1537888   .0782359    -1.97   0.052    -.3088033    .0012257
        21 |  -.2009937   .0712221    -2.82   0.006    -.3421111   -.0598763
        22 |  -.0865498   .1337841    -0.65   0.519    -.3516259    .1785262
        23 |   -.277167   .0664611    -4.17   0.000    -.4088512   -.1454829
        24 |  -.2904979   .0670077    -4.34   0.000    -.4232651   -.1577307
           |
      _cons |   .0819325    .073604     1.11   0.268    -.0639045    .2277694
-------------------------------------------------------------------------------
```

. est store base_line_3

.
. reg mathz1 abc female age dosso i.avc, cluster(codev)
note: 21.avcode omitted because of collinearity.

```
Linear regression                               Number of obs     =      5,675
                                                F(25, 112)        =       8.04
                                                Prob > F          =     0.0000
                                                R-squared         =     0.0339
                                                Root MSE          =     .91184
```

```
                          (Std. err. adjusted for 113 clusters in codevillage)
-----------------------------------------------------------------------------
             |               Robust
     mathz1  | Coefficient  std. err.      t    P>|t|     [95% conf. interval]
-------------+---------------------------------------------------------------
        abc  | -.0671249    .0494956    -1.36   0.178    -.1651941    .0309443
      female | -.2175978    .0375091    -5.80   0.000    -.2919172   -.1432783
        age  | -.0015332    .0010447    -1.47   0.145    -.0036032    .0005368
       dosso |  .1969197    .0761977     2.58   0.011     .0459436    .3478958
             |
      avcode |
          2  |  .2634692    .0686632     3.84   0.000     .1274219    .3995165
          3  | -.0188015    .1321897    -0.14   0.887    -.2807184    .2431155
          4  | -.0640936    .1285905    -0.50   0.619    -.3188793     .190692
          5  | -.1254464    .0882364    -1.42   0.158    -.3002755    .0493828
          6  | -.0091999    .0287968    -0.32   0.750     -.066257    .0478571
          8  |  .0107621    .0454534     0.24   0.813    -.0792981    .1008222
          9  |  .1125617    .0897686     1.25   0.212    -.0653033    .2904268
         10  |  .2863779    .2119594     1.35   0.179    -.1335926    .7063483
         11  | -.0095482    .0738564    -0.13   0.897    -.1558851    .1367888
         12  |   .079682    .0468187     1.70   0.092    -.0130832    .1724473
         13  | -.0329992    .1333292    -0.25   0.805    -.2971739    .2311755
         14  | -.2241771    .0792723    -2.83   0.006     -.381245   -.0671093
         15  |  .0886956    .2427696     0.37   0.716    -.3923213    .5697124
         16  |   .080078    .1396942     0.57   0.568    -.1967081    .3568642
         17  | -.0378795    .0341381    -1.11   0.270    -.1055198    .0297608
         18  |  .3419282     .087637     3.90   0.000     .1682867    .5155698
         19  | -.2073141    .1355479    -1.53   0.129    -.4758848    .0612566
         20  |  .0404889    .0578061     0.70   0.485    -.0740465    .1550242
         21  |         0   (omitted)
         22  | -.0932146    .1367998    -0.68   0.497    -.3642659    .1778366
         23  | -.2794646    .0713104    -3.92   0.000     -.420757   -.1381722
         24  | -.2860503    .0719926    -3.97   0.000    -.4286944   -.1434063
             |
       _cons |  .0564463    .0536035     1.05   0.295    -.0497622    .1626549
-----------------------------------------------------------------------------

. est store base_line_4

.
. esttab base_line_1 base_line_2 base_line_3 base_line_4 ///
>  using ../manuscript/Tables/baseline_check.tex, ///
> style(tex) booktabs keep(abc) ///
> mtitle("log(income)" "price concession" "log(lead times)") ///
> star(* 0.1 ** 0.05 *** 0.01) ///
> se ///
> scalars("r2 R-squared") ///
>  replace
(output written to ../manuscript/Tables/baseline_check.tex)

.
. /***************TABLE 2 ******************/
.
. use "ABChousehold.dta", clear

.
. keep if year==2009
(2,059 observations deleted)

.
. /******** NOTE ********/
.
```

```
. // For Table one, I generated two versions
. // one version is consistent with the description of the guide file
. // another version is consistent with the original paper's result, because:
. // I think the original paper's method is better, because it clusters the resu
> lt to village level
. // furthermore, it uses the subdistrict's fixed effect in the model.
. // this is more robust than naive comparision of the difference
.
. global Pre_Test_Variables age hhhead eth_hausa hhmem_no edchild_percent assets
>  drought cellphone accesscellphone usecellphone makecall receivecall


.
. // summary statistics
. // I will save these results to stata dta, and use python to combine the resul
> t to latex
.
. /*
> logout, save("ttest_with_result") dta replace: ttable3 $Pre_Test_Variables, by
> (abc) tvalue
> logout, save("ttest_with_result_mean_std") dta replace: tabstat $Pre_Test_Vari
> ables, by(abc) stat(mean sd) nototal long col(stat)
> */
.
. // report the mean and standard deviation
.
. tabstat $Pre_Test_Variables, by(abc) stat(mean sd) nototal long col(stat)

abc          Variable |      Mean        SD
----------------------+--------------------
0                 age |  37.86127  13.09617
               hhhead |  .5600775  .4968593
            eth_hausa |  .7148362   .451928
             hhmem_no |  8.421965  4.053834
          edchild_pe~t |  .2786161  .2756192
               assets |  4.990366  1.608947
              drought |  .3853565   .487149
            cellphone |  .2959381  .4569054
          accesscell~e |  .7630058   .425649
         usecellphone |  .5420744  .4987148
              makecall |  .6909091  .4629612
           receivecall |  .8581818  .3494996
----------------------+--------------------
1                 age |  37.17534  11.75794
               hhhead |  .5473888  .4982313
            eth_hausa |  .7206166  .4491292
             hhmem_no |  8.327553  4.074195
          edchild_pe~t |  .2685527  .2697695
               assets |  4.978805  1.574879
              drought |  .3795761  .4857496
            cellphone |  .2953668  .4566485
          accesscell~e |  .7976879  .4021113
         usecellphone |  .5728155  .4951504
              makecall |  .7254237  .4470589
           receivecall |  .8677966  .3392873
------------------------------------------

. outreg2 using ttest_with_result_mean_std.dta, replace
dir : seeout


.
.
. foreach i in $Pre_Test_Variables{
  2.          xi: reg `i' abc i.avcode, robust cluster(codev)
```

```
  3.           outreg2 abc using "Table1_PanelA", dec(2) append dta ctitle ("`var'
> ")   nocons
  4. }
i.avcode           _Iavcode_1-22        (naturally coded; _Iavcode_1 omitted)

Linear regression                             Number of obs   =      1,038
                                              F(21, 94)       =      10.09
                                              Prob > F        =     0.0000
                                              R-squared       =     0.1039
                                              Root MSE        =     11.901

                          (Std. err. adjusted for 95 clusters in codevillage)
-------------------------------------------------------------------------------
             |               Robust
         age |  Coefficient  std. err.      t    P>|t|     [95% conf. interval]
-------------+-----------------------------------------------------------------
         abc |  -.3567906   .9311367    -0.38   0.702    -2.205584    1.492003
   _Iavcode_2 |  -.6610624   3.343874    -0.20   0.844    -7.300403    5.978278
   _Iavcode_3 |  -.9478003   3.130994    -0.30   0.763    -7.164462    5.268861
   _Iavcode_4 |   3.823123   3.399385     1.12   0.264    -2.926436    10.57268
   _Iavcode_5 |   2.704856   3.576323     0.76   0.451    -4.396017    9.805729
   _Iavcode_6 |  -2.235679   4.063755    -0.55   0.584    -10.30436    5.833003
   _Iavcode_8 |   -8.14477   2.965209    -2.75   0.007    -14.03226   -2.257279
   _Iavcode_9 |  -8.085305   2.985504    -2.71   0.008    -14.01309   -2.157517
  _Iavcode_10 |  -6.476962   3.264558    -1.98   0.050    -12.95882    .0048938
  _Iavcode_11 |  -5.690225   2.878396    -1.98   0.051    -11.40535    .0248986
  _Iavcode_12 |   -2.28954   3.854208    -0.59   0.554     -9.94216     5.36308
  _Iavcode_13 |    1.85523   3.140418     0.59   0.556    -4.380143    8.090603
  _Iavcode_14 |   .3461588    3.89545     0.09   0.929    -7.388349    8.080666
  _Iavcode_15 |   .8174565   3.453917     0.24   0.813    -6.040377     7.67529
  _Iavcode_16 |   3.672727   3.524192     1.04   0.300    -3.324639    10.67009
  _Iavcode_17 |   -9.98739   3.045812    -3.28   0.001    -16.03492   -3.939859
  _Iavcode_18 |  -2.563636    4.56644    -0.56   0.576    -11.63041    6.503138
  _Iavcode_19 |   1.127957   3.212146     0.35   0.726    -5.249834    7.505748
  _Iavcode_20 |  -3.872043   3.932902    -0.98   0.327    -11.68091    3.936827
  _Iavcode_21 |  -4.998661   3.072051    -1.63   0.107    -11.09829    1.100968
  _Iavcode_22 |  -5.603605   3.449166    -1.62   0.108    -12.45201    1.244795
        _cons |    39.6868   2.868775    13.83   0.000     33.99078    45.38282
-------------------------------------------------------------------------------
dir : seeout
i.avcode           _Iavcode_1-22        (naturally coded; _Iavcode_1 omitted)

Linear regression                             Number of obs   =      1,033
                                              F(21, 94)       =       8.35
                                              Prob > F        =     0.0000
                                              R-squared       =     0.0135
                                              Root MSE        =      .49907

                          (Std. err. adjusted for 95 clusters in codevillage)
-------------------------------------------------------------------------------
             |               Robust
       hhhead |  Coefficient  std. err.      t    P>|t|     [95% conf. interval]
-------------+-----------------------------------------------------------------
         abc |  -.0073054   .0193998    -0.38   0.707    -.0458241    .0312133
   _Iavcode_2 |  -.0450436    .055329    -0.81   0.418    -.1549006    .0648133
   _Iavcode_3 |   .0295725   .0674244     0.44   0.662    -.1043002    .1634451
   _Iavcode_4 |   .1156308   .0528021     2.19   0.031     .0107909    .2204706
   _Iavcode_5 |    .006481   .0507431     0.13   0.899    -.0942706    .1072326
   _Iavcode_6 |   .0901786   .0386553     2.33   0.022     .0134275    .1669296
   _Iavcode_8 |  -.0007305    .049708    -0.01   0.988     -.099427    .0979659
   _Iavcode_9 |  -.0904221   .0567853    -1.59   0.115    -.2031706    .0223265
  _Iavcode_10 |  -.0396729   .0501699    -0.79   0.431    -.1392863    .0599405
  _Iavcode_11 |  -.0461851   .0488742    -0.94   0.347    -.1432259    .0508558
```

```
_Iavcode_12 |   .0712662   .0423824     1.68   0.096    -.012885    .1554174
_Iavcode_13 |  -.0007305   .0769741    -0.01   0.992   -.1535645    .1521034
_Iavcode_14 |  -.0095175   .0772117    -0.12   0.902   -.1628232    .1437882
_Iavcode_15 |   .0647926   .0425397     1.52   0.131    -.019671    .1492561
_Iavcode_16 |   .0545455   .0561584     0.97   0.334   -.0569584    .1660493
_Iavcode_17 |  -.0216315   .0628755    -0.34   0.732   -.1464723    .1032094
_Iavcode_18 |  -.0084716   .0867555    -0.10   0.922   -.1807268    .1637835
_Iavcode_19 |   .1356331   .0522614     2.60   0.011    .0318669    .2393993
_Iavcode_20 |  -.0158821   .0408933    -0.39   0.699   -.0970766    .0653125
_Iavcode_21 |  -.0311443   .0513585    -0.61   0.546   -.1331177    .0708292
_Iavcode_22 |  -.1025524   .0745808    -1.38   0.172   -.2506342    .0455295
       _cons |   .5498378   .0406818    13.52   0.000    .4690632    .6306124
-------------------------------------------------------------------------------
dir : seeout
i.avcode          _Iavcode_1-22      (naturally coded; _Iavcode_1 omitted)
```

Linear regression   Number of obs   =   1,038
                                                F(21, 94)   =   3599.44
                                                Prob > F   =   0.0000
                                                R-squared   =   0.4094
                                                Root MSE   =   .34963

(Std. err. adjusted for 95 clusters in codevillage)

eth_hausa	Coefficient	Robust std. err.	t	P>|t|	[95% conf. interval]	
abc	.012015	.0349363	0.34	0.732	-.0573518	.0813819
_Iavcode_2	.5264717	.1623353	3.24	0.002	.2041512	.8487923
_Iavcode_3	.5890803	.1602662	3.68	0.000	.270868	.9072926
_Iavcode_4	.581846	.1605774	3.62	0.000	.2630158	.9006762
_Iavcode_5	-.0452808	.1802514	-0.25	0.802	-.4031743	.3126126
_Iavcode_6	-.3806167	.1580759	-2.41	0.018	-.6944801	-.0667533
_Iavcode_8	.5512015	.1595115	3.46	0.001	.2344877	.8679153
_Iavcode_9	.3143505	.1842892	1.71	0.091	-.0515599	.6802609
_Iavcode_10	.3183555	.2018361	1.58	0.118	-.0823949	.7191059
_Iavcode_11	-.2897076	.1580759	-1.83	0.070	-.603571	.0241558
_Iavcode_12	.0933121	.1907411	0.49	0.626	-.2854088	.472033
_Iavcode_13	.5739288	.1601635	3.58	0.001	.2559204	.8919371
_Iavcode_14	.5931936	.1572318	3.77	0.000	.2810062	.905381
_Iavcode_15	.6214676	.1599367	3.89	0.000	.3039095	.9390256
_Iavcode_16	-.2	.1683518	-1.19	0.238	-.5342665	.1342665
_Iavcode_17	.2300159	.2229219	1.03	0.305	-.2126007	.6726326
_Iavcode_18	.4363636	.1710429	2.55	0.012	.096754	.7759732
_Iavcode_19	.6193833	.1580759	3.92	0.000	.3055199	.9332467
_Iavcode_20	.5284742	.1610056	3.28	0.001	.2087938	.8481546
_Iavcode_21	.286232	.167034	1.71	0.090	-.0454179	.6178819
_Iavcode_22	.6207183	.1592317	3.90	0.000	.3045601	.9368766
_cons	.3746092	.1640383	2.28	0.025	.0489072	.7003111

```
-------------------------------------------------------------------------------
dir : seeout
i.avcode          _Iavcode_1-22      (naturally coded; _Iavcode_1 omitted)
```

Linear regression   Number of obs   =   1,038
                                                F(21, 94)   =   6.24
                                                Prob > F   =   0.0000
                                                R-squared   =   0.0717
                                                Root MSE   =   3.9542

(Std. err. adjusted for 95 clusters in codevillage)

hhmem_no	Coefficient	Robust std. err.	t	P>|t|	[95% conf. interval]	

```
------------+----------------------------------------------------------------
        abc |   .0217984   .2542599     0.09   0.932    -.4830407    .5266374
  _Iavcode_2 |   .7076377   .7213953     0.98   0.329    -.7247095    2.139985
  _Iavcode_3 |   1.044604   .7436202     1.40   0.163    -.4318712    2.521079
  _Iavcode_4 |   1.819008   .9923548     1.83   0.070    -.1513356    3.789352
  _Iavcode_5 |   .6997523   .7791797     0.90   0.371    -.8473273    2.246832
  _Iavcode_6 |  -1.743275   1.218152    -1.43   0.156    -4.161944    .6753947
  _Iavcode_8 |  -.9932747   .8007989    -1.24   0.218     -2.58328    .5967304
  _Iavcode_9 |  -1.504484   .8015105    -1.88   0.064    -3.095901    .0869343
 _Iavcode_10 |   .1846008   .7618476     0.24   0.809    -1.328066    1.697267
 _Iavcode_11 |  -1.879638   1.080268    -1.74   0.085    -4.024536    .2652592
 _Iavcode_12 |  -.5956403   .7598227    -0.78   0.435    -2.104286    .9130055
 _Iavcode_13 |    1.30218   .7115621     1.83   0.070    -.1106434    2.715003
 _Iavcode_14 |   1.025187   .8579753     1.19   0.235    -.6783433    2.728717
 _Iavcode_15 |     .31431   .7001271     0.45   0.655    -1.075809    1.704429
 _Iavcode_16 |   .7818182   .7357367     1.06   0.291    -.6790042    2.242641
 _Iavcode_17 |  -.9078152   1.094914    -0.83   0.409    -3.081792    1.266161
 _Iavcode_18 |   .6909091   .8648299     0.80   0.426    -1.026231    2.408049
 _Iavcode_19 |   1.438543   1.162211     1.24   0.219    -.8690538    3.746141
 _Iavcode_20 |   .3021798   .8553104     0.35   0.725    -1.396059    2.000419
 _Iavcode_21 |  -.9702172   .7599721    -1.28   0.205     -2.47916    .5387252
 _Iavcode_22 |   2.597531   .6693062     3.88   0.000     1.268608    3.926454
       _cons |   8.005103   .6280253    12.75   0.000     6.758144    9.252062
------------------------------------------------------------------------------
dir : seeout
i.avcode          _Iavcode_1-22       (naturally coded; _Iavcode_1 omitted)

Linear regression                               Number of obs   =      1,012
                                                F(21, 94)       =      84.61
                                                Prob > F        =     0.0000
                                                R-squared       =     0.1475
                                                Root MSE        =     .25437

                     (Std. err. adjusted for 95 clusters in codevillage)
------------------------------------------------------------------------------
            |               Robust
edchild_pe~t | Coefficient  std. err.      t    P>|t|     [95% conf. interval]
------------+----------------------------------------------------------------
        abc |  -.0002277   .0183422    -0.01   0.990    -.0366467    .0361912
  _Iavcode_2 |  -.1451826   .0535493    -2.71   0.008     -.251506   -.0388592
  _Iavcode_3 |  -.0184886   .0553946    -0.33   0.739    -.1284759    .0914986
  _Iavcode_4 |  -.0881842   .0610644    -1.44   0.152     -.209429    .0330606
  _Iavcode_5 |  -.1074316   .0672968    -1.60   0.114     -.241051    .0261878
  _Iavcode_6 |  -.0364125   .0699725    -0.52   0.604    -.1753445    .1025196
  _Iavcode_8 |  -.2763289   .0570313    -4.85   0.000    -.3895658    -.163092
  _Iavcode_9 |  -.0542404   .0500933    -1.08   0.282    -.1537018    .0452209
 _Iavcode_10 |  -.0605815   .0612924    -0.99   0.325     -.182279     .061116
 _Iavcode_11 |  -.3597951   .0461299    -7.80   0.000    -.4513871   -.2682031
 _Iavcode_12 |   .0409793   .0696756     0.59   0.558    -.0973634    .1793219
 _Iavcode_13 |   .1294367    .072971     1.77   0.079    -.0154488    .2743222
 _Iavcode_14 |  -.1426885   .0561694    -2.54   0.013    -.2542142   -.0311627
 _Iavcode_15 |   .0657517   .0679865     0.97   0.336    -.0692371    .2007404
 _Iavcode_16 |  -.0373254   .0732813    -0.51   0.612    -.1828273    .1081764
 _Iavcode_17 |  -.1196478   .0502886    -2.38   0.019    -.2194969   -.0197986
 _Iavcode_18 |  -.1195123   .0571305    -2.09   0.039    -.2329461   -.0060784
 _Iavcode_19 |  -.0947199   .0495246    -1.91   0.059    -.1930521    .0036123
 _Iavcode_20 |  -.1791428   .0510777    -3.51   0.001    -.2805588   -.0777268
 _Iavcode_21 |  -.2711462   .0567213    -4.78   0.000    -.3837676   -.1585247
 _Iavcode_22 |  -.0505331   .0492786    -1.03   0.308     -.148377    .0473108
       _cons |    .359903   .0472928     7.61   0.000     .266002    .4538039
------------------------------------------------------------------------------
dir : seeout
i.avcode          _Iavcode_1-22       (naturally coded; _Iavcode_1 omitted)
```

```
Linear regression                              Number of obs   =      1,038
                                               F(21, 94)       =      13.20
                                               Prob > F        =     0.0000
                                               R-squared       =     0.0598
                                               Root MSE        =     1.5588

                    (Std. err. adjusted for 95 clusters in codevillage)
--------------------------------------------------------------------------------
             |               Robust
      assets | Coefficient  std. err.      t    P>|t|     [95% conf. interval]
-------------+------------------------------------------------------------------
         abc | -.0341962    .0967777    -0.35   0.725    -.2263507    .1579582
  _Iavcode_2 |  .7840979    .2301153     3.41   0.001     .3271986   1.240997
  _Iavcode_3 |  .5208228    .2181326     2.39   0.019     .0877154   .9539302
  _Iavcode_4 |  .3981457    .2111144     1.89   0.062     -.021027   .8173184
  _Iavcode_5 |  .0302749    .3147766     0.10   0.924    -.5947214   .6552713
  _Iavcode_6 | -.3579651    .1656677    -2.16   0.033    -.6869022   -.029028
  _Iavcode_8 |  .0056713    .2514413     0.02   0.982    -.4935713   .5049139
  _Iavcode_9 |  .2083404    .2814255     0.74   0.461    -.3504366   .7671173
 _Iavcode_10 |  .5151234    .2864328     1.80   0.075    -.0535956   1.083842
 _Iavcode_11 |  .6420349    .1810084     3.55   0.001     .2826385   1.001431
 _Iavcode_12 |  .2113426    .2275849     0.93   0.355    -.2405325   .6632177
 _Iavcode_13 |  .6193076    .3090489     2.00   0.048     .0056838   1.232931
 _Iavcode_14 |  1.169413    .4262613     2.74   0.007     .3230608   2.015764
 _Iavcode_15 |  .1342476    .2340053     0.57   0.568    -.3303753   .5988706
 _Iavcode_16 |  .5454545    .2317108     2.35   0.021     .0853874   1.005522
 _Iavcode_17 |  .2642203    .2356443     1.12   0.265    -.2036569   .7320975
 _Iavcode_18 | -.1636364     .355084    -0.46   0.646     -.868664   .5413913
 _Iavcode_19 | -.2216014    .2955759    -0.75   0.455    -.8084743   .3652714
 _Iavcode_20 |   .263247    .2730072     0.96   0.337    -.2788151   .8053092
 _Iavcode_21 | -.2978771    .2040605    -1.46   0.148    -.7030441   .1072898
 _Iavcode_22 |  1.079313    .1999392     5.40   0.000     .6823287   1.476297
       _cons |  4.693245    .1698453    27.63   0.000     4.356013   5.030477
--------------------------------------------------------------------------------
dir : seeout
i.avcode        _Iavcode_1-22       (naturally coded; _Iavcode_1 omitted)

Linear regression                              Number of obs   =      1,038
                                               F(21, 94)       =      10.57
                                               Prob > F        =     0.0000
                                               R-squared       =     0.0755
                                               Root MSE        =     .47231

                    (Std. err. adjusted for 95 clusters in codevillage)
--------------------------------------------------------------------------------
             |               Robust
     drought | Coefficient  std. err.      t    P>|t|     [95% conf. interval]
-------------+------------------------------------------------------------------
         abc |  -.029972    .0347727    -0.86   0.391     -.099014   .0390701
  _Iavcode_2 | -.2646685    .0641818    -4.12   0.000     -.392103  -.1372341
  _Iavcode_3 | -.2848154     .087751    -3.25   0.002     -.459047  -.1105838
  _Iavcode_4 | -.2579834    .0671993    -3.84   0.000    -.3914092  -.1245576
  _Iavcode_5 | -.0322349    .0628955    -0.51   0.609    -.1571153   .0926454
  _Iavcode_6 | -.0120881     .103007    -0.12   0.907    -.2166108   .1924346
  _Iavcode_8 | -.0575427    .0833676    -0.69   0.492    -.2230709   .1079856
  _Iavcode_9 | -.1131534    .2535495    -0.45   0.656    -.6165818    .390275
 _Iavcode_10 | -.1989016    .0753997    -2.64   0.010    -.3486094  -.0491938
 _Iavcode_11 | -.1029972    .0699717    -1.47   0.144    -.2419277   .0359333
 _Iavcode_12 | -.2059944    .1004607    -2.05   0.043    -.4054614  -.0065274
 _Iavcode_13 | -.3529972    .0757173    -4.66   0.000    -.5033357  -.2026587
 _Iavcode_14 | -.1094205     .159738    -0.68   0.495    -.4265841   .2077431
 _Iavcode_15 | -.1295322    .0946992    -1.37   0.175    -.3175596   .0584952
```

```
_Iavcode_16 |   -1.10e-14     .087092     -0.00    1.000    -.1729232     .1729232
_Iavcode_17 |    .0635867    .1158494      0.55    0.584    -.1664351     .2936085
_Iavcode_18 |    .0545455    .0656953      0.83    0.408    -.0758942     .1849851
_Iavcode_19 |   -.3757245    .0590824     -6.36    0.000    -.4930339     -.258415
_Iavcode_20 |    .0333664    .1117675      0.30    0.766    -.1885505     .2552834
_Iavcode_21 |   -.0882998    .0768295     -1.15    0.253    -.2408466      .064247
_Iavcode_22 |   -.3487517    .0878121     -3.97    0.000    -.5231047    -.1743986
       _cons |    .5270741    .0588432      8.96    0.000     .4102396     .6439086
-------------------------------------------------------------------------------
dir : seeout
i.avcode          _Iavcode_1-22       (naturally coded; _Iavcode_1 omitted)

Linear regression                               Number of obs   =      1,035
                                                F(21, 94)       =      19.21
                                                Prob > F        =     0.0000
                                                R-squared       =     0.0991
                                                Root MSE        =     .43782

                        (Std. err. adjusted for 95 clusters in codevillage)
-------------------------------------------------------------------------------
            |              Robust
  cellphone | Coefficient  std. err.      t    P>|t|     [95% conf. interval]
------------+------------------------------------------------------------------
        abc |   -.0037592    .0266485     -0.14    0.888    -.0566704      .049152
_Iavcode_2 |   -.0724767    .1144164     -0.63    0.528    -.2996532     .1546999
_Iavcode_3 |   -.1034062    .1207499     -0.86    0.394     -.343158     .1363455
_Iavcode_4 |    .1025983     .114247      0.90    0.371    -.1242418     .3294384
_Iavcode_5 |    .0171794    .1264084      0.14    0.892    -.2338075     .2681662
_Iavcode_6 |   -.3003759    .1102424     -2.72    0.008    -.5192648     -.081487
_Iavcode_8 |   -.2549214    .1100382     -2.32    0.023    -.4734048    -.0364379
_Iavcode_9 |   -.1330827    .1518101     -0.88    0.383    -.4345052     .1683397
_Iavcode_10 |    .0020278    .1164196      0.02    0.986     -.229126     .2331817
_Iavcode_11 |   -.0731032    .1048788     -0.70    0.488    -.2813425     .1351361
_Iavcode_12 |   -.0916609    .1148137     -0.80    0.427    -.3196262     .1363044
_Iavcode_13 |    .1425853    .1068138      1.33    0.185     -.069496     .3546667
_Iavcode_14 |    .2980112    .1130654      2.64    0.010     .0735173     .5225052
_Iavcode_15 |    .0004562    .1169839      0.00    0.997    -.2318181     .2327305
_Iavcode_16 |     .024888    .1215585      0.20    0.838    -.2164692     .2662452
_Iavcode_17 |    .0187457    .1206435      0.16    0.877    -.2207948     .2582862
_Iavcode_18 |   -.2181818    .1332133     -1.64    0.105      -.48268     .0463163
_Iavcode_19 |   -.2549214    .1228253     -2.08    0.041    -.4987939    -.0110488
_Iavcode_20 |   -.2094668    .1107489     -1.89    0.062    -.4293614     .0104278
_Iavcode_21 |   -.2549783     .108673     -2.35    0.021    -.4707512    -.0392055
_Iavcode_22 |    .0796778    .1092635      0.73    0.468    -.1372675      .296623
       _cons |    .3477101      .10299      3.38    0.001     .1432211     .5521991
-------------------------------------------------------------------------------
dir : seeout
i.avcode          _Iavcode_1-22       (naturally coded; _Iavcode_1 omitted)

Linear regression                               Number of obs   =      1,038
                                                F(21, 94)       =      17.35
                                                Prob > F        =     0.0000
                                                R-squared       =     0.2022
                                                Root MSE        =     .37378

                        (Std. err. adjusted for 95 clusters in codevillage)
-------------------------------------------------------------------------------
            |              Robust
accesscell~e | Coefficient  std. err.      t    P>|t|     [95% conf. interval]
------------+------------------------------------------------------------------
        abc |    .0427679    .0230579      1.85    0.067    -.0030141       .08855
_Iavcode_2 |   -.0937603    .0684315     -1.37    0.174    -.2296327     .0421121
_Iavcode_3 |   -.0260262    .0819988     -0.32    0.752    -.1888367     .1367843
```

```
   _Iavcode_4 |   .0215526   .0690124     0.31   0.756   -.1154732    .1585785
   _Iavcode_5 |   .0417078   .0738344     0.56   0.573   -.1048922    .1883078
   _Iavcode_6 |  -.2684505   .1046788    -2.56   0.012   -.4762926   -.0606084
   _Iavcode_8 |  -.4502687   .0997885    -4.51   0.000    -.648401   -.2521363
   _Iavcode_9 |  -.0937603   .0754084    -1.24   0.217   -.2434854    .0559648
  _Iavcode_10 |  -.0643528    .070542    -0.91   0.364   -.2044156      .07571
  _Iavcode_11 |  -.1320868   .0689408    -1.92   0.058   -.2689704    .0047967
  _Iavcode_12 |   -.136901   .0991779    -1.38   0.171   -.3338211    .0600192
  _Iavcode_13 |   .0270041   .0793867     0.34   0.734     -.13062    .1846281
  _Iavcode_14 |  -.0082807   .0793938    -0.10   0.917    -.165919    .1493576
  _Iavcode_15 |  -.0810687   .0837648    -0.97   0.336   -.2473855    .0852482
  _Iavcode_16 |   .0545455   .0702781     0.78   0.440   -.0849934    .1940843
  _Iavcode_17 |  -.0973243   .0972539    -1.00   0.320   -.2904241    .0957755
  _Iavcode_18 |  -.3636364   .0953282    -3.81   0.000   -.5529127     -.17436
  _Iavcode_19 |   .0042768   .0833491     0.05   0.959   -.1612148    .1697683
  _Iavcode_20 |  -.4654202    .105171    -4.43   0.000   -.6742396   -.2566007
  _Iavcode_21 |  -.4950752   .0736541    -6.72   0.000   -.6413172   -.3488332
  _Iavcode_22 |   .0443823   .0770661     0.58   0.566   -.1086343    .1973989
        _cons |   .8834301   .0660787    13.37   0.000    .7522293    1.014631
----------------------------------------------------------------------------
dir : seeout
i.avcode        _Iavcode_1-22      (naturally coded; _Iavcode_1 omitted)

Linear regression                              Number of obs    =      1,026
                                               F(21, 94)        =       8.01
                                               Prob > F         =     0.0000
                                               R-squared        =     0.1225
                                               Root MSE         =     .47035

                             (Std. err. adjusted for 95 clusters in codevillage)
----------------------------------------------------------------------------
              |             Robust
usecellphone | Coefficient  std. err.     t    P>|t|    [95% conf. interval]
-------------+--------------------------------------------------------------
          abc |   .0359607   .0320567     1.12   0.265   -.0276886      .09961
   _Iavcode_2 |   .0116262    .107133     0.11   0.914   -.2010888    .2243412
   _Iavcode_3 |  -.1388282   .1137638    -1.22   0.225   -.3647089    .0870526
   _Iavcode_4 |   .0387632   .1106069     0.35   0.727   -.1808494    .2583758
   _Iavcode_5 |    .094438   .1196203     0.79   0.432   -.1430709    .3319469
   _Iavcode_6 |  -.1691312   .1518595    -1.11   0.268   -.4706519    .1323895
   _Iavcode_8 |  -.3431317   .1394144    -2.46   0.016   -.6199423   -.0663211
   _Iavcode_9 |  -.1122501   .1187139    -0.95   0.347   -.3479594    .1234592
  _Iavcode_10 |  -.0541373   .1154178    -0.47   0.640    -.283302    .1750274
  _Iavcode_11 |  -.1920845     .12624    -1.52   0.131   -.4427371     .058568
  _Iavcode_12 |  -.1200806    .125604    -0.96   0.342   -.3694702     .129309
  _Iavcode_13 |    .012687   .1125906     0.11   0.911   -.2108642    .2362382
  _Iavcode_14 |   .1127854   .1264301     0.89   0.375   -.1382445    .3638152
  _Iavcode_15 |  -.0381378   .1555215    -0.25   0.807   -.3469293    .2706538
  _Iavcode_16 |   .0727273   .1129843     0.64   0.521   -.1516056    .2970602
  _Iavcode_17 |  -.0872123   .1459424    -0.60   0.552   -.3769844    .2025598
  _Iavcode_18 |        -.4   .1216121    -3.29   0.001   -.6414636   -.1585364
  _Iavcode_19 |  -.2600403   .1341706    -1.94   0.056   -.5264393    .0063587
  _Iavcode_20 |  -.4115554    .116909    -3.52   0.001   -.6436809     -.17943
  _Iavcode_21 |  -.4235243   .1223031    -3.46   0.001     -.66636   -.1806887
  _Iavcode_22 |  -.0355059   .1241616    -0.29   0.776   -.2820318    .2110199
        _cons |   .6511509    .105546     6.17   0.000    .4415869    .8607149
----------------------------------------------------------------------------
dir : seeout
i.avcode        _Iavcode_1-22      (naturally coded; _Iavcode_1 omitted)

Linear regression                              Number of obs    =        570
                                               F(21, 92)        =      19.68
                                               Prob > F         =     0.0000
```

```
                                       R-squared       =     0.0636
                                       Root MSE        =     .44838

                  (Std. err. adjusted for 93 clusters in codevillage)
--------------------------------------------------------------------------------
            |              Robust
   makecall | Coefficient  std. err.      t    P>|t|     [95% conf. interval]
------------+-------------------------------------------------------------------
        abc |   .0308199   .0391302     0.79   0.433    -.0468962    .1085359
 _Iavcode_2 |   .0943634   .1163854     0.81   0.420    -.1367881    .3255148
 _Iavcode_3 |   .2107526   .0964992     2.18   0.032     .0190969    .4024083
 _Iavcode_4 |    .166125   .1025244     1.62   0.109    -.0374974    .3697473
 _Iavcode_5 |   .0327873   .1075782     0.30   0.761    -.1808722    .2464468
 _Iavcode_6 |  -.3049212   .1045443    -2.92   0.004    -.5125551   -.0972873
 _Iavcode_8 |   .2558111     .10183     2.51   0.014     .0535679    .4580544
 _Iavcode_9 |   .0998809   .0897385     1.11   0.269    -.0783475    .2781092
_Iavcode_10 |   .0238938    .119029     0.20   0.841     -.212508    .2602956
_Iavcode_11 |  -.0758423   .1270776    -0.60   0.552    -.3282294    .1765448
_Iavcode_12 |  -.1019843   .1232906    -0.83   0.410    -.3468501    .1428814
_Iavcode_13 |  -.0414816   .0980342    -0.42   0.673     -.236186    .1532228
_Iavcode_14 |   .0258703   .1262815     0.20   0.838    -.2249356    .2766763
_Iavcode_15 |   .0708463   .1069076     0.66   0.509    -.1414814    .2831741
_Iavcode_16 |  -.0183581   .0953462    -0.19   0.848    -.2077238    .1710077
_Iavcode_17 |  -.1053202   .1014232    -1.04   0.302    -.3067555     .096115
_Iavcode_18 |   .3179938   .0796043     3.99   0.000     .1598927    .4760948
_Iavcode_19 |  -.0112303   .1713417    -0.07   0.948    -.3515296    .3290691
_Iavcode_20 |   .0070348   .1430832     0.05   0.961    -.2771409    .2912104
_Iavcode_21 |  -.0991303   .2277214    -0.44   0.664    -.5514046     .353144
_Iavcode_22 |  -.0238885     .12316    -0.19   0.847    -.2684948    .2207178
       _cons |   .6573504   .0908152     7.24   0.000     .4769835    .8377172
--------------------------------------------------------------------------------
dir : seeout
i.avcode          _Iavcode_1-22     (naturally coded; _Iavcode_1 omitted)

Linear regression                        Number of obs   =        570
                                         F(21, 92)       =       4.36
                                         Prob > F        =     0.0000
                                         R-squared       =     0.0802
                                         Root MSE        =     .33617

                  (Std. err. adjusted for 93 clusters in codevillage)
--------------------------------------------------------------------------------
            |              Robust
receivecall | Coefficient  std. err.      t    P>|t|     [95% conf. interval]
------------+-------------------------------------------------------------------
        abc |   .0289937   .0314504     0.92   0.359    -.0334695    .0914569
 _Iavcode_2 |  -.1941751   .0692003    -2.81   0.006    -.3316129   -.0567374
 _Iavcode_3 |  -.1468187   .0992381    -1.48   0.142    -.3439142    .0502768
 _Iavcode_4 |   .0316505   .0467408     0.68   0.500    -.0611808    .1244818
 _Iavcode_5 |   .0090426    .052232     0.17   0.863    -.0946947    .1127799
 _Iavcode_6 |  -.0031317   .1021867    -0.03   0.976    -.2060834      .19982
 _Iavcode_8 |  -.3447477    .084294    -4.09   0.000    -.5121628   -.1773326
 _Iavcode_9 |  -.0876752   .0420481    -2.09   0.040    -.1711864    -.004164
_Iavcode_10 |  -.0915746   .1243228    -0.74   0.463    -.3384905    .1553413
_Iavcode_11 |  -.0190756   .0863518    -0.22   0.826    -.1905777    .1524265
_Iavcode_12 |  -.0456438   .0612364    -0.75   0.458    -.1672645     .075977
_Iavcode_13 |   .0485575   .0510706     0.95   0.344    -.0528732    .1499882
_Iavcode_14 |  -.0406454   .0886599    -0.46   0.648    -.2167317    .1354409
_Iavcode_15 |   -.039845   .0672526    -0.59   0.555    -.1734144    .0937243
_Iavcode_16 |   .0555441    .044911     1.24   0.219     -.033653    .1447411
_Iavcode_17 |   -.040482   .0813143    -0.50   0.620    -.2019792    .1210152
_Iavcode_18 |  -.3248744   .0828075    -3.92   0.000    -.4893373   -.1604115
_Iavcode_19 |  -.1432308   .1231919    -1.16   0.248    -.3879004    .1014389
```

```
_Iavcode_20 |   -.2359247    .1512202    -1.56   0.122    -.5362611    .0644117
_Iavcode_21 |    -.128391    .1041029    -1.23   0.221    -.3351483    .0783663
_Iavcode_22 |   -.0027061     .068988    -0.04   0.969    -.1397222    .1343101
      _cons |    .9016794    .0447759    20.14   0.000     .8127506    .9906083
-------------------------------------------------------------------------------
dir : seeout


.
. use "ABCtestscore.dta", clear


.
. bys codev: keep if _n==1
(23,797 observations deleted)

. keep codev

. merge 1:m codev using "ABCteacher.dta"

    Result                       Number of obs
    -----------------------------------------
    Not matched                            24
        from master                         0  (_merge==1)
        from using                         24  (_merge==2)

    Matched                               346  (_merge==3)
    -----------------------------------------


.
. // note that during our operation, we have dropped some of the codes that are
> not contained in the test score result.
. // because these are not relevant to our study.
. tab _m

    Matching result from |
                   merge |      Freq.     Percent        Cum.
------------------------+-----------------------------------
          Using only (2) |         24        6.49        6.49
            Matched (3) |        346       93.51      100.00
------------------------+-----------------------------------
                  Total |        370      100.00

. drop if _m==2
(24 observations deleted)


.
. tabstat levelno teacherage femaleteacher local, by(abc) stat(mean sd) nototal
> long col(stat)

abc          Variable |      Mean         SD
---------------------+-------------------
0             levelno |  8.323171    2.083932
          teacherage |  33.05521    9.157909
        femaleteac~r |  .3173653    .4668508
               local |  .7573964    .4299312
---------------------+-------------------
1             levelno |  8.572254     1.77899
          teacherage |  32.71098    8.067142
        femaleteac~r |  .3678161    .4836026
               local |  .6818182    .4670994
-------------------------------------------

. outreg2 using Table1_PanelB_mean_std.dta, replace
dir : seeout
```

```
.
. foreach i in levelno teacherage femaleteacher local{
  2.         xi: reg `i' abc i.avcode, robust cluster(codev)
  3.         outreg2 abc using "Table1_PanelB", dec(2) append dta ctitle ("`var'
> ")   nocons
  4.         }
i.avcode          _Iavcode_1-24       (naturally coded; _Iavcode_1 omitted)
```

Linear regression   Number of obs   =   337
                                               F(23, 112)   =   5.53
                                               Prob > F   =   0.0000
                                               R-squared   =   0.1854
                                               Root MSE   =   1.809

                     (Std. err. adjusted for 113 clusters in codevillage)

             | Robust
     levelno | Coefficient std. err.   t   P>|t| [95% conf. interval]
-------------+--
         abc | .0802486   .2163942   0.37   0.711   -.3485088   .5090059
  _Iavcode_2 | .7766383   .4873943   1.59   0.114   -.1890711   1.742348
  _Iavcode_3 | -.0997675   .4987741   -0.20   0.842   -1.088024   .8884894
  _Iavcode_4 | -1.458649   .5547038   -2.63   0.010   -2.557724   -.3595749
  _Iavcode_5 | -1.544212   .5694835   -2.71   0.008   -2.67257   -.4158533
  _Iavcode_6 | .6046218   .388493   1.56   0.122   -.1651274   1.374371
  _Iavcode_8 | -.6453782   .7568115   -0.85   0.396   -2.144903   .8541466
  _Iavcode_9 | -.4233617   .5080666   -0.83   0.406   -1.430031   .5833072
 _Iavcode_10 | -1.570275   .6159605   -2.55   0.012   -2.790721   -.3498279
 _Iavcode_11 | .4379551   .4186403   1.05   0.298   -.391527   1.267437
 _Iavcode_12 | .1260214   .4695053   0.27   0.789   -.8042432   1.056286
 _Iavcode_13 | -1.022576   .5759544   -1.78   0.079   -2.163756   .1186042
 _Iavcode_14 | -.7287116   .7102468   -1.03   0.307   -2.135975   .6785514
 _Iavcode_15 | -1.266434   .7836363   -1.62   0.109   -2.819109   .2862407
 _Iavcode_16 | -1.551345   .7007669   -2.21   0.029   -2.939825   -.1628652
 _Iavcode_17 | -.4153933   .4462345   -0.93   0.354   -1.29955   .4687631
 _Iavcode_18 | -.2878679   .5382422   -0.53   0.594   -1.354326   .77859
 _Iavcode_19 | -1.951962   .8113422   -2.41   0.018   -3.559533   -.3443914
 _Iavcode_20 | -.1642395   .5176675   -0.32   0.752   -1.189931   .8614523
 _Iavcode_21 | .2335659   .4171043   0.56   0.577   -.5928729   1.060005
 _Iavcode_22 | -2.273979   .8728006   -2.61   0.010   -4.003321   -.544636
 _Iavcode_23 | -1.860399   .8612325   -2.16   0.033   -3.566821   -.1539772
 _Iavcode_24 | .0246321   .5246059   0.05   0.963   -1.014807   1.064072
       _cons | 9.175213   .3998824   22.94   0.000   8.382897   9.967528
----
dir : seeout
i.avcode   _Iavcode_1-24   (naturally coded; _Iavcode_1 omitted)

Linear regression   Number of obs   =   336
                                               F(23, 112)   =   5.52
                                               Prob > F   =   0.0000
                                               R-squared   =   0.1531
                                               Root MSE   =   8.2031

                     (Std. err. adjusted for 113 clusters in codevillage)

             | Robust
   teacherage | Coefficient std. err.   t   P>|t| [95% conf. interval]
-------------+--
         abc | -.3090361   1.184916   -0.26   0.795   -2.656794   2.038722
  _Iavcode_2 | 1.017627   6.510191   0.16   0.876   -11.88148   13.91674
  _Iavcode_3 | -1.008223   6.259481   -0.16   0.872   -13.41058   11.39414
  _Iavcode_4 | .0109708   6.062758   0.00   0.999   -12.00161   12.02355
```

```
_Iavcode_5  |  -4.119334     5.6608    -0.73   0.468    -15.33548    7.096816
_Iavcode_6  |  -5.995103    5.624389   -1.07   0.289    -17.13911    5.148903
_Iavcode_8  |   .6715632    6.027858    0.11   0.911    -11.27186    12.61499
_Iavcode_9  |  -2.682373    6.325358   -0.42   0.672    -15.21526    9.850514
_Iavcode_10 |   3.896965    5.946039    0.66   0.514    -7.884349    15.67828
_Iavcode_11 |  -6.995103    5.735281   -1.22   0.225    -18.35883     4.36862
_Iavcode_12 |  -.9108465    6.222668   -0.15   0.884    -13.24027    11.41857
_Iavcode_13 |  -2.209963    6.810797   -0.32   0.746    -15.70469    11.28476
_Iavcode_14 |   .6715632    6.110963    0.11   0.913    -11.43653    12.77965
_Iavcode_15 |  -2.008223    6.271264   -0.32   0.749    -14.43393    10.41748
_Iavcode_16 |  -5.069642    5.783922   -0.88   0.383    -16.52974    6.390459
_Iavcode_17 |   4.947868    6.151285    0.80   0.423    -7.240114    17.13585
_Iavcode_18 |  -2.612147     6.11147   -0.43   0.670    -14.72124    9.496947
_Iavcode_19 |  -4.681449    5.756291   -0.81   0.418     -16.0868    6.723904
_Iavcode_20 |   -5.41833    5.762586   -0.94   0.349    -16.83615    5.999495
_Iavcode_21 |  -7.222365    5.902732   -1.22   0.224    -18.91787    4.473142
_Iavcode_22 |    5.95582    7.191021    0.83   0.409    -8.292265    20.20391
_Iavcode_23 |  -.8235171    6.247559   -0.13   0.895    -13.20225    11.55522
_Iavcode_24 |   1.450353    5.718558    0.25   0.800    -9.880236    12.78094
       _cons |   34.36779    5.620765    6.11   0.000     23.23097    45.50462
------------------------------------------------------------------------------
dir : seeout
i.avcode          _Iavcode_1-24       (naturally coded; _Iavcode_1 omitted)

Linear regression                               Number of obs   =        341
                                                F(23, 112)      =      27.91
                                                Prob > F        =     0.0000
                                                R-squared       =     0.0844
                                                Root MSE        =     .47115

                        (Std. err. adjusted for 113 clusters in codevillage)
------------------------------------------------------------------------------
             |               Robust
femaleteac~r | Coefficient  std. err.     t    P>|t|     [95% conf. interval]
-------------+----------------------------------------------------------------
         abc |   .0604638   .0434274    1.39   0.167     -.025582    .1465095
 _Iavcode_2  |   .2354816   .0738566    3.19   0.002     .0891442    .3818189
 _Iavcode_3  |   .1671093   .1089034    1.53   0.128    -.0486689    .3828875
 _Iavcode_4  |   .2382333   .1091432    2.18   0.031     .0219801    .4544865
 _Iavcode_5  |   .2782204   .1260676    2.21   0.029     .0284336    .5280072
 _Iavcode_6  |   .4314507   .0591226    7.30   0.000     .3143068    .5485945
 _Iavcode_8  |    .264784   .1688384    1.57   0.120    -.0697477    .5993156
 _Iavcode_9  |   .2354816   .0738566    3.19   0.002     .0891442    .3818189
 _Iavcode_10 |   .3941439   .1489835    2.65   0.009     .0989523    .6893355
 _Iavcode_11 |   .5981173   .0833069    7.18   0.000     .4330553    .7631793
 _Iavcode_12 |   .3865859   .1112895    3.47   0.001     .1660801    .6070918
 _Iavcode_13 |   .4043185   .0724673    5.58   0.000     .2607338    .5479032
 _Iavcode_14 |  -.0685493   .0572327   -1.20   0.234    -.1819485    .0448499
 _Iavcode_15 |   .3337759    .143568    2.32   0.022     .0493144    .6182375
 _Iavcode_16 |   .1395125   .1490788    0.94   0.351     -.155868    .434893
 _Iavcode_17 |    .514784   .0984471    5.23   0.000     .3197236    .7098444
 _Iavcode_18 |     .43397   .0984395    4.41   0.000     .2389247    .6290153
 _Iavcode_19 |   .2849386   .1707857    1.67   0.098    -.0534515    .6233286
 _Iavcode_20 |   .3270577   .0886265    3.69   0.000     .1514556    .5026599
 _Iavcode_21 |   .3337759   .1069981    3.12   0.002      .121773    .5457789
 _Iavcode_22 |   .1365859   .1188467    1.15   0.253    -.0988936    .3720654
 _Iavcode_23 |    .363912   .0874067    4.16   0.000     .1907268    .5370972
 _Iavcode_24 |     .24647   .1370623    1.80   0.075    -.0251014    .5180414
       _cons |   .0282402   .0621356    0.45   0.650    -.0948735    .1513538
------------------------------------------------------------------------------
dir : seeout
i.avcode          _Iavcode_1-24       (naturally coded; _Iavcode_1 omitted)
```

```
Linear regression                                Number of obs   =        345
                                                 F(23, 112)      =    1313.50
                                                 Prob > F        =     0.0000
                                                 R-squared       =     0.4900
                                                 Root MSE        =     .33285

                        (Std. err. adjusted for 113 clusters in codevillage)
-------------------------------------------------------------------------------
             |               Robust
       local | Coefficient  std. err.      t    P>|t|     [95% conf. interval]
-------------+-----------------------------------------------------------------
         abc |    -.02373   .0509235    -0.47   0.642    -.1246283    .0771684
  _Iavcode_2 |  -.2910595   .2874665    -1.01   0.313    -.8606375    .2785185
  _Iavcode_3 |   .3052492   .1911376     1.60   0.113    -.0734655    .6839638
  _Iavcode_4 |     .30459    .191271     1.59   0.114     -.074389     .683569
  _Iavcode_5 |   .3052492   .1911434     1.60   0.113    -.0734769    .6839753
  _Iavcode_6 |  -.6894775   .1904403    -3.62   0.000     -1.06681   -.3121445
  _Iavcode_8 |  -.1894775   .2571869    -0.74   0.463    -.6990604    .3201054
  _Iavcode_9 |  -.3910595   .3061824    -1.28   0.204    -.9977208    .2156018
 _Iavcode_10 |   -.074365   .2836363    -0.26   0.794     -.636354     .487624
 _Iavcode_11 |  -.6894775   .1904403    -3.62   0.000     -1.06681   -.3121445
 _Iavcode_12 |  -.1963987   .2660542    -0.74   0.462    -.7235511    .3307536
 _Iavcode_13 |   .2085044   .2106028     0.99   0.324    -.2087779    .6257868
 _Iavcode_14 |   .3105225   .1903514     1.63   0.106    -.0666343    .6876793
 _Iavcode_15 |   .3052492   .1911376     1.60   0.113    -.0734655    .6839638
 _Iavcode_16 |   .3065675   .1908938     1.61   0.111    -.0716642    .6847992
 _Iavcode_17 |  -.3561442   .2369494    -1.50   0.136    -.8256291    .1133407
 _Iavcode_18 |  -.3154662   .2682648    -1.18   0.242    -.8469986    .2160661
 _Iavcode_19 |   .3014825    .192128     1.57   0.119    -.0791944    .6821594
 _Iavcode_20 |  -.2476697   .2437167    -1.02   0.312    -.7305631    .2352237
 _Iavcode_21 |  -.5280842   .2270513    -2.33   0.022    -.9779572   -.0782111
 _Iavcode_22 |   .3036013    .191523     1.59   0.116     -.075877    .6830795
 _Iavcode_23 |      .1875   .2174885     0.86   0.390    -.2434256    .6184256
 _Iavcode_24 |   .3095338   .1904579     1.63   0.107    -.0678342    .6869017
        _cons |   .7052975   .1946061     3.62   0.000     .3197104    1.090885
-------------------------------------------------------------------------------
dir : seeout


.
. use "ABCtestscore.dta", clear

.
. tabstat writez1 mathz1, by(abc) stat(mean sd) nototal long col(stat)

abc          Variable |      Mean         SD
----------------------+--------------------
0             writez1 |  -1.03e-08   .9998296
              mathz1 |  -6.69e-09   .9998296
----------------------+--------------------
1             writez1 |   -.026852   .8858414
              mathz1 |  -.0712108   .8159666
-----------------------------------------

. outreg2 using Table1_PanelC_mean_std.dta, replace
dir : seeout


.
.
. foreach i of varlist writez1 mathz1 {
  2.          xi: reg `i' abc i.avc, cluster(codev)
  3.          outreg2 abc using "Table1_PanelC", dec(2) append dta ctitle ("`var'
> ")   nocons
  4.          }
```

```
i.avcode          _Iavcode_1-24        (naturally coded; _Iavcode_1 omitted)

Linear regression                              Number of obs   =      5,982
                                               F(23, 112)      =       4.22
                                               Prob > F        =     0.0000
                                               R-squared       =     0.0224
                                               Root MSE        =      .9347

                        (Std. err. adjusted for 113 clusters in codevillage)
------------------------------------------------------------------------------
             |               Robust
     writez1 | Coefficient  std. err.      t    P>|t|     [95% conf. interval]
-------------+----------------------------------------------------------------
         abc | -.0230921   .0399616    -0.58   0.565    -.1022709    .0560867
  _Iavcode_2 | -.2052144   .1216767    -1.69   0.094    -.4463011    .0358723
  _Iavcode_3 | -.3711898   .0773765    -4.80   0.000    -.5245013   -.2178782
  _Iavcode_4 | -.3032091   .0811349    -3.74   0.000    -.4639674   -.1424508
  _Iavcode_5 | -.2361261   .0929439    -2.54   0.012    -.4202826   -.0519696
  _Iavcode_6 | -.3646186   .0790297    -4.61   0.000    -.5212059   -.2080313
  _Iavcode_8 | -.3464581   .083205     -4.16   0.000    -.5113182    -.181598
  _Iavcode_9 | -.2341432   .111874     -2.09   0.039    -.4558072   -.0124791
 _Iavcode_10 | -.0489395   .2207886    -0.22   0.825    -.4864039    .3885248
 _Iavcode_11 | -.3634914   .0869115    -4.18   0.000    -.5356955   -.1912874
 _Iavcode_12 |   -.27556   .0900153    -3.06   0.003    -.4539138   -.0972062
 _Iavcode_13 | -.3252861   .0807738    -4.03   0.000     -.485329   -.1652432
 _Iavcode_14 | -.2848496   .0958569    -2.97   0.004    -.4747777   -.0949214
 _Iavcode_15 | -.1754577   .1762696    -1.00   0.322    -.5247133    .1737979
 _Iavcode_16 |  .1108725   .1750943     0.63   0.528    -.2360545    .4577995
 _Iavcode_17 | -.3840173   .0773277    -4.97   0.000    -.5372323   -.2308023
 _Iavcode_18 | -.0624857   .1315787    -0.47   0.636    -.3231921    .1982207
 _Iavcode_19 | -.3935956   .0776814    -5.07   0.000    -.5475114   -.2396798
 _Iavcode_20 | -.3272519   .08237      -3.97   0.000    -.4904574   -.1640463
 _Iavcode_21 | -.3633844   .0784376    -4.63   0.000    -.5187985   -.2079702
 _Iavcode_22 | -.1000956   .1718358    -0.58   0.561    -.4405661     .240375
 _Iavcode_23 | -.3799316   .0744152    -5.11   0.000    -.5273757   -.2324874
 _Iavcode_24 | -.3851199   .0748474    -5.15   0.000    -.5334204   -.2368195
       _cons |  .2450349   .0808129     3.03   0.003     .0849145    .4051553
------------------------------------------------------------------------------
dir : seeout
i.avcode          _Iavcode_1-24        (naturally coded; _Iavcode_1 omitted)

Linear regression                              Number of obs   =      5,982
                                               F(23, 112)      =       8.16
                                               Prob > F        =     0.0000
                                               R-squared       =     0.0199
                                               Root MSE        =      .90412

                        (Std. err. adjusted for 113 clusters in codevillage)
------------------------------------------------------------------------------
             |               Robust
      mathz1 | Coefficient  std. err.      t    P>|t|     [95% conf. interval]
-------------+----------------------------------------------------------------
         abc | -.0593326   .0468961    -1.27   0.208    -.1522512     .033586
  _Iavcode_2 |  .0625439   .0924042     0.68   0.500    -.1205432     .245631
  _Iavcode_3 | -.0176523   .1308971    -0.13   0.893    -.2770082    .2417035
  _Iavcode_4 | -.0692193   .1275946    -0.54   0.589    -.3220315     .183593
  _Iavcode_5 | -.1202344   .0840566    -1.43   0.155    -.2867818     .046313
  _Iavcode_6 | -.2029252   .0670745    -3.03   0.003    -.3358247   -.0700256
  _Iavcode_8 |  -.186536   .0744624    -2.51   0.014    -.3340736   -.0389983
  _Iavcode_9 | -.0735696   .1021616    -0.72   0.473    -.2759897    .1288505
 _Iavcode_10 |  .1028629   .1989149     0.52   0.606    -.2912615    .4969873
 _Iavcode_11 | -.2015216   .0855893    -2.35   0.020    -.3711059   -.0319373
 _Iavcode_12 | -.1222683   .0767666    -1.59   0.114    -.2743715     .029835
```

```
_Iavcode_13 |   -.0344487    .1303188    -0.26   0.792    -.2926587    .2237613
_Iavcode_14 |   -.2170937    .0755794    -2.87   0.005    -.3668447   -.0673428
_Iavcode_15 |    .0899308    .2432233     0.37   0.712    -.3919851    .5718466
_Iavcode_16 |     .080392    .1371445     0.59   0.559    -.1913423    .3521263
_Iavcode_17 |    -.211454    .0705392    -3.00   0.003    -.3512185   -.0716895
_Iavcode_18 |    .1173407    .1053573     1.11   0.268    -.0914114    .3260927
_Iavcode_19 |   -.2039475    .1308492    -1.56   0.122    -.4632085    .0553135
_Iavcode_20 |   -.1537888    .0782359    -1.97   0.052    -.3088033    .0012257
_Iavcode_21 |   -.2009937    .0712221    -2.82   0.006    -.3421111   -.0598763
_Iavcode_22 |   -.0865498    .1337841    -0.65   0.519    -.3516259    .1785262
_Iavcode_23 |    -.277167    .0664611    -4.17   0.000    -.4088512   -.1454829
_Iavcode_24 |   -.2904979    .0670077    -4.34   0.000    -.4232651   -.1577307
       _cons |    .0819325     .073604     1.11   0.268    -.0639045    .2277694
-------------------------------------------------------------------------------

dir : seeout

.
. // now run the python code in jupyter notebook to generate the latex table in
> paper.
.
. /***************TABLE 3 ******************/
. /* Difference-In-Difference Estimation*/
.
. use "ABCtestscore.dta", clear

.
. keep if round==1|round==2|round==4
(8,848 observations deleted)

.
. regress writezscore abc post abcpost i.avc, robust cluster(codev)

Linear regression                               Number of obs     =     13,402
                                                F(25, 112)        =       7.22
                                                Prob > F          =     0.0000
                                                R-squared         =     0.0323
                                                Root MSE          =      .9824

                    (Std. err. adjusted for 113 clusters in codevillage)
-------------------------------------------------------------------------------
            |               Robust
 writezscore | Coefficient  std. err.      t    P>|t|     [95% conf. interval]
------------+------------------------------------------------------------------
        abc |   -.0510589    .0465429    -1.10   0.275    -.1432777      .04116
       post |   -.0039726    .0587009    -0.07   0.946    -.1202809    .1123357
    abcpost |    .1992111    .0879969     2.26   0.026     .0248564    .3735657
            |
     avcode |
          2 |   -.0906601    .1079392    -0.84   0.403    -.3045277    .1232075
          3 |    -.183981    .1017302    -1.81   0.073    -.3855465    .0175844
          4 |   -.2894135    .1066402    -2.71   0.008    -.5007075   -.0781196
          5 |   -.2452143    .1044592    -2.35   0.021     -.452187   -.0382417
          6 |     -.46009    .1292994    -3.56   0.001    -.7162801   -.2038998
          8 |   -.2800115    .1198111    -2.34   0.021    -.5174018   -.0426211
          9 |   -.1620166    .1055456    -1.54   0.128    -.3711417    .0471086
         10 |   -.0048311    .2000725    -0.02   0.981    -.4012491     .391587
         11 |    -.390521    .0870401    -4.49   0.000    -.5629798   -.2180621
         12 |   -.2878447    .1350846    -2.13   0.035    -.5554976   -.0201919
         13 |   -.1591703    .1127097    -1.41   0.161      -.38249    .0641495
         14 |   -.2646314    .1041042    -2.54   0.012    -.4709005   -.0583622
         15 |    -.129693    .1554394    -0.83   0.406    -.4376763    .1782902
         16 |    .0366599    .1324394     0.28   0.782    -.2257518    .2990716
         17 |   -.1387642    .1230681    -1.13   0.262    -.3826078    .1050794
```

```
        18  |  -.1951126   .1235594   -1.58   0.117   -.4399297    .0497046
        19  |   -.679253   .0982517   -6.91   0.000   -.8739262   -.4845797
        20  |  -.3457518   .1202588   -2.88   0.005   -.5840293   -.1074744
        21  |   -.267037   .1218386   -2.19   0.030   -.5084445   -.0256295
        22  |   .1134695   .1612048    0.70   0.483   -.2059372    .4328761
        23  |  -.0857758   .1191486   -0.72   0.473   -.3218534    .1503018
        24  |  -.2650121   .1637743   -1.62   0.108     -.58951    .0594857
            |
      _cons |   .2043208   .0933573    2.19   0.031    .0193453    .3892962
------------------------------------------------------------------------------

. est store did_1

.
. regress mathzscore abc post abcpost i.avc, robust cluster(codev)

Linear regression                               Number of obs     =     13,420
                                                F(25, 112)        =       8.71
                                                Prob > F          =     0.0000
                                                R-squared         =     0.0387
                                                Root MSE          =     .95166

                        (Std. err. adjusted for 113 clusters in codevillage)
------------------------------------------------------------------------------
            |               Robust
 mathzscore | Coefficient  std. err.      t    P>|t|     [95% conf. interval]
------------+-----------------------------------------------------------------
        abc |  -.0951747   .0548499   -1.74   0.085   -.2038528    .0135033
       post |    -.00444    .065844   -0.07   0.946   -.1349015    .1260214
    abcpost |   .2495865   .0897821    2.78   0.006    .0716947    .4274783
            |
     avcode |
         2  |   -.082131   .1782522   -0.46   0.646   -.4353149    .2710528
         3  |  -.0925166   .1727398   -0.54   0.593   -.4347783    .2497451
         4  |  -.3735547   .1702757   -2.19   0.030   -.7109342   -.0361752
         5  |  -.1247134   .1690281   -0.74   0.462    -.459621    .2101942
         6  |  -.5222786    .148996   -3.51   0.001   -.8174952   -.2270621
         8  |   -.268576   .1565125   -1.72   0.089   -.5786855    .0415336
         9  |   -.208784   .1494414   -1.40   0.165    -.504883     .087315
        10  |  -.1499738   .1724666   -0.87   0.386   -.4916944    .1917467
        11  |  -.2986701   .1561977   -1.91   0.058   -.6081558    .0108157
        12  |  -.3242764   .1605311   -2.02   0.046   -.6423481   -.0062046
        13  |  -.1888014   .1604644   -1.18   0.242   -.5067411    .1291383
        14  |   -.486933    .178265   -2.73   0.007   -.8401423   -.1337236
        15  |  -.1148496   .2321587   -0.49   0.622   -.5748424    .3451432
        16  |   .0418162   .2112213    0.20   0.843   -.3766916     .460324
        17  |  -.2581149   .1577508   -1.64   0.105   -.5706779     .054448
        18  |  -.2168221    .166191   -1.30   0.195   -.5461083    .1124642
        19  |  -.7515548   .1848091   -4.07   0.000    -1.11773   -.3853792
        20  |  -.2996786   .1726373   -1.74   0.085   -.6417372    .0423801
        21  |  -.3697023   .1827287   -2.02   0.045   -.7317558   -.0076488
        22  |  -.0746031   .2050252   -0.36   0.717   -.4808343    .3316281
        23  |     -.1667   .1775515   -0.94   0.350   -.5184955    .1850954
        24  |  -.2404897   .1853159   -1.30   0.197   -.6076695      .12669
            |
      _cons |   .2406417   .1498708    1.61   0.111   -.0563082    .5375915
------------------------------------------------------------------------------

. est store did_2

.
. regress writezscore abc post abcpost age female zarma kanuri dosso i.avc, robu
> st cluster(codev)
```

note: 21.avcode omitted because of collinearity.

```
Linear regression                               Number of obs     =     12,823
                                                F(28, 112)        =         .
                                                Prob > F          =         .
                                                R-squared         =    0.0841
                                                Root MSE          =    .96124
```

                    (Std. err. adjusted for 113 clusters in codevillage)
```
------------------------------------------------------------------------------
             |               Robust
 writezscore | Coefficient  std. err.      t    P>|t|     [95% conf. interval]
-------------+----------------------------------------------------------------
         abc | -.0550791    .0503067    -1.09   0.276    -.1547553    .0445971
        post | -.0052542    .0598876    -0.09   0.930    -.1239138    .1134054
     abcpost |  .2060991    .0880806     2.34   0.021     .0315787    .3806196
         age | -.0100185    .0010229    -9.79   0.000    -.0120452   -.0079918
      female |  -.422774    .0324581   -13.03   0.000    -.4870855   -.3584624
       zarma | -.1243937    .1057711    -1.18   0.242    -.3339655    .0851782
      kanuri | -.1453456    .1060114    -1.37   0.173    -.3553936    .0647023
       dosso |  .3834023    .1047878     3.66   0.000     .1757786    .5910259
             |
      avcode |
           2 |  .1387582    .1246294     1.11   0.268     -.108179    .3856953
           3 |  -.268829    .0572569    -4.70   0.000    -.3822763   -.1553817
           4 | -.3318701    .0502921    -6.60   0.000    -.4315175   -.2322227
           5 | -.2208393    .1226682    -1.80   0.075    -.4638906     .022212
           6 | -.0577199    .1676177    -0.34   0.731    -.3898329    .2743931
           8 |  -.000999    .1281626    -0.01   0.994    -.2549368    .2529388
           9 |  .1096527    .1391078     0.79   0.432    -.1659716    .3852771
          10 |  .2264182    .2074351     1.09   0.277    -.1845878    .6374242
          11 | -.1705492    .1017395    -1.68   0.096     -.372133    .0310347
          12 | -.0089675    .1505911    -0.06   0.953    -.3073445    .2894094
          13 | -.2182531    .0614261    -3.55   0.001    -.3399611   -.0965451
          14 | -.3756919    .0560114    -6.71   0.000    -.4866713   -.2647126
          15 | -.2104435     .145473    -1.45   0.151    -.4986796    .0777926
          16 |   .088227    .1346647     0.66   0.514    -.1785938    .3550479
          17 |    .08145    .1392305     0.59   0.560    -.1944174    .3573175
          18 |   .084162    .1285724     0.65   0.514    -.1705877    .3389117
          19 | -.7718081    .0503207   -15.34   0.000    -.8715121   -.6721041
          20 | -.1003749    .1456929    -0.69   0.492    -.3890466    .1882969
          21 |         0   (omitted)
          22 | -.0013611    .1286655    -0.01   0.992    -.2562953    .2535731
          23 | -.2019155    .0803801    -2.51   0.013    -.3611783   -.0426526
          24 | -.3243647    .1146495    -2.83   0.006     -.551528   -.0972014
             |
       _cons |  .5003294    .1155349     4.33   0.000     .2714118     .729247
------------------------------------------------------------------------------
```

. est store did_3

.
. regress mathzscore abc post abcpost age female hausa zarma kanuri dosso i.avc,
> robust cluster(codev)
note: kanuri omitted because of collinearity.
note: 21.avcode omitted because of collinearity.

```
Linear regression                               Number of obs     =     12,840
                                                F(28, 112)        =         .
                                                Prob > F          =         .
                                                R-squared         =    0.0824
                                                Root MSE          =    .93591
```

```
                              (Std. err. adjusted for 113 clusters in codevillage)
        ------------------------------------------------------------------------------
                    |              Robust
        mathzscore |  Coefficient  std. err.      t    P>|t|     [95% conf. interval]
        ------------+----------------------------------------------------------------
               abc |   -.105952    .0594318   -1.78   0.077    -.2237086    .0118045
              post |  -.0103319    .0679903   -0.15   0.879     -.145046    .1243822
           abcpost |   .2638597    .0922572    2.86   0.005      .081064    .4466555
               age |  -.0088965    .0010682   -8.33   0.000    -.0110131     -.00678
            female |  -.3779148    .0326013  -11.59   0.000      -.44251   -.3133196
             hausa |   .0932102    .0730168    1.28   0.204    -.0514633    .2378836
             zarma |   .1057464    .1834039    0.58   0.565    -.2576449    .4691377
            kanuri |          0   (omitted)
             dosso |   .3626226    .1232071    2.94   0.004     .1185034    .6067417
                   |
            avcode |
                 2 |    .268268    .1617104    1.66   0.100    -.0521404    .5886763
                 3 |    -.06535    .0920711   -0.71   0.479     -.247777     .117077
                 4 |  -.3094394    .0837591   -3.69   0.000    -.4753973   -.1434815
                 5 |  -.1222296    .1807902   -0.68   0.500    -.4804422     .235983
                 6 |  -.0766599    .1412152   -0.54   0.588    -.3564596    .2031399
                 8 |   .0829937    .1301713    0.64   0.525    -.1749239    .3409114
                 9 |   .1486676    .1302288    1.14   0.256    -.1093641    .4066993
                10 |   .1749696    .1550554    1.13   0.262    -.1322527     .482192
                11 |   .0005789    .1234509    0.00   0.996    -.2440232    .2451809
                12 |   .0370997    .1425613    0.26   0.795    -.2453673    .3195668
                13 |  -.1389413    .0652473   -2.13   0.035    -.2682205   -.0096621
                14 |  -.4829835    .0999152   -4.83   0.000    -.6809526   -.2850144
                15 |  -.0844382    .1922667   -0.44   0.661      -.46539    .2965137
                16 |   .0673805    .2137162    0.32   0.753    -.3560707    .4908316
                17 |   .0614323    .1356061    0.45   0.651    -.2072538    .3301185
                18 |   .1601654    .1415728    1.13   0.260     -.120343    .4406738
                19 |  -.7326965     .113865   -6.43   0.000    -.9583054   -.5070876
                20 |   .0532177    .1632214    0.33   0.745    -.2701846      .37662
                21 |          0   (omitted)
                22 |  -.0748024    .1376478   -0.54   0.588     -.347534    .1979291
                23 |  -.1663476    .0947249   -1.76   0.082    -.3540328    .0213377
                24 |  -.1903549    .0968322   -1.97   0.052    -.3822156    .0015057
                   |
             _cons |   .2908555    .1517514    1.92   0.058    -.0098204    .5915314
        ------------------------------------------------------------------------------

. est store did_4

.
. generate agesq = age * age
(758 missing values generated)

. regress writezscore abc post abcpost age agesq female zarma kanuri dosso i.avc
> , robust cluster(codev)
note: 21.avcode omitted because of collinearity.

Linear regression                               Number of obs     =     12,823
                                                F(29, 112)        =          .
                                                Prob > F          =          .
                                                R-squared         =     0.0852
                                                Root MSE          =     .96068

                              (Std. err. adjusted for 113 clusters in codevillage)
        ------------------------------------------------------------------------------
                    |              Robust
        writezscore |  Coefficient  std. err.      t    P>|t|     [95% conf. interval]
        ------------+----------------------------------------------------------------
```

```
         abc |  -.0556091    .0502835    -1.11   0.271    -.1552393    .0440212
        post |  -.0041433    .0599477    -0.07   0.945     -.122922    .1146354
     abcpost |   .2053414     .088065     2.33   0.022     .0308519    .3798308
         age |   .0035228     .004061     0.87   0.388    -.0045236    .0115692
       agesq |  -.0001758    .0000494    -3.56   0.001    -.0002738   -.0000778
      female |  -.4199216    .0321456   -13.06   0.000    -.4836141   -.3562292
       zarma |  -.1337417    .1016719    -1.32   0.191    -.3351915    .0677082
      kanuri |  -.1396212     .108159    -1.29   0.199    -.3539243    .0746819
       dosso |      .3954    .1042005     3.79   0.000     .1889402    .6018598
             |
      avcode |
           2 |   .1364994    .1274856     1.07   0.287    -.1160971    .3890958
           3 |  -.2852728    .0552272    -5.17   0.000    -.3946985   -.1758472
           4 |  -.3479106    .0501266    -6.94   0.000    -.4472301   -.2485911
           5 |  -.2208747    .1190167    -1.86   0.066    -.4566911    .0149418
           6 |  -.0691594    .1712647    -0.40   0.687    -.4084984    .2701796
           8 |   .0016404     .127715     0.01   0.990    -.2514105    .2546913
           9 |   .1125322    .1364198     0.82   0.411    -.1577661    .3828305
          10 |   .2289574    .2067217     1.11   0.270    -.1806352    .6385499
          11 |   -.154831    .1025477    -1.51   0.134    -.3580161     .048354
          12 |  -.0105509    .1529626    -0.07   0.945    -.3136267    .2925249
          13 |  -.2267797    .0620862    -3.65   0.000    -.3497955   -.1037639
          14 |  -.3890739    .0566752    -6.86   0.000    -.5013685   -.2767793
          15 |  -.2320266    .1458889    -1.59   0.115    -.5210868    .0570335
          16 |   .0818397     .128478     0.64   0.525     -.172723    .3364024
          17 |   .0798223    .1379494     0.58   0.564    -.1935068    .3531514
          18 |   .0804048    .1281812     0.63   0.532    -.1735698    .3343795
          19 |  -.7866782    .0510107   -15.42   0.000    -.8877493   -.6856071
          20 |  -.0997755    .1448084    -0.69   0.492    -.3866948    .1871437
          21 |          0  (omitted)
          22 |  -.0145482    .1298051    -0.11   0.911    -.2717404     .242644
          23 |  -.2162934    .0826966    -2.62   0.010    -.3801462   -.0524407
          24 |  -.3294515    .1137905    -2.90   0.005    -.5549129   -.1039901
             |
       _cons |   .2668819    .1389208     1.92   0.057    -.0083718    .5421356
------------------------------------------------------------------------------

. est store did_5

.
. regress mathzscore abc post abcpost age agesq female zarma kanuri dosso i.avc,
>  robust cluster(codev)
note: 21.avcode omitted because of collinearity.

Linear regression                               Number of obs     =     12,840
                                                F(29, 112)        =          .
                                                Prob > F          =          .
                                                R-squared         =     0.0834
                                                Root MSE          =     .93544

                     (Std. err. adjusted for 113 clusters in codevillage)
------------------------------------------------------------------------------
             |               Robust
  mathzscore | Coefficient  std. err.      t    P>|t|     [95% conf. interval]
-------------+----------------------------------------------------------------
         abc |  -.1064173    .0592745    -1.80   0.075    -.2238621    .0110275
        post |   -.009312    .0680841    -0.14   0.891    -.1442119    .1255878
     abcpost |   .2631894    .0922854     2.85   0.005     .0803376    .4460411
         age |   .0034686    .0043576     0.80   0.428    -.0051655    .0121027
       agesq |  -.0001605     .000055    -2.92   0.004    -.0002694   -.0000516
      female |  -.3753278    .0324433   -11.57   0.000      -.43961   -.3110456
       zarma |    .003916    .1634816     0.02   0.981    -.3200019    .3278339
      kanuri |  -.0880252    .0754579    -1.17   0.246    -.2375354     .061485
```

```
      dosso |   .3736709   .1225222    3.05   0.003    .1309089    .6164329
            |
     avcode |
          2 |   .2662544   .1626552    1.64   0.104    -.056026    .5885348
          3 |  -.0803924   .0902928   -0.89   0.375    -.259296    .0985113
          4 |  -.3240728   .0846412   -3.83   0.000   -.4917785   -.1563671
          5 |  -.1220011   .1768527   -0.69   0.492    -.472412    .2284099
          6 |  -.0869908   .1415421   -0.61   0.540   -.3674384    .1934567
          8 |   .0854807   .1291402    0.66   0.509    -.170394    .3413553
          9 |   .1513965   .1288535    1.17   0.243   -.1039101    .4067032
         10 |   .1773566   .1549541    1.14   0.255   -.1296651    .4843783
         11 |   .0150215   .1264835    0.12   0.906   -.2355893    .2656322
         12 |   .0358183   .1431655    0.25   0.803   -.2478458    .3194825
         13 |  -.1467585   .0657588   -2.23   0.028    -.277051   -.0164659
         14 |  -.4952641   .0992215   -4.99   0.000   -.6918587   -.2986695
         15 |  -.1041566   .1931611   -0.54   0.591   -.4868805    .2785674
         16 |   .0615991   .2080679    0.30   0.768   -.3506608    .4738591
         17 |   .0600293    .134215    0.45   0.656   -.2059006    .3259592
         18 |   .1568323   .1409379    1.11   0.268   -.1224181    .4360827
         19 |  -.7462927   .1133911   -6.58   0.000   -.9709627   -.5216226
         20 |   .0537575   .1620974    0.33   0.741   -.2674178    .3749327
         21 |          0  (omitted)
         22 |  -.0867922   .1389986   -0.62   0.534   -.3622002    .1886158
         23 |   -.179502   .0964194   -1.86   0.065   -.3705446    .0115406
         24 |  -.1950376   .0950146   -2.05   0.042   -.3832969   -.0067784
            |
      _cons |   .1707563   .1583278    1.08   0.283   -.1429498    .4844625
------------------------------------------------------------------------------

. est store did_6

.
. qui tab codevillage, gen(village_dum)

.
. reg writezscore abc post abcpost age agesq female village_dum*, robust cluster
> (codev)
note: village_dum23 omitted because of collinearity.
note: village_dum71 omitted because of collinearity.

Linear regression                               Number of obs     =      12,823
                                                F(4, 112)         =           .
                                                Prob > F          =           .
                                                R-squared         =      0.1310
                                                Root MSE          =      .93953

                      (Std. err. adjusted for 113 clusters in codevillage)
------------------------------------------------------------------------------
             |               Robust
  writezscore | Coefficient  std. err.      t    P>|t|     [95% conf. interval]
-------------+----------------------------------------------------------------
         abc |   .2000127   .0409423    4.89   0.000    .1188908    .2811347
        post |  -.0121467   .0602387   -0.20   0.841    -.131502    .1072085
     abcpost |   .1981458   .0900948    2.20   0.030    .0196346    .3766571
         age |   .0035513   .0038522    0.92   0.359   -.0040813    .0111838
       agesq |  -.0001729   .0000476   -3.64   0.000   -.0002671   -.0000786
      female |    -.42022   .0318673  -13.19   0.000   -.4833609   -.3570791
village_dum1 |   .2463838   .0120014   20.53   0.000    .2226045    .2701631
village_dum2 |   .3594132   .0114612   31.36   0.000    .3367043    .3821221
village_dum3 |  -.0304211   .0057636   -5.28   0.000    -.041841   -.0190012
village_dum4 |   .3483127   .0112254   31.03   0.000     .326071    .3705543
village_dum5 |  -.2166004   .0053286  -40.65   0.000   -.2271583   -.2060425
village_dum6 |   .3707893   .0138283   26.81   0.000    .3433903    .3981883
```

```
village_dum7  |   .0085449   .0075632     1.13   0.261    -.0064405    .0235304
village_dum8  |   .2758065   .0130167    21.19   0.000     .2500156    .3015975
village_dum9  |   .2509161   .0112013    22.40   0.000     .2287221      .27311
village_dum10 |  -.0493719   .0053025    -9.31   0.000     -.059878   -.0388657
village_dum11 |   .4104497   .0188899    21.73   0.000     .3730217    .4478777
village_dum12 |   .2046092   .0073339    27.90   0.000      .190078    .2191405
village_dum13 |   .3452605   .0118047    29.25   0.000      .321871    .3686501
village_dum14 |   1.049788   .0139625    75.19   0.000     1.022123    1.077453
village_dum15 |   .0268117   .0056937     4.71   0.000     .0155304     .038093
village_dum16 |   .0829354   .0055801    14.86   0.000     .0718791    .0939916
village_dum17 |  -.0787306    .012587    -6.25   0.000    -.1036702   -.0537911
village_dum18 |   .0301431   .0112097     2.69   0.008     .0079326    .0523537
village_dum19 |   .2509395   .0221304    11.34   0.000      .207091    .2947881
village_dum20 |   .1350521   .0102752    13.14   0.000     .1146931    .1554112
village_dum21 |    .292485   .0092702    31.55   0.000     .2741173    .3108526
village_dum22 |   .3646007   .0131779    27.67   0.000     .3384904     .390711
village_dum23 |          0  (omitted)
village_dum24 |   -.122782   .0147775    -8.31   0.000    -.1520617   -.0935022
village_dum25 |   .2294518   .0153605    14.94   0.000     .1990169    .2598866
village_dum26 |   -.043829   .0062296    -7.04   0.000    -.0561721    -.031486
village_dum27 |   .4659355   .0088764    52.49   0.000     .4483481     .483523
village_dum28 |   .3299478   .0171415    19.25   0.000     .2959841    .3639114
village_dum29 |  -.0959563   .0054068   -17.75   0.000    -.1066692   -.0852433
village_dum30 |   .4381723   .0085531    51.23   0.000     .4212255    .4551191
village_dum31 |   .3144499   .0145556    21.60   0.000     .2856099      .34329
village_dum32 |   .4706423   .0218307    21.56   0.000     .4273876     .513897
village_dum33 |  -.1921805   .0148748   -12.92   0.000     -.221653   -.1627079
village_dum34 |   .2782096   .0166371    16.72   0.000     .2452453    .3111739
village_dum35 |   .4653453   .0128306    36.27   0.000      .439923    .4907675
village_dum36 |   .1857377   .0113258    16.40   0.000     .1632971    .2081783
village_dum37 |  -.1328043   .0049865   -26.63   0.000    -.1426844   -.1229243
village_dum38 |   .3033545    .005656    53.63   0.000     .2921479    .3145611
village_dum39 |   .6047206   .0119595    50.56   0.000     .5810244    .6284168
village_dum40 |   .7469455   .0073236   101.99   0.000     .7324348    .7614563
village_dum41 |   .0820559     .00511    16.06   0.000      .071931    .0921808
village_dum42 |   .8363101   .0136051    61.47   0.000     .8093534    .8632669
village_dum43 |   .3680188   .0123875    29.71   0.000     .3434745    .3925631
village_dum44 |   .6109077   .0061925    98.65   0.000      .598638    .6231773
village_dum45 |  -.3060901    .014849   -20.61   0.000    -.3355114   -.2766688
village_dum46 |  -.1230971   .0129077    -9.54   0.000     -.148672   -.0975222
village_dum47 |  -.4282263   .0103153   -41.51   0.000    -.4486647   -.4077878
village_dum48 |  -.0446813   .0127734    -3.50   0.001    -.0699903   -.0193724
village_dum49 |   .1746349   .0063877    27.34   0.000     .1619785    .1872913
village_dum50 |   .1084691   .0155095     6.99   0.000     .0777389    .1391993
village_dum51 |   .0750311   .0118576     6.33   0.000     .0515367    .0985255
village_dum52 |   .0917464   .0103363     8.88   0.000     .0712663    .1122265
village_dum53 |  -.1370117   .0061662   -22.22   0.000    -.1492293   -.1247941
village_dum54 |   .6250278   .0115922    53.92   0.000     .6020594    .6479962
village_dum55 |  -.0005771   .0059555    -0.10   0.923    -.0123771    .0112228
village_dum56 |   .5881901   .0206581    28.47   0.000     .5472588    .6291214
village_dum57 |   .5582569   .0143967    38.78   0.000     .5297317     .586782
village_dum58 |   .0658919   .0055316    11.91   0.000     .0549317     .076852
village_dum59 |  -.0551618   .0104185    -5.29   0.000    -.0758048   -.0345188
village_dum60 |   .5489568   .0188675    29.10   0.000     .5115734    .5863403
village_dum61 |   .2446412    .004813    50.83   0.000     .2351049    .2541775
village_dum62 |   .3517421   .0067813    51.87   0.000     .3383058    .3651784
village_dum63 |   .0262433   .0052229     5.02   0.000     .0158949    .0365917
village_dum64 |  -.1307429   .0104654   -12.49   0.000    -.1514788    -.110007
village_dum65 |   .1924216   .0122953    15.65   0.000       .16806    .2167831
village_dum66 |    .413397   .0117836    35.08   0.000     .3900493    .4367447
village_dum67 |   .1047458   .0065449    16.00   0.000     .0917779    .1177137
village_dum68 |   .3082862   .0120073    25.67   0.000     .2844952    .3320772
village_dum69 |  -.0362231   .0138807    -2.61   0.010    -.0637259   -.0087204
```

```
village_dum70 |  -.2047813   .0136022    -15.05   0.000     -.2317324    -.1778302
village_dum71 |         0   (omitted)
village_dum72 |   .5147862   .0084002     61.28   0.000      .4981424      .53143
village_dum73 |   .0333197   .0162646      2.05   0.043      .0010934     .0655459
village_dum74 |   .0101105   .0063275      1.60   0.113     -.0024267     .0226478
village_dum75 |   .1320347   .0068668     19.23   0.000       .118429     .1456405
village_dum76 |  -.0916407   .0159302     -5.75   0.000     -.1232043    -.0600772
village_dum77 |   .2873811   .0111221     25.84   0.000      .2653442     .3094181
village_dum78 |  -.3089412   .0067091    -46.05   0.000     -.3222344     -.295648
village_dum79 |   .2622445   .0157479     16.65   0.000       .231042      .293447
village_dum80 |   .4049001   .0155201     26.09   0.000      .3741491      .435651
village_dum81 |  -.1971048   .0060174    -32.76   0.000     -.2090276    -.1851821
village_dum82 |   .0200442   .0119882      1.67   0.097      -.003709     .0437974
village_dum83 |   -.095612   .0100623     -9.50   0.000     -.1155491    -.0756749
village_dum84 |   .2209478   .0145085     15.23   0.000       .192201     .2496946
village_dum85 |   .4659644   .0132508     35.16   0.000      .4397095     .4922192
village_dum86 |   .3321916   .0094833     35.03   0.000      .3134017     .3509814
village_dum87 |   .1503892   .0146662     10.25   0.000      .1213301     .1794484
village_dum88 |   .2690468   .0110279     24.40   0.000      .2471964     .2908972
village_dum89 |  -.1688341   .0068497    -24.65   0.000      -.182406    -.1552623
village_dum90 |   .6203053   .0081072     76.51   0.000      .6042419     .6363686
village_dum91 |  -.0884095   .0082307    -10.74   0.000     -.1047177    -.0721014
village_dum92 |  -.2753335    .014496    -18.99   0.000     -.3040555    -.2466115
village_dum93 |   .0915902   .0134923      6.79   0.000      .0648569     .1183236
village_dum94 |   .5520984   .0106833     51.68   0.000      .5309307     .5732661
village_dum95 |  -.1543976   .0098757    -15.63   0.000     -.1739651    -.1348302
village_dum96 |   .0108074   .0169062      0.64   0.524     -.0226901     .0443048
village_dum97 |   1.172814   .0039729    295.20   0.000      1.164942     1.180686
village_dum98 |    .285212   .0122306     23.32   0.000      .2609786     .3094453
village_dum99 |   -.342363   .0146582    -23.36   0.000     -.3714064    -.3133196
village_d~100 |  -.1649565   .0235799     -7.00   0.000      -.211677     -.118236
village_d~101 |   .5504485   .0029785    184.80   0.000      .5445469     .5563501
village_d~102 |  -.0800508   .0082518     -9.70   0.000     -.0964007    -.0637009
village_d~103 |   .1635836   .0043785     37.36   0.000      .1549082      .172259
village_d~104 |   .0386099   .0064398      6.00   0.000      .0258502     .0513695
village_d~105 |  -.0427333   .0089744     -4.76   0.000     -.0605149    -.0249516
village_d~106 |   .0958824   .0055424     17.30   0.000      .0849009     .1068639
village_d~107 |   .3970639   .0140557     28.25   0.000      .3692142     .4249135
village_d~108 |   .2835363    .015932     17.80   0.000      .2519691     .3151034
village_d~109 |   .0000214   .0068973      0.00   0.998     -.0136446     .0136875
village_d~110 |   .1243371   .0118457     10.50   0.000      .1008664     .1478078
village_d~111 |  -.5558233   .0136063    -40.85   0.000     -.5827823    -.5288642
village_d~112 |  -.0863275   .0147459     -5.85   0.000     -.1155447    -.0571104
village_d~113 |   .2710067   .0152354     17.79   0.000      .2408198     .3011937
        _cons |   .0503767   .0805497      0.63   0.533     -.1092223     .2099757
-------------------------------------------------------------------------------

. est store did_7

.
. reg mathzscore abc post abcpost age agesq female village_dum*, robust cluster(
> codev)
note: village_dum23 omitted because of collinearity.
note: village_dum71 omitted because of collinearity.

Linear regression                               Number of obs     =     12,840
                                                F(4, 112)         =          .
                                                Prob > F          =          .
                                                R-squared         =     0.1393
                                                Root MSE          =     .90959

                        (Std. err. adjusted for 113 clusters in codevillage)
-------------------------------------------------------------------------------
```

mathzscore	Coefficient	Robust std. err.	t	P>|t|	[95% conf. interval]	
abc	.2304088	.0424443	5.43	0.000	.1463109	.3145067
post	-.0269673	.0692329	-0.39	0.698	-.1641434	.1102087
abcpost	.2581796	.0942908	2.74	0.007	.0713545	.4450047
age	.0014676	.0040803	0.36	0.720	-.006617	.0095522
agesq	-.0001277	.0000508	-2.51	0.013	-.0002285	-.000027
female	-.3739415	.0324674	-11.52	0.000	-.4382715	-.3096115
village_dum1	.1340469	.0104668	12.81	0.000	.1133082	.1547855
village_dum2	.6172878	.0107638	57.35	0.000	.5959606	.638615
village_dum3	.1121939	.0055464	20.23	0.000	.1012044	.1231833
village_dum4	.0476657	.0106083	4.49	0.000	.0266467	.0686847
village_dum5	-.2245481	.0051292	-43.78	0.000	-.2347109	-.2143853
village_dum6	.57214	.0156429	36.58	0.000	.5411457	.6031344
village_dum7	.1769142	.0077772	22.75	0.000	.1615046	.1923238
village_dum8	.5647013	.0112651	50.13	0.000	.5423811	.5870216
village_dum9	.5767816	.0127261	45.32	0.000	.5515665	.6019966
village_dum10	-.0268811	.0050898	-5.28	0.000	-.0369659	-.0167962
village_dum11	.7422923	.0203261	36.52	0.000	.7020187	.7825658
village_dum12	.2898047	.0078318	37.00	0.000	.274287	.3053223
village_dum13	.3964721	.0126973	31.22	0.000	.371314	.4216303
village_dum14	1.437935	.0151704	94.79	0.000	1.407877	1.467993
village_dum15	-.080201	.005773	-13.89	0.000	-.0916395	-.0687625
village_dum16	.0220621	.0055657	3.96	0.000	.0110343	.0330899
village_dum17	.3294287	.0108356	30.40	0.000	.3079594	.3508981
village_dum18	.0143654	.0111573	1.29	0.201	-.0077414	.0364721
village_dum19	.4050257	.0219306	18.47	0.000	.361573	.4484785
village_dum20	.1595526	.0110434	14.45	0.000	.1376715	.1814337
village_dum21	.0388279	.0095568	4.06	0.000	.0198923	.0577634
village_dum22	.6583834	.0142258	46.28	0.000	.6301968	.68657
village_dum23	0	(omitted)				
village_dum24	-.2701003	.0130883	-20.64	0.000	-.2960331	-.2441675
village_dum25	.4073737	.0162667	25.04	0.000	.3751434	.4396041
village_dum26	.0945878	.0062123	15.23	0.000	.0822788	.1068967
village_dum27	.2911824	.007901	36.85	0.000	.2755276	.3068373
village_dum28	.7692604	.0184037	41.80	0.000	.7327958	.8057249
village_dum29	-.0933571	.0053484	-17.46	0.000	-.1039543	-.0827598
village_dum30	.5304775	.0087941	60.32	0.000	.5130532	.5479018
village_dum31	.3664185	.0144708	25.32	0.000	.3377465	.3950906
village_dum32	.5243534	.0225591	23.24	0.000	.4796555	.5690513
village_dum33	-.0941615	.0148258	-6.35	0.000	-.1235369	-.0647861
village_dum34	.6177983	.0179047	34.50	0.000	.5823224	.6532742
village_dum35	.3967689	.0115812	34.26	0.000	.3738222	.4197155
village_dum36	.2593729	.0114671	22.62	0.000	.2366522	.2820935
village_dum37	.1308264	.0049358	26.51	0.000	.1210469	.140606
village_dum38	.5692132	.0059825	95.15	0.000	.5573596	.5810668
village_dum39	.6312953	.011525	54.78	0.000	.6084601	.6541306
village_dum40	.2490621	.0078883	31.57	0.000	.2334324	.2646918
village_dum41	.1946032	.0047017	41.39	0.000	.1852873	.2039191
village_dum42	.7854782	.0119751	65.59	0.000	.761751	.8092053
village_dum43	.291605	.014299	20.39	0.000	.2632734	.3199367
village_dum44	.6651024	.0064149	103.68	0.000	.6523921	.6778128
village_dum45	-.3652751	.0164423	-22.22	0.000	-.3978534	-.3326967
village_dum46	-.0590672	.014429	-4.09	0.000	-.0876564	-.0304781
village_dum47	-.0989499	.0089006	-11.12	0.000	-.1165854	-.0813144
village_dum48	-.0538021	.0128661	-4.18	0.000	-.0792946	-.0283095
village_dum49	.1233083	.0061411	20.08	0.000	.1111405	.1354762
village_dum50	-.1059587	.014749	-7.18	0.000	-.135182	-.0767354
village_dum51	.1040803	.0104587	9.95	0.000	.0833577	.1248029
village_dum52	-.1020964	.0101783	-10.03	0.000	-.1222634	-.0819294
village_dum53	-.2980892	.0059544	-50.06	0.000	-.3098871	-.2862913
village_dum54	.879559	.0130979	67.15	0.000	.8536072	.9055108

```
village_dum55 |   .0227232   .0057806     3.93   0.000     .0112696    .0341768
village_dum56 |   .4625065   .0214378    21.57   0.000     .4200303    .5049827
village_dum57 |   .7876855   .0126405    62.31   0.000     .7626401    .8127309
village_dum58 |   .3254212    .005368    60.62   0.000     .3147851    .3360573
village_dum59 |  -.0691536   .0111554    -6.20   0.000    -.0912567   -.0470506
village_dum60 |   .6435241     .02005    32.10   0.000     .6037977    .6832506
village_dum61 |   .7981737   .0052147   153.06   0.000     .7878414    .8085059
village_dum62 |   .5254195   .0069438    75.67   0.000     .5116612    .5391777
village_dum63 |   .4912544   .0055708    88.18   0.000     .4802165    .5022923
village_dum64 |   .2971935   .0089458    33.22   0.000     .2794686    .3149185
village_dum65 |   .0620621   .0113341     5.48   0.000     .0396051    .0845192
village_dum66 |   .7914963   .0095686    82.72   0.000     .7725373    .8104553
village_dum67 |   .3461106    .006939    49.88   0.000     .3323619    .3598593
village_dum68 |   .3548055   .0111941    31.70   0.000     .3326259    .3769851
village_dum69 |    .144745   .0124008    11.67   0.000     .1201744    .1693156
village_dum70 |  -.1462085     .0121    -12.08   0.000     -.170183   -.1222339
village_dum71 |          0  (omitted)
village_dum72 |   .4309493   .0085322    50.51   0.000     .4140438    .4478548
village_dum73 |   .0986976   .0147858     6.68   0.000     .0694015    .1279937
village_dum74 |   .4232973   .0068322    61.96   0.000     .4097601    .4368345
village_dum75 |   .1901039   .0072444    26.24   0.000      .17575    .2044578
village_dum76 |   .1680752   .0180188     9.33   0.000     .1323731    .2037772
village_dum77 |   .2816224   .0123935    22.72   0.000     .2570663    .3061785
village_dum78 |  -.2342353   .0061579   -38.04   0.000    -.2464365   -.2220342
village_dum79 |   .1845568   .0139647    13.22   0.000     .1568876     .212226
village_dum80 |   .6649395   .0173373    38.35   0.000     .6305879    .6992912
village_dum81 |  -.1650774   .0056778   -29.07   0.000    -.1763273   -.1538275
village_dum82 |  -.1862645   .0112038   -16.63   0.000    -.2084634   -.1640655
village_dum83 |  -.0190238   .0110537    -1.72   0.088    -.0409253    .0028776
village_dum84 |   .3361813   .0131455    25.57   0.000     .3101351    .3622274
village_dum85 |   .5654703   .0145002    39.00   0.000      .53674    .5942007
village_dum86 |    .377591   .0098252    38.43   0.000     .3581236    .3970585
village_dum87 |   .1150872   .0132007     8.72   0.000     .0889318    .1412427
village_dum88 |   .4554562   .0117098    38.90   0.000     .4322548    .4786577
village_dum89 |  -.0764105   .0063255   -12.08   0.000    -.0889436   -.0638774
village_dum90 |   .5886127   .0089668    65.64   0.000     .5708461    .6063792
village_dum91 |  -.0286019   .0076692    -3.73   0.000    -.0437975   -.0134064
village_dum92 |  -.1631718   .0133078   -12.26   0.000    -.1895396    -.136804
village_dum93 |   .2248553   .0153166    14.68   0.000     .1945074    .2552032
village_dum94 |   .5213362   .0121439    42.93   0.000     .4972746    .5453978
village_dum95 |   .0025262   .0092995     0.27   0.786    -.0158996     .020952
village_dum96 |  -.0152691   .0155402    -0.98   0.328    -.0460599    .0155218
village_dum97 |   .6015611   .0034217   175.81   0.000     .5947814    .6083408
village_dum98 |   .4379961   .0133729    32.75   0.000     .4114994    .4644928
village_dum99 |  -.2128962   .0128816   -16.53   0.000    -.2384194    -.187373
village_d~100 |   .0261496   .0233281     1.12   0.265    -.0200719    .0723712
village_d~101 |   .5731722   .0032539   176.15   0.000      .566725    .5796194
village_d~102 |  -.0715143   .0074591    -9.59   0.000    -.0862936   -.0567351
village_d~103 |   .1229107   .0046703    26.32   0.000     .1136571    .1321644
village_d~104 |   .2589786   .0067059    38.62   0.000     .2456918    .2722654
village_d~105 |  -.0897122   .0082611   -10.86   0.000    -.1060805   -.0733439
village_d~106 |   .4165499   .0057679    72.22   0.000     .4051214    .4279783
village_d~107 |   .6256733    .015856    39.46   0.000     .5942568    .6570898
village_d~108 |   .6600402   .0176457    37.41   0.000     .6250775     .695003
village_d~109 |   .1066969   .0068667    15.54   0.000     .0930913    .1203025
village_d~110 |   .3307869   .0120544    27.44   0.000     .3069027    .3546712
village_d~111 |  -.4362401   .0122494   -35.61   0.000    -.4605108   -.4119694
village_d~112 |   .0973619   .0129308     7.53   0.000     .0717412    .1229827
village_d~113 |   .3751599    .014136    26.54   0.000     .3471513    .4031684
        _cons |  -.0898277   .0876636    -1.02   0.308    -.2635219    .0838664
--------------------------------------------------------------------------------
```

. est store did_8

```
.
. esttab did_* ///
>  using ../manuscript/Tables/did_result.tex, ///
> style(tex) booktabs keep(abc post abcpost age agesq female) ///
> mtitle("literacy" "math" "literacy" "math" "literacy" "math" "literacy" "math"
> ) ///
> star(* 0.1 ** 0.05 *** 0.01) ///
> se ///
> scalars("r2 R-squared") ///
>  replace
(output written to ../manuscript/Tables/did_result.tex)


.
. /***************TABLE 4 ******************/
. /* Difference-In-Difference-In-Difference Estimation*/
.
. use "ABCtestscore.dta", clear


.
. keep if round==1|round==2|round==4
(8,848 observations deleted)


.
. generate agesq = age * age
(758 missing values generated)

. capture drop region regionpost regionabc abcregionpost

. gen region=dosso==1

. gen regionpost=region*post

. gen regionabc=region*abc

. gen abcregionpost=regionabc*post


.
. reg writezscore abcpost abc post region regionpost regionabc abcregionpost coh
> ort2009 female age agesq i.avc, robust cluster(codev)
note: 21.avcode omitted because of collinearity.
```

Linear regression				Number of obs	=	12,823
				F(32, 112)	=	17.62
				Prob > F	=	0.0000
				R-squared	=	0.0867
				Root MSE	=	.95998

(Std. err. adjusted for 113 clusters in codevillage)

writezscore	Coefficient	Robust std. err.	t	P>|t|	[95% conf. interval]	
abcpost	.1875113	.1546648	1.21	0.228	-.1189371	.4939597
abc	-.0645277	.0708698	-0.91	0.365	-.2049472	.0758917
post	-.0647489	.1104386	-0.59	0.559	-.2835688	.154071
region	.2101382	.1447979	1.45	0.150	-.0767602	.4970366
regionpost	.07895	.1294945	0.61	0.543	-.1776269	.3355268
regionabc	.0141632	.0953904	0.15	0.882	-.1748406	.2031671
abcregionpost	.0350682	.1858886	0.19	0.851	-.3332461	.4033825
cohort2009	.0761185	.0469876	1.62	0.108	-.0169814	.1692184
female	-.4209914	.0323125	-13.03	0.000	-.4850145	-.3569684
age	.0032988	.0041922	0.79	0.433	-.0050075	.0116052

```
       agesq |  -.0001733    .0000507    -3.42   0.001    -.0002737    -.0000729
             |
      avcode |
           2 |   .1311723    .1228699     1.07   0.288    -.1122787     .3746233
           3 |  -.1592494    .0848302    -1.88   0.063    -.3273295     .0088308
           4 |  -.2273826    .0936891    -2.43   0.017    -.4130157    -.0417496
           5 |  -.2269041    .1051112    -2.16   0.033    -.4351685    -.0186397
           6 |  -.2049445    .1416413    -1.45   0.151    -.4855886     .0756995
           8 |   .0035552    .1271581     0.03   0.978    -.2483922     .2555027
           9 |   .0539037    .1132944     0.48   0.635    -.1705747     .2783821
          10 |   .2146739    .2216326     0.97   0.335    -.2244627     .6538106
          11 |   -.147341    .0994785    -1.48   0.141    -.3444449      .049763
          12 |   -.051788    .1551379    -0.33   0.739    -.3591739     .2555979
          13 |  -.0824452    .1021807    -0.81   0.421    -.2849032     .1200128
          14 |  -.2402021    .0833075    -2.88   0.005    -.4052651     -.075139
          15 |  -.1066155    .1510305    -0.71   0.482    -.4058631     .1926321
          16 |   .0642228    .1040609     0.62   0.538    -.1419606     .2704061
          17 |   .0832575    .1264731     0.66   0.512    -.1673328     .3338478
          18 |   .0791907    .1226077     0.65   0.520    -.1637407     .3221221
          19 |  -.6747156    .0959081    -7.04   0.000    -.8647453    -.4846859
          20 |  -.0988615    .1439464    -0.69   0.494    -.3840729     .1863499
          21 |          0  (omitted)
          22 |   .1254239     .152612     0.82   0.413    -.1769572      .427805
          23 |  -.0806136    .1032451    -0.78   0.437    -.2851805     .1239534
          24 |  -.2120672    .1314206    -1.61   0.109    -.4724604     .0483259
             |
       _cons |    .269378    .1478756     1.82   0.071    -.0236186     .5623745
-------------------------------------------------------------------------------

. est store ddd_1

.
. reg mathzscore abcpost abc post region regionpost regionabc abcregionpost coho
> rt2009 female age agesq i.avc, robust cluster(codev)
note: 21.avcode omitted because of collinearity.

Linear regression                               Number of obs     =     12,840
                                                F(32, 112)        =      18.76
                                                Prob > F          =     0.0000
                                                R-squared         =     0.0906
                                                Root MSE          =     .93184

                      (Std. err. adjusted for 113 clusters in codevillage)
-------------------------------------------------------------------------------
             |               Robust
   mathzscore | Coefficient  std. err.      t    P>|t|     [95% conf. interval]
-------------+-----------------------------------------------------------------
     abcpost |   .1700956    .1361127     1.25   0.214    -.0995944     .4397855
         abc |   -.091966    .0667008    -1.38   0.171    -.2241251     .0401932
        post |  -.0722764    .1085576    -0.67   0.507    -.2873694     .1428166
      region |   .2761222    .1819218     1.52   0.132    -.0843325     .6365769
  regionpost |   .0676242    .1382878     0.49   0.626    -.2063754     .3416238
   regionabc |  -.0138299    .1019994    -0.14   0.892    -.2159286     .1882688
abcregionpost |   .1621943    .1822125     0.89   0.375    -.1988365     .5232251
  cohort2009 |   .1497525     .044429     3.37   0.001     .0617222     .2377829
      female |  -.3767175    .0327101   -11.52   0.000    -.4415285    -.3119066
         age |   .0029241     .004401     0.66   0.508    -.0057958      .011644
       agesq |    -.000155    .0000554    -2.80   0.006    -.0002647    -.0000452
             |
      avcode |
           2 |   .2547139    .1385283     1.84   0.069    -.0197621     .5291899
           3 |  -.0545556    .1410739    -0.39   0.700    -.3340756     .2249643
           4 |  -.3094012    .1566883    -1.97   0.051     -.619859     .0010565
```

```
         5 |  -.0910436   .1573528    -0.58   0.564    -.4028181    .2207308
         6 |   -.165273    .119908    -1.38   0.171    -.4028553    .0723094
         8 |   .0907038   .1286382     0.71   0.482    -.1641764     .345584
         9 |    .104275   .1178035     0.89   0.378    -.1291376    .3376877
        10 |   .1476765   .1663658     0.89   0.377    -.1819559    .4773089
        11 |   .0321709   .1156865     0.28   0.781    -.1970471    .2613889
        12 |  -.0001426   .1541682    -0.00   0.999    -.3056072     .305322
        13 |  -.0841079   .1350368    -0.62   0.535     -.351666    .1834501
        14 |  -.4284876   .1387466    -3.09   0.003    -.7033961   -.1535791
        15 |  -.0805993   .2056189    -0.39   0.696    -.4880068    .3268082
        16 |   .0711743   .1709724     0.42   0.678    -.2675856    .4099342
        17 |   .0658755   .1195103     0.55   0.583    -.1709188    .3026697
        18 |   .1540878   .1263141     1.22   0.225    -.0961874     .404363
        19 |  -.7456012    .170303    -4.38   0.000    -1.083035   -.4081677
        20 |    .056219   .1598665     0.35   0.726    -.2605358    .3729739
        21 |          0   (omitted)
        22 |  -.0338572   .1828015    -0.19   0.853     -.396055    .3283406
        23 |  -.1381339   .1564119    -0.88   0.379     -.448044    .1717763
        24 |  -.1882473   .1542967    -1.22   0.225    -.4939665    .1174718
           |
     _cons |   .1469647   .1576319     0.93   0.353    -.1653627     .459292
------------------------------------------------------------------------------

. est store ddd_2

.
. reg writezscore abc female post femalepost femaleabc abcpost abcfemalepost coh
> ort2009 age agesq i.avc, robust cluster(codev)

Linear regression                               Number of obs     =     12,823
                                                F(32, 112)        =      19.04
                                                Prob > F          =     0.0000
                                                R-squared         =     0.0995
                                                Root MSE          =     .95323

                      (Std. err. adjusted for 113 clusters in codevillage)
------------------------------------------------------------------------------
              |               Robust
  writezscore | Coefficient  std. err.      t    P>|t|    [95% conf. interval]
--------------+---------------------------------------------------------------
          abc |  -.0363614   .0615562    -0.59   0.556    -.1583271    .0856043
       female |  -.1418064   .0488895    -2.90   0.004    -.2386747   -.0449382
         post |   .2374158    .063656     3.73   0.000     .1112896     .363542
   femalepost |  -.4939304   .0637036    -7.75   0.000    -.6201509   -.3677099
    femaleabc |  -.0360335   .0685321    -0.53   0.600     -.171821     .099754
      abcpost |    .174952   .0993676     1.76   0.081    -.0219322    .3718361
abcfemalepost |   .0513733   .0920257     0.56   0.578    -.1309639    .2337105
   cohort2009 |   .0762103   .0469247     1.62   0.107    -.0167649    .1691856
          age |   .0031189    .004167     0.75   0.456    -.0051374    .0113752
        agesq |  -.0001707   .0000506    -3.37   0.001     -.000271   -.0000704
              |
       avcode |
            2 |  -.1474886   .0979639    -1.51   0.135    -.3415916    .0466144
            3 |  -.1649647   .0846114    -1.95   0.054    -.3326113     .002682
            4 |  -.2301215   .0911768    -2.52   0.013    -.4107766   -.0494664
            5 |  -.2332138   .1040985    -2.24   0.027    -.4394716   -.0269559
            6 |  -.4860539   .1298741    -3.74   0.000    -.7433829   -.2287249
            8 |    -.27777   .1047175    -2.65   0.009    -.4852544   -.0702856
            9 |  -.2214196   .0866819    -2.55   0.012    -.3931687   -.0496704
           10 |  -.0568964   .2068169    -0.28   0.784    -.4666777    .3528848
           11 |  -.4245775   .0741329    -5.73   0.000    -.5714624   -.2776926
           12 |  -.3273215   .1398347    -2.34   0.021     -.604386    -.050257
           13 |   -.089724   .0993974    -0.90   0.369    -.2866672    .1072191
```

```
        14 |  -.2399954   .0838234    -2.86   0.005    -.4060807   -.0739102
        15 |  -.1092933   .1502068    -0.73   0.468    -.4069088    .1883222
        16 |   .0630432   .1054094     0.60   0.551    -.1458119    .2718984
        17 |  -.2006471   .1066207    -1.88   0.062    -.4119024    .0106083
        18 |   -.201768   .1010589    -2.00   0.048    -.4020033   -.0015327
        19 |  -.6811549   .0948098    -7.18   0.000    -.8690084   -.4933014
        20 |  -.3744653   .1310156    -2.86   0.005    -.6340559   -.1148748
        21 |  -.2741017   .1172135    -2.34   0.021    -.5063453   -.0418581
        22 |    .121534   .1516294     0.80   0.425    -.1789003    .4219683
        23 |  -.0822375   .1036969    -0.79   0.429    -.2876996    .1232247
        24 |   -.212223    .130234    -1.63   0.106     -.470265     .045819
           |
      _cons |   .3695756   .1213133     3.05   0.003     .129209    .6099423
------------------------------------------------------------------------------

. est store ddd_3

.
. reg mathzscore abc female post femalepost femaleabc abcpost abcfemalepost coho
> rt2009 age agesq i.avc, robust cluster(codev)

Linear regression                               Number of obs     =     12,840
                                                F(32, 112)        =      18.70
                                                Prob > F          =     0.0000
                                                R-squared         =     0.0923
                                                Root MSE          =     .93098

                      (Std. err. adjusted for 113 clusters in codevillage)
------------------------------------------------------------------------------
              |               Robust
   mathzscore | Coefficient  std. err.      t    P>|t|     [95% conf. interval]
--------------+---------------------------------------------------------------
          abc |  -.1293793    .076903    -1.68   0.095    -.2817527    .0229941
       female |  -.2765806   .0599122    -4.62   0.000     -.395289   -.1578723
         post |    .092556   .0790551     1.17   0.244    -.0640815    .2491934
   femalepost |  -.2368251   .0668162    -3.54   0.001    -.3692128   -.1044374
    femaleabc |   .0628764   .0758805     0.83   0.409     -.087471    .2132238
      abcpost |   .2586065    .105787     2.44   0.016     .0490032    .4682099
abcfemalepost |  -.0009824   .0989681    -0.01   0.992    -.1970749    .1951102
   cohort2009 |   .1494374   .0445541     3.35   0.001     .0611591    .2377156
          age |   .0029417   .0044084     0.67   0.506     -.005793    .0116765
        agesq |   -.000155   .0000553    -2.80   0.006    -.0002647   -.0000454
              |
       avcode |
            2 |  -.1130366   .1483169    -0.76   0.448    -.4069076    .1808343
            3 |  -.0650865   .1434596    -0.45   0.651    -.3493332    .2191603
            4 |    -.32059   .1541014    -2.08   0.040    -.6259223   -.0152577
            5 |   -.102395   .1540043    -0.66   0.507    -.4075347    .2027448
            6 |  -.5389134   .1384046    -3.89   0.000    -.8131443   -.2646824
            8 |  -.2825951   .1424622    -1.98   0.050    -.5648657   -.0003244
            9 |  -.2620838   .1281553    -2.05   0.043     -.516007   -.0081606
           10 |  -.2027223   .1692678    -1.20   0.234    -.5381047    .1326601
           11 |   -.334637   .1284888    -2.60   0.010    -.5892212   -.0800528
           12 |  -.3599667   .1631725    -2.21   0.029    -.6832721   -.0366613
           13 |  -.0997032   .1360239    -0.73   0.465     -.369217    .1698107
           14 |  -.4352235    .142908    -3.05   0.003    -.7183775   -.1520695
           15 |  -.0892117   .2079067    -0.43   0.669    -.5011522    .3227289
           16 |   .0661242   .1757185     0.38   0.707    -.2820394    .4142878
           17 |  -.3059858   .1350285    -2.27   0.025    -.5735275    -.038444
           18 |  -.2178846   .1394121    -1.56   0.121    -.4941118    .0583425
           19 |    -.76147   .1750761    -4.35   0.000    -1.108361   -.4145791
           20 |  -.3071111   .1751122    -1.75   0.082    -.6540735    .0398514
           21 |  -.3587194   .1651457    -2.17   0.032    -.6859345   -.0315043
```

```
        22 |   -.046142   .1873087    -0.25   0.806    -.4172702   .3249862
        23 |   -.140965   .1559812    -0.90   0.368    -.4500218   .1680917
        24 |  -.1912196   .1537583    -1.24   0.216    -.4958719   .1134327
           |
     _cons |   .4109359   .1563463     2.63   0.010     .1011558    .720716
-------------------------------------------------------------------------------

. est store ddd_4

.
. esttab ddd_* ///
>  using ../manuscript/Tables/ddd.tex, ///
> style(tex) booktabs keep(abc female post femalepost femaleabc abcpost abcfemal
> epost cohort2009 age agesq) ///
> mtitle("literacy" "math" "literacy" "math") ///
> star(* 0.1 ** 0.05 *** 0.01) ///
> se ///
> scalars("r2 R-squared") ///
>  replace
(output written to ../manuscript/Tables/ddd.tex)

.
.
. log close
      name:  <unnamed>
       log:  C:\Users\zxuyuan\Downloads\02. Datasets\Replication_v2.log
  log type:  text
 closed on:  27 Mar 2024, 09:33:56
-------------------------------------------------------------------------------
```