

name: <unnamed> log: C:\Users\Emilie\Documents\Emilie\Master\Nottingham\2 Appl Microeconometri > cs\fdimatching_deleteEXP/log_fdi_matching.smcl log type: smcI opened on: 10 May 2020, 20:53:51 clear all 1 . PART 1.0: Download Packages 5 . *-----* 6. package gr0070 from http://www.stata-journal.com/software/sj17-3
cap ssc install gr0070 7 . // package outreg2 cap ssc install outreg2 10. // 11. 12. 13. // package tabout cap ssc install tabout 16. *-----* PART 1.1: Set globals for do-file routines 18. *-----* 19. "\$root/01 input" 20. global input 21. global scripts "\$root/02 scripts" global log "\$root/03_log" 22. 23. global results "\$root/04_results" 24. use "\$input/FDI project" 25. 26. 28. *-----* 29. * PART 1.2: Adjust variable labels 30. *-----* 31. 32. label var OWN "Ownership" 33. label var TECH "Technology intensity" label var PORT "Access to port" 34. 35. label var logwages2015 "Log wages" label var TFP2015 "TFP" 36. label var logemp2015 "Log employment" 37. 38. label var DEBTS2015 "Log debts"

```
39.
        label var EXP2015 "Export intensity"
40.
        label var RD2015 "R&D dummy"
41.
        label var logwages2017 "Log wages"
42.
        label var TFP2017 "TFP"
43.
44. *----
        PART 1.3: Transforming variables
45. *
47.
        generate TFPS17= (TFP2017-3.656046)/2.056464
48.
49.
        generate emp2015= exp(logemp2015)
50.
        generate wages15 = exp(logwages2015)
51.
        generate debts15 = exp(DEBTS2015)
52.
53.
        save $input/fdi matching clean, replace
 file C:\Users\Emilie\Documents\Emilie\Master\Nottingham\2_Appl_Microeconometrics\fdima
 > tching deleteEXP/01 input/fdi matching clean.dta saved
54.
55. *-----*
56. *
       PART 1.4: Set globals for variables
57. *-----
58.
59.
        global F "OWN TECH RD2015"
60.
        global C "logwages2015 TFP2015 emp2015 DEBTS2015"
63. *
                    PART 2: Descriptive Analysis
64. ***********
65.
              do $scripts/02 Descriptive Analysis
67. /*******************************
                                      DESCRIPTIVE ANALYSIS DO-FILE
  ************************
 >
                    Applied Microeconometrics
 >
 >
                                Empirical Project
 >
                                           Do-File 02
 >
               PURPOSE:
                          Analysis of Dataset
 >
 >
               OUTLINE:
                          PART 1: Overview
                                PART 2: Summary Statistics
                                PART 3: Balance Tables
     *******************
                               PART 1: Overview
 > *********************************
```

68. 69. describe

Contains data from C:\Users\Emilie\Documents\Emilie\Master\Nottingham\2 Appl Microecon > ometrics\fdimatching_deleteEXP/01_input/fdi_matching_clean.dta

11,323 vars: 21 713,349 size:

10 May 2020 20:54

variable name	storage type	display format	value label	variable label
firm FDI2016 FDITYPE2016 OWN TECH PORT logwages2015 TFP2015 logemp2015 EXP2015 RD2015 logwages2017 TFP2017 logemp2017 EXP2017 RD2017 TFPS17 emp2015 wages15 debts15	float byte byte byte float float float float float float float float float float float float float float float float float float	%9.0g %9.0g %28.0g %27.0g %27.0g %29.0g %99.0g %99.0g %99.0g %99.0g %99.0g %99.0g %99.0g %99.0g	FDITYPE OWN TECH PORT	firm identifier FDI/TREATMENT dummy in 2016 FDI type Ownership Technology intensity Access to port Log wages TFP Log employment Log debts Export intensity R&D dummy Log wages TFP log employment in 2017 EXPORT INTENSITY in 2017 R&D dummy in 2017

Sorted by: FDI2016

70. 71. //

Frequencies of FDI types

72. tab FDITYPE2016

FDI type	Freq.	Percent	Cum.
No FDI Exports-oriented FDI Technology intensive FDI Domestic market seeking FDI	6,863 940 1,555 1,965	60.61 8.30 13.73 17.35	60.61 68.91 82.65 100.00
Total	11,323	100.00	

```
73.
74. *-----*
75. * PART 1.1: Correlations matrix
77.
78.
       corr FDI2016 ///
 >
                  OWN TECH PORT ///
                  logwages2015 TFP2015 emp2015 DEBTS2015 EXP2015 RD2015
 (obs=11,323)
```

	FDI2016	OWN	TECH	PORT	logwag~5	TFP2015
FDI2016 OWN TECH PORT logwages2015 TFP2015 emp2015 DEBTS2015 EXP2015 RD2015	1.0000 0.1026 -0.3144 0.1984 -0.0633 -0.0868 0.0249 -0.0259 0.4480 0.0175	1.0000 -0.1797 0.0564 -0.0566 -0.0457 -0.0025 0.2636 -0.1249 0.0070	1.0000 -0.4172 0.1843 0.1080 -0.0353 -0.0064 0.3125 0.0093	1.0000 -0.0694 0.0620 0.0319 0.0019 0.2780 -0.0088	1.0000 0.0351 -0.0062 -0.0327 0.0453 0.0100	1.0000 -0.0035 -0.0423 0.0409 0.0419

1%	Percentiles 0	Smallest 0		
5%	0	0		
10%	0	0	Obs	11,323
25%	0	0	Sum of Wgt.	11,323
50%	0		Mean	.8783008
		Largest	Std. Dev.	1.192862
75%	2	_ 3		
90%	3	3	Variance	1.42292
95%	3	3	Skewness	.8489698
99%	3	3	Kurtosis	2.022788

Owr.			

1%	Percentiles 1	Smallest 1		
5% 10% 25%	1 2 2	1 1 1	Obs Sum of Wgt.	11,323 11,323
50%	3	Largest	Mean Std. Dev.	2.888987 .9071667
75% 90% 95% 99%	4 4 4 4	4 4 4 4	Variance Skewness Kurtosis	.8229515 4250337 2.357997
		Technology inte	ensity	
1%	Percentiles 1	Smallest 1		
5% 10% 25%	1 1 1	1 1 1	Obs Sum of Wgt.	11,323 11,323
50%	2	Largest	Mean Std. Dev.	2.278636 1.130658
75% 90% 95% 99%	3 4 4 4	4 4 4 4	Variance Skewness Kurtosis	1.278387 .1369556 1.562267
		Access to po	ort	
1% 5%	Percentiles 0 0	Smallest 0 0		
10% 25%	0 0	0 0	Obs Sum of Wgt.	11,323 11,323
50%	0	Largest	Mean Std. Dev.	.3494657 .4768223
75% 90% 95% 99%	1 1 1 1	1 1 1 1	Variance Skewness Kurtosis	.2273595 .6314342 1.398709
		Log wages	3	
1%	Percentiles -1.638978 1.059369	Smallest -7.331795 -7.103724		
5% 10% 25%	2.408368 4.74146	-5.701573 -5.625238	Obs Sum of Wgt.	11,323 11,323
50%	7.338148	Largest	Mean Std. Dev.	7.332918 3.838861
75% 90% 95% 99%	9.902966 12.20624 13.65446 16.26827	20.87844 20.99824 21.31597 22.43151	Variance Skewness Kurtosis	14.73685 .0050248 3.044124
		TFP		
1% 5% 10% 25%	Percentiles -1.7603413396301 .4065464 1.69375	Smallest -5.359266 -4.564884 -3.947462 -3.887785	Obs Sum of Wgt.	11,323 11,323

50%	3.032239	Largost	Mean Std. Dev.	3.041338 2.046604
75% 90% 95% 99%	4.417369 5.679015 6.381904 7.791977	Largest 10.39066 10.79894 10.82878 11.35702	Variance Skewness Kurtosis	4.188589 0117873 3.028324
		Log employmer	nt 	
1% 5% 10% 25%	Percentiles -2.6342895589151 .5075461 2.341855	Smallest -6.228763 -6.20012 -6.185894 -6.092359	Obs Sum of Wgt.	11,323 11,323
50%	4.399255	Largest	Mean Std. Dev.	4.411473 3.040198
75% 90% 95% 99%	6.524904 8.279512 9.413677 11.393	14.9902 15.08997 15.28719 15.99303	Variance Skewness Kurtosis	9.242801 0080799 2.960453
		Log debts		
1% 5% 10% 25%	Percentiles17502220806167 .029059 .2368089	Smallest199846419973921994081993328	Obs Sum of Wgt.	11,323 11,323
50%	.5004624	Largest	Mean Std. Dev.	.5040355 .3525262
75% 90% 95% 99%	.7537385 .9722362 1.122765 1.254863	1.2992 1.29932 1.299587 1.299778	Variance Skewness Kurtosis	.1242747 .0806031 2.316729
		Export intens	ity	
1% 5% 10% 25%	Percentiles .0190834 .0384401 .0575267 .0990072	Smallest .0103205 .0104334 .0104726 .0105073	Obs Sum of Wgt.	11,323 11,323
50%	.1543709	Largest	Mean Std. Dev.	.1593435 .0798147
75% 90% 95% 99%	.2130122 .2652063 .2949337 .3648675	.4667603 .4720742 .4777972 .4831533	Variance Skewness Kurtosis	.0063704 .4171633 2.827241
		R&D dummy		
1% 5% 10% 25%	Percentiles 0 0 0 0	Smallest 0 0 0 0	Obs Sum of Wgt.	11,323 11,323
50%	0	Largest	Mean Std. Dev.	.1211693 .3263383
75% 90% 95% 99%	0 1 1	1 1 1 1	Variance Skewness Kurtosis	.1064967 2.321808 6.390791

Log wages

	Percentiles	Smallest		
1%	-2.120156	-6.185148		
5% 10%	0123446 1.035314	-6.022474 -5.493109	Obs	11,323
25%	2.910137	-5.369166	Sum of Wgt.	11,323
				,
50%	4.989117		Mean	5.010195
75%	7.136983	Largest 15.41822	Std. Dev.	3.082818
90%	8.938831	15.76589	Variance	9.503766
95%	10.04671	16.21945	Skewness	0073109
99%	12.01537	17.04211	Kurtosis	2.956235
		TFP		
		111		
1.0	Percentiles	Smallest		
1% 5%	-1.170003 .2511905	-4.700881 -3.951226		
10%	1.018264	-3.692741	Obs	11,323
25%	2.283582	-3.331597	Sum of Wgt.	11,323
			,	
50%	3.664006		Mean	3.656046
750	E 041626	Largest	Std. Dev.	2.056464
75% 90%	5.041636 6.310671	11.30793 11.34453	Variance	4.229043
95%	7.028272	11.62984	Skewness	016582
99%	8.400249	11.8114	Kurtosis	3.017121
		log employment i	n 2017	
	Percentiles	Smallest		
1%	-2.170581	-6.217651 -6.184767		
5% 10%	018102 1.038013	-5.748356	Obs	11,323
25%	2.929524	-5.622331	Sum of Wgt.	11,323
			-	
50%	5.0262	Tammant	Mean	5.030484
75%	7.173199	Largest 15.48663	Std. Dev.	3.094736
90%	8.980158	15.49919	Variance	9.57739
95%	10.10212	15.74725	Skewness	024026
99%	12.07887	16.38825	Kurtosis	2.950697
	E	XPORT INTENSITY	in 2017	
	Danasatiles	C		
1%	Percentiles .0581937	Smallest . 0187976		
5%	.1113043	.0211925		
10%	.1423226	.0216743	Obs	11,323
25%	.19367	.0221602	Sum of Wgt.	11,323
50%	.2606816		Mean	.2696827
J 0 %	.2000010	Largest	Std. Dev.	.1083555
75%	.3300854	.7790653		. = : • • • •
90%	.4089049	.7935594	Variance	.0117409
95%	.4650209	.8165495	Skewness	.6997986
99%	.5815625	. 9501169	Kurtosis	4.15865
		R&D dummy in 2	017	
	Percentiles	Smallest		
1%	0	0		
5%	0	0		
10%	0	0	Obs	11,323
25%	0	0	Sum of Wgt.	11,323

50%	0	Largest	Mean Std. Dev.	.4074009 .4913723
75% 90% 95% 99%	1 1 1	1 1 1 1	Variance Skewness Kurtosis	.2414467 .3769168 1.142066
		TFPS17		
1% 5% 10% 25%	Percentiles -2.34677 -1.655684 -1.28267866739	Smallest -4.063736 -3.6992 -3.573506 -3.397892	Obs Sum of Wgt.	11,323 11,323
50%	.0038706	Largest	Mean Std. Dev.	1.64e-07 .9999998
75% 90% 95% 99%	.6737731 1.290869 1.639817 2.306971	3.720892 3.738692 3.87743 3.965719	Variance Skewness Kurtosis	.9999996 016582 3.017121
		emp2015		
1% 5% 10% 25%	Percentiles .07177 .5718291 1.66121 10.40051	Smallest .0019719 .0020292 .0020583 .0022601	Obs Sum of Wgt.	11,323 11,323
50%	81.39024	Largost	Mean Std. Dev.	7111.033 117154.6
75% 90% 95% 99%	681.9145 3942.272 12254.85 88698.71	Largest 3237150 3576776 4356531 8824411	Variance Skewness Kurtosis	1.37e+10 49.56077 3179.901
		wages15		
1% 5% 10% 25%	Percentiles .1941784 2.884551 11.1158 114.6014	Smallest .0006544 .000822 .0033407 .0036057	Obs Sum of Wgt.	11,323 11,323
50%	1537.861	Largost	Mean Std. Dev.	1966556 5.99e+07
75% 90% 95% 99%	19989.56 200032.7 851244.9 1.16e+07	Largest 1.17e+09 1.32e+09 1.81e+09 5.52e+09	Variance Skewness Kurtosis	3.59e+15 73.88568 6472.332
		debts15		
1% 5% 10% 25%	Percentiles .8394383 .9225472 1.029485 1.267199	Smallest .8188565 .8189443 .8192155 .8192772	Obs Sum of Wgt.	11,323 11,323
50%	1.649484	Largest	Mean Std. Dev.	1.76176 .6339302
75% 90% 95% 99%	2.124929 2.64385 3.073339 3.507359	3.666363 3.666803 3.667783 3.668482	Variance Skewness Kurtosis	.4018675 .7983175 3.165366

C:\Users\Emilie\Documents\Emilie\Master\Nottingham\2_Appl_Microeconometrics\fdimatchin > g_deleteEXP/04_results/02_Descriptive_Analysis/summarystats.tex dir : seeout

87.
88. // Categorical variables
89. tab PORT

Access to port	Freq.	Percent	Cum.
No ports within 500km Ports within 500km	7,366 3,957	65.05 34.95	65.05 100.00
Total	11,323	100.00	

90. tab OWN

nt Cur	Percent	Freq.	Ownership
23 31.3 56 71.8	8.03 23.23 40.56 28.18	909 2,630 4,593 3,191	Listed companies Subsidiaries Independent State
00	100.00	11,323	Total

91. tab TECH

Technology intensity	Freq.	Percent	Cum.
Low-tech industries Medium low-tech industries Medium high-tech industries High-tech industries	4,194 1,685 3,539 1,905	37.04 14.88 31.25 16.82	37.04 51.92 83.18 100.00
Total	11,323	100.00	

92. tab RD2015

> PNG format)

	R&D dummy	Freq.	Percent	Cum.
•	0 1	9,951 1,372	87.88 12.12	87.88 100.00
·	Total	11.323	100.00	

```
93.
94. *-----*
95. * PART 2.1: Checking for Outliers in employment variable
97.
98.
           set scheme plotplainblind
            scatter TFP2017 emp2015, ytitle("TFP in 2017")
99.
            graph save $results/02_Descriptive_Analysis/emp2015_outliers.gph, ///
100
            replace
 (file C:\Users\Emilie\Documents\Emilie\Master\Nottingham\2 Appl_Microeconometrics\fdim > atching_deleteEXP/04_results/02_Descriptive_Analysis/emp2015_outliers.gph_saved)
101
102
            graph export $results/02 Descriptive Analysis/emp2015 outliers.png, ///
            as(png) replace
 (file C:\Users\Emilie\Documents\Emilie\Master\Nottingham\2 Appl Microeconometrics\fdim
```

> atching_deleteEXP/04_results/02_Descriptive_Analysis/emp2015_outliers.png written in

```
103
104
106
                                                                                                       PART 3: Balance Tables
107 ***
108
                                                \hspace{1.5cm}  \hspace{1.5cm} \hspace{1.5cm}  \hspace{1.5cm}  \hspace{1.5cm}  \hspace{1.5cm}  \hspace{1.5cm}  \hspace{1.5cm}  \hspace{1.5cm}  \hspace{1.5cm}  \hspace{1.5cm}  \hspace{1.5cm}  \hspace{1.5cm} \hspace{1.5cm} \hspace{1.5cm} \hspace{1.5cm} \hspace{1.5cm} \hspace{1.5cm} \hspace{1.5cm} \hspace{1.5cm} \hspace{1.5cm} \hspace{1.5cm} \hspace{1.5cm} \hspace{1.5cm} \hspace{1.5cm} \hspace{1.5cm} \hspace{1.5cm} \hspace{1.5cm} \hspace{1.5cm} \hspace{1.5cm} \hspace{1.5cm} \hspace{1.5cm} \hspace{1.5cm} \hspace{1.5cm} \hspace{1.5cm} \hspace{1.5cm} \hspace{1.5cm} \hspace{1.5cm} \hspace{1.5cm} \hspace{1.5cm} \hspace{1.5cm} \hspace{1.5cm} \hspace{1.5cm} \hspace{1.5
109 //
110 iebaltab
                                                                  logwages2015 TFP2015 logemp2015 DEBTS2015 EXP2015 RD2015, //
    >
    >
                                                                   grpvar(FDI2016) ///
                                                                   savetex("$results/02 Descriptive Analysis/baltest byfdi pre.
        tex") ///
                                                                  rowvarlabels texdoc replace
              Balance table saved to:
                       C:\Users\Emilie\Documents\Emilie\Master\Nottingham\2 Appl Microeconometrics\
                        > fdimatching deleteEXP/04 results/02 Descriptive Analysis/baltest byfdi pre
                       > .tex
111
112
113 //
                                                                  By FDI type (treatment arms) [not reported in paper]
                                               TECH PORT ///
114 iebaltab
                                                                  logwages2015 TFP2015 logemp2015 DEBTS2015 EXP2015 RD2015, //
    > /
                                                                   grpvar(FDITYPE2016) ///
                                                                   savetex("$results/02_Descriptive_Analysis/baltest_fditype_pr
    > e.tex") ///
                                                                  rowvarlabels texdoc replace
              Balance table saved to:
                       C:\Users\Emilie\Documents\Emilie\Master\Nottingham\2_Appl_Microeconometrics\
                        > fdimatching_deleteEXP/04_results/02_Descriptive_Analysis/baltest_fditype_p
                       > re.tex
115
    end of do-file
116
117
119 *
                                                                 PART 3: Results
121
122 *----
123 *
                         PART 3.1: Effect of FDI on TFP
124 *-----
125
126
                                               do $scripts/03a Main Results
MAIN RESULTS DO-FILE
         **************
    >
                                                                Applied Microeconometrics
    >
                                                                                                       Empirical Project
    >
    >
                                                                                                                                        Do-File 03a
                                                                                      Estimation of the effect of FDI on TFP.
                                                PURPOSE:
                                                                                      PART 1: Several ATE estimations for
                                                OUTLINE:
                                                                                                                                                                                 main model
                                                                                                         PART 1.1: NN1
    >
                                                                                                         Part 1.2: NN5 with caliper 0.05
    >
                                                                                                         Part 1.3: IPW
                                                                                                         Part 1.4: AIPW
        *****************
                                                                 PART 1: Several ATE estimations for main model
        **************************
```

140 tebalance summarize

Covariate balance summary

L y	Raw	Matched
Number of obs =	11,323	22,646
Treated obs =	4,460	11,323
Control obs =	6,863	11,323

	Standardized	differences	Varia	ance ratio
	Raw	Matched	Raw	Matched
OWN Subsidiaries Independent State	018354 .0616272 .1016402	0175033 0068445 .0130378	.9769702 1.02321 1.100951	.9774223 .9972679 1.01213
TECH Medium low-t~s Medium high-~s High-tech in~s	.1206088	0400593	1.263082	.9244732
	2329159	.0104791	.8156583	1.008514
	5425507	.0051861	.2855456	1.009211
RD2015 1	.0356507	.016501	1.085768	1.039031
logwages2015	1300321	.0174603	.9769191	1.009556
TFP2015	178877	013165	.9473458	.9917016
emp2015	.0470091	.0271819	5.49725	1.696765
DEBTS2015	0529435	0040148	1.051101	1.017773

141 142 *-----* 143 * PART 1.2: NN5 with caliper 0.05

144 *-----* >

```
// ATE
145
146
            cap drop osa1
147
            cap drop p1*
148
            cap teffects psmatch (TFPS17) ///
                                                      (FDI2016 i.($F) c.($C), logit), /// nneighbor(5) caliper(.05) osample(os
  > a1) generate(p1)
149
                                                      // 5 observations violate caliper
150
151
            // Reestimate
152
            cap teffects psmatch (TFPS17) ///
                                                       (FDI2016 i.($F) c.($C), logit) if o
  > sa1==0,
              ///
                                                       nneighbor(5) caliper(.05) generate
 > (p1)
153
            outreg2 using $results/05_Tables/Table2_TFP.tex, append dec(3) ///
drop(i.OWN i.PORT logwages2015 TFP2015 emp2015 DEBTS2015 i.TECH RD2015) ///
154
            nocon eqdrop (TME1)
  dir : seeout
155
156
            tebalance summarize
```

		Raw	Matched
Number of obs	= = =	11,318	22,636
Treated obs		4,456	11,318
Control obs		6,862	11,318

	Standardized Raw	differences Matched	Vari Raw	ance ratio Matched
	i taw			
OWN Subsidiaries Independent State	0190182 .0618259 .1020001	0205252 0100251 .0045727	.976131 1.023258 1.101344	.9738583 .9959379 1.004328
TECH Medium low-t~s Medium high-~s High-tech in~s	.1209652 2325048 5424366	0328628 .0081591 .0045745	1.263818 .816095 .2857586	.9372059 1.006628 1.008117
RD2015 1	.0359419	.0166292	1.086462	1.03894
logwages2015 TFP2015 emp2015 DEBTS2015	1300519 1787364 .0436824 0525752	.0082815 0294567 .0385463 0086042	.977301 .9475049 .5304931 1.051687	1.00904 .9850587 .4724067 1.01474

157 158 *-----* 159 * PART 1.3: IPW 160 *--// ATE 161 162 cap drop osa1 163 164 teffects ipw (TFPS17) (FDI2016 i.(\$F) c.(\$C), logit), osample(osa1) Iteration 0: EE criterion = 4.223e-23 Iteration 1: EE criterion = 1.805e-33 Treatment-effects estimation Number of obs = 11,323 : inverse-probability weights Estimator Outcome model : weighted mean

Treatment model: logit

Robust TFPS17 Coef. Std. Err. [95% Conf. Interval] z P>|z| ATE FDI2016 (1 vs 0) .1221664 .0068002 17.97 0.000 .1088383 .1354945 POmean FDI2016 -.0493354 0 -.0682823 .0096669 -7.06 0.000 -.0872292

C:\Users\Emilie\Documents\Emilie\Master\Nottingham\2_Appl_Microeconometrics\fdimatchin
\[
\sum_g deleteEXP/04_results/05_Tables/Table2_TFP.tex
\]

<u>dir</u>: <u>seeout</u>

166 167

tebalance summarize

Raw	Weighted
11,323	11,323.0
4,460	5,630.2
6,863	5,692.8
	11,323 4,460

	Standardized differences			ance ratio
	Raw	Weighted	Raw	Weighted
OWN Subsidiaries Independent State	018354 .0616272 .1016402	0075057 0006473 .0120719	.9769702 1.02321 1.100951	.990309 .9997498 1.011322
TECH Medium low-t~s Medium high-~s High-tech in~s	.1206088 2329159 5425507	.0037312 0001227 0102215	1.263082 .8156583 .2855456	1.007386 .9999017 .9817943
RD2015 1	.0356507	.0088614	1.085768	1.020464
logwages2015 TFP2015 emp2015 DEBTS2015	1300321 178877 .0470091 0529435	0016836 0199601 .0126666 0129979	.9769191 .9473458 5.49725 1.051101	1.003246 .9420373 1.243208 1.016256

Treatment-effects estimation Estimator : augmented IPW Outcome model : linear by ML Treatment model: logit

TFP2017	Coef.	Robust Std. Err.	Z	P> z	[95% Conf.	Interval]
ATE FDI2016 (1 vs 0)	.2918229	.0061911	47.14	0.000	.2796885	. 3039572
POmean FDI2016	3.539684	.0195128	181.40	0.000	3.501439	3.577928

176 177

outreg2 using \$results/05 Tables/Table2 TFP.tex, append dec(3) /// drop(i.OWN i.PORT logwages2015 TFP2015 emp2015 DEBTS2015 i.TECH RD2015) ///
nocon eqdrop(OME0 OME1 TME1)

C:\Users\Emilie\Documents\Emilie\Master\Nottingham\2_Appl_Microeconometrics\fdimatchin
> g_deleteEXP/04_results/05_Tables/Table2_TFP.tex

dir : seeout

178 179

tebalance summarize

		Raw	Weighted
Number of obs	= = =	11,323	11,323.0
Treated obs		4,460	5,630.2
Control obs		6,863	5,692.8

	Standardized	differences	Vari	ance ratio
	Raw	Weighted	Raw	Weighted
OWN Subsidiaries Independent State	018354 .0616272 .1016402	0075057 0006473 .0120719	.9769702 1.02321 1.100951	.990309 .9997498 1.011322
TECH Medium low-t~s Medium high-~s High-tech in~s	.1206088 2329159 5425507	.0037312 0001227 0102215	1.263082 .8156583 .2855456	1.007386 .9999017 .9817943
RD2015 1	.0356507	.0088614	1.085768	1.020464
logwages2015 TFP2015 emp2015 DEBTS2015	1300321 178877 .0470091 0529435	0016836 0199601 .0126666 0129979	.9769191 .9473458 5.49725 1.051101	1.003246 .9420373 1.243208 1.016256

```
180
181
182
 end of do-file
183
184 *-----*
        PART 3.2: Robustness Checks
186 *--
187
               do $scripts/03b_Robustness_Checks
188
189 /*************************
                                              ROBUSTNESS DO-FILE
  ******************
 >
                    Applied Microeconometrics
 > >
                                 Empirical Project
 >
>
                                            Do-File 03b
 >
>
               PURPOSE:
                           Robustness Checks.
               OUTLINE:
                            PART 1: Including Interactions
                                  PART 2: Excluding Outliers PART 3: Including PORT
 >
 >
                                  PART 4: ATT
 >
                                  PART 5: Analysis by TECH
 >
                                  PART 6: Appendix: Frequency of FDI by TECH
   *************************
  PART 1: Including Interactions
190
191
         cap drop osa1
192
        cap drop p1*
193
         teffects psmatch (TFPS17) ///
                                   (FDI2016 i.($F)##c.($C), logit), ///
                                   osample(osa1) generate(p1)
 Treatment-effects estimation
                                      Number of obs
                                                         11,323
 Estimator : propensity-score matching
                                      Matches: requested =
                                                             1
 Outcome model
            : matching
                                                 min =
                                                             1
 Treatment model: logit
                                                 max =
                                                             1
                       AI Robust
                                     P>|z| [95% Conf. Interval]
     TFPS17
                Coef. Std. Err.
                                  Z
     FDI2016
                                     0.000
   (1 vs 0)
              .1520598
                      .0157615
                                 9.65
                                              .1211679
                                                       .1829518
```

194 195 tebalance summarize

- 1	Raw	Matched
Number of obs = Treated obs = Control obs =	11,323 4,460 6,863	22,646 11,323 11,323

	Standardized Raw	differences Matched	Varia Raw	ance ratio Matched
OWN Subsidiaries Independent State	018354 .0616272 .1016402	0301379 0196548 .0280783	.9769702 1.02321 1.100951	.9615233 .9919582 1.026604
TECH Medium low-t~s Medium high-~s High-tech in~s	.1206088 2329159 5425507	016179 0260248 .0375841	1.263082 .8156583 .2855456	.9683774 .9785426 1.067129
RD2015 1	.0356507	.0341887	1.085768	1.080693
logwages2015 TFP2015 emp2015 DEBTS2015	1300321 178877 .0470091 0529435	.0235087 .0069241 .0220187 .0128246	.9769191 .9473458 5.49725 1.051101	1.036729 .980012 3.424582 .9874191
OWN# logwages2015 Subsidiaries Independent State	0501523 .0095374 .0578536	0264313 0051365 .0245939	.8787442 .9615021 1.020548	.957907 1.062062 1.011841
OWN# TFP2015 Subsidiaries Independent State	064156 0408866 .0558077	0361761 0118797 .0348481	.8276227 .8831729 1.040186	.9193172 1.000839 1.056287
OWN# emp2015 Subsidiaries Independent State	.0333955 .0268385 .0189749	.0270158 0058267 .00586	17.59077 3.91432 .5735634	16.69265 .9369739 .6417643
OWN# DEBTS2015 Subsidiaries Independent State	0444712 0148901 .0840856	0346152 0132875 .0313432	.8861299 .9654587 1.078225	.9220981 .9511524 1.038717
TECH# logwages2015 Medium low-t~s Medium high-~s High-tech in~s	.0985765 1947846 4878963	0130018 0207019 .0551011	1.221177 .7998561 .2637228	.95976 .9750318 1.200365
TECH# TFP2015 Medium low-t~s Medium high-~s High-tech in~s	.0592069 2626395 4825334	0168126 030936 .0340785	1.09476 .6142341 .2214855	.9223716 .9223356 1.141804
TECH# emp2015 Medium low-t~s Medium high-~s High-tech in~s	.0099385 .0215945 .023925	0232465 .0060306 .0399947	.1033668 .4923478 2.37245	.0229633 .1691328 1.036049
TECH# DEBTS2015 Medium low-t~s Medium high-~s High-tech in~s	.0875624 1987245 4597713	0089829 0020756 .0262805	1.216558 .7404538 .2304414	.9383764 1.01959 1.072064
RD2015# logwages2015				

DEBTS2015	.0328123	.0266122	1.167688	1.085422
RD2015# emp2015 1 RD2015#	.0639848	.0382383	31.03198	8.471608
RD2015# TFP2015 1	.0080044	.0475566	. 9791256	1.254495
1	.0055913	.0333829	.9912599	1.099438

```
196
                      outreg2 using \frac{5-\text{Tables}}{100} Tables/Table6_Robustness.tex, replace dec(3) /// drop(i.OWN i.TECH logwages2015 TFP2015 emp2015 DEBTS2015 RD2015) ///
197
                      nocon eqdrop (TME1)
```

C:\Users\Emilie\Documents\Emilie\Master\Nottingham\2_Appl_Microeconometrics\fdimatchin

> g_deleteEXP/04_results/05_Tables/Table6_Robustness.tex

dir: seeout

```
198
200 *
               PART 2: Excluding Outliers
202
203
      cap drop osa1
204
      cap drop p1*
205
      cap teffects psmatch (TFPS17) ///
                             (FDI2016 i.($F) c.($C), logit) if e
 > mp2015<4000000,
                 ///
                             osample(osa1) generate(p1)
206
```

Covariate balance summary

tebalance summarize

207

Raw	Matched
11,321	22,642
4,458	11,321
6,863	11,321
	11,321 4,458

	Standardized	differences	Vari	ance ratio
	Raw	Matched	Raw	Matched
OWN Subsidiaries Independent State	0186455 .0615581 .1019412	0214674 0041437 .0054729	.9766001 1.023189 1.101223	.9725788 .9983425 1.005197
TECH Medium low-t~s Medium high-~s High-tech in~s	.1208152 2326559 5424529	0380474 .0078187 .0047152	1.263528 .8159034 .2856663	.9282785 1.006379 1.00837
RD2015 1	.0358227	.0032695	1.086184	1.007708
logwages2015 TFP2015 emp2015 DEBTS2015	1301697 1790158 .0415358 0528498	.0098616 01456 .0517651 0106762	.9772428 .9477123 1.120857 1.051515	.9891245 .9622371 1.126963 .9991066

```
208
          outreg2 using $results/05_Tables/Table6_Robustness.tex, append dec(3) /// drop(i.OWN i.TECH logwages2015 TFP2015 emp2015 DEBTS2015 RD2015) ///
209
 >
          nocon eqdrop (TME1)
 C:\Users\Emilie\Documents\Emilie\Master\Nottingham\2_Appl_Microeconometrics\fdimatchin

> g_deleteXP/04_results/05_Tables/Table6_Robustness.tex
 dir : seeout
212 *
                        PART 3: Including PORT
214
215 global P "OWN TECH RD2015 PORT"
216
217
          cap drop osal
218
          cap drop p1*
219
           cap teffects psmatch (TFPS17) ///
                                                                        ///
                                          (FDI2016 i.($P) c.($C), logit),
 >
                                          osample(osa1) generate(p1)
220
221
           tebalance summarize
   Covariate balance summary
                                                 Darr Matabad
```

		Naw	Mattheu
Number of obs Treated obs Control obs	= =	11,323 4,460 6,863	22,646 11,323 11,323
CONCIOI ODS	_	0,003	11,323

	Standardized	differences	Vari	ance ratio
	Raw	Matched	Raw	Matched
OWN Subsidiaries Independent State	018354 .0616272 .1016402	0200286 .0032353 0052983	.9769702 1.02321 1.100951	.97423 1.001221 .9948827
TECH Medium low-t~s Medium high-~s High-tech in~s	.1206088	0586116	1.263082	.8913964
	2329159	002487	.8156583	.9979324
	5425507	.0329806	.2855456	1.058948
RD2015 1	.0356507	.0246992	1.085768	1.058193
PORT Ports within~m	.4092869	.0661913	1.253595	1.041592
logwages2015	1300321	.0176969	.9769191	1.037866
TFP2015	178877	0131356	.9473458	.9480748
emp2015	.0470091	.0419073	5.49725	3.052481
DEBTS2015	0529435	019821	1.051101	1.007143

```
222
223
                                          outreg2 using $results/05 Tables/Table6 Robustness.tex, append dec(3) ///
                                          drop(i.OWN i.TECH i.PORT Togwages2015 TFP2015 emp2015 DEBTS2015 RD2015) ///
                                          nocon eqdrop (TME1)
      \underline{\texttt{C:} Users} \\ \underline{\texttt{Emilie}} \\ \underline{\texttt{Documents}} \\ \underline{\texttt{Emilie}} \\ \underline{\texttt{Master}} \\ \underline{\texttt{Nottingham}} \\ \underline{\texttt{2\_Appl\_Microeconometrics}} \\ \underline{\texttt{fdimatchin}} \\ \underline{\texttt{Master}} \\ \underline{\texttt{Nottingham}} \\ \underline{\texttt{2\_Appl\_Microeconometrics}} \\ \underline{\texttt{fdimatchin}} \\ \underline{\texttt{Nottingham}} \\ \underline{\texttt{2\_Appl\_Microeconometrics}} \\ \underline{\texttt{fdimatchin}} \\ \underline{\texttt{Nottingham}} \\ \underline{\texttt{Not
      > g_deleteEXP/04_results/05_Tables/Table6_Robustness.tex
      dir : seeout
224
226 *
                                                                                                  PART 4: ATT
228
229
                                          cap drop osa1
230
                                          cap drop p1*
231
                                          cap teffects psmatch (TFPS17) ///
                                                                                                                                                                                          (FDI2016 i.($F) c.($C), logit), atet
      >
                            111
      >
                                                                                                                                                                                         osample(osal) generate(p1)
232
233
                                          tebalance summarize
              Covariate balance summary
                                                                                                                                                                                                                             Matched
                                                                                                                                                                                             Raw
                                                                                                                                                                                  11,323
                                                                                                    Number of obs =
                                                                                                                                                                                                                                     8,920
                                                                                                                                                                                      4,460
                                                                                                                                                                                                                                     4,460
                                                                                                    Treated obs =
                                                                                                    Control obs
                                                                                                                                                                                      6,863
                                                                                                                                                                                                                                     4,460
                                                                           Standardized differences
                                                                                                                                                                                                    Variance ratio
                                                                                                                                   Matched
                                                                                                                                                                                                                          Matched
                                                        OWN
                     Subsidiaries
                                                                                     -.018354
                                                                                                                                    .010732
                                                                                                                                                                                  .9769702
                                                                                                                                                                                                                          1.014212
                                                                                                                                .0099883
                                                                                       .0616272
                                                                                                                                                                                     1.02321
                                                                                                                                                                                                                            1.00318
                        Independent
                                              State
                                                                                       .1016402
                                                                                                                             -.0294066
                                                                                                                                                                                  1.100951
                                                                                                                                                                                                                           .9770547
                                                     TECH
             Medium low-t~s
                                                                                    .1206088
                                                                                                                             -.0553476
                                                                                                                                                                                  1.263082
                                                                                                                                                                                                                           .9143962
                                                                                                                                .0145945
                                                                                                                                                                                                                          1.017453
             Medium high-~s
                                                                                                                                                                                  .8156583
                                                                                  -.2329159
             High-tech in~s
                                                                                  -.5425507
                                                                                                                                .0039358
                                                                                                                                                                                  .2855456
                                                                                                                                                                                                                          1.015497
                                              RD2015
                                                                                      .0356507
                                                                                                                               .0196597
                                                                                                                                                                                  1.085768
                                                                                                                                                                                                                          1.045608
                                                           1
                        logwages2015
                                                                                  -.1300321
                                                                                                                                .0080137
                                                                                                                                                                                   .9769191
                                                                                                                                                                                                                           .9922576
                                                                                                                                                                                                                          1.002034
                                                                                                                             -.0156447
                                          TFP2015
                                                                                     -.178877
                                                                                                                                                                                   .9473458
                                          emp2015
                                                                                      .0470091
                                                                                                                               .0210317
                                                                                                                                                                                      5.49725
                                                                                                                                                                                                                          2.356114
                                   DEBTS2015
                                                                                  -.0529435
                                                                                                                             -.0152205
                                                                                                                                                                                  1.051101
                                                                                                                                                                                                                          1.029529
234
```

235 outreg2 using \$results/05 Tables/Table6 Robustness.tex, append dec(3) /// drop(i.OWN i.TECH logwages2015 TFP2015 emp2015 DEBTS2015 RD2015) /// nocon eqdrop (TME1) C:\Users\Emilie\Documents\Emilie\Master\Nottingham\2_Appl_Microeconometrics\fdimatchin > g_deleteEXP/04_results/05_Tables/Table6_Robustness.tex

dir : seeout

tebalance summarize

	Raw	Matched
Number of obs =	4,194	8,388
Treated obs =	2,325	4,194
Control obs =	1,869	4,194

	Standardized	differences	Varia	ance ratio
	Raw	Matched	Raw	Matched
OWN Subsidiaries Independent State	.0299781 .0057604 0250578	.0150625 0071951 0015653	1.036398 1.001373 .9786308	1.018467 .9984236 .9986098
RD2015 1	.0165825	0014964	1.041031	.9963872
logwages2015	0219915	.0051526	1.012966	1.058301
TFP2015	.0072539	.0099917	.9676072	1.008227
emp2015	.0253438	0031803	4.356693	1.864609
DEBTS2015	0474876	.0088166	1.031416	.9736994

	Raw	Matched
Number of obs =	1,685	3,370
Treated obs =	781	1,685
Control obs =	904	1,685

	Standardized	differences	Varia	nce ratio
	Raw	Matched	Raw	Matched
OWN Subsidiaries Independent State	0789459 .0356487 .094977	0222737 .0449057 0685426	.9057037 1.015483 1.082362	.9730349 1.019382 .9424559
RD2015 1	.0196745	.010822	1.04555	1.025096
logwages2015	0321255	.0186688	.9187912	.9609082
TFP2015	1550946	0443829	.9364425	.971122
emp2015	.0032877	.0284799	.0754936	.1191435
DEBTS2015	0426368	0683897	.9498591	.9548114

```
262
263
                                                                          outreg2 using $results/05 Tables/Table7 Robustness.tex, append dec(3) ///
                                                                           drop(i.OWN i.TECH i.PORT Togwages2015 TFP2015 emp2015 DEBTS2015 RD2015) ///
           >
                                                                          nocon eqdrop (TME1)
           \underline{\texttt{C:} Users} \\ \underline{\texttt{Emilie}} \\ \underline{\texttt{Documents}} \\ \underline{\texttt{Emilie}} \\ \underline{\texttt{Master}} \\ \underline{\texttt{Nottingham}} \\ \underline{\texttt{2\_Appl\_Microeconometrics}} \\ \underline{\texttt{fdimatchin}} \\ \underline{\texttt{Master}} \\ \underline{\texttt{Nottingham}} \\ \underline{\texttt{2\_Appl\_Microeconometrics}} \\ \underline{\texttt{fdimatchin}} \\ \underline{\texttt{Master}} \\ \underline{\texttt{Nottingham}} \\ \underline{\texttt{1}} \\ \underline{\texttt{Master}} \\ \underline{\texttt{1}} \\ \underline{\texttt{Master}} \\ \underline{\texttt{1}} \\ \underline{\texttt
            > g_deleteEXP/04_results/05_Tables/Table7_Robustness.tex
           dir : seeout
264
265 *========*
266 * (3) NN1 TECH=3
267 *========*
268
269
                                                                      cap drop osa1
270
                                                                     cap drop p1
271
                                                                         teffects psmatch (TFPS17) ///
                                                                                                                                                                                                                                                                                             (FDI2016 i.($F) c.($C), logit) if TECH==3,
            >
                                                  ///
            >
                                                                                                                                                                                                                                                                                                 osample(osal) generate(p1)
           note: 3.TECH omitted because of collinearity
           Treatment-effects estimation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3,539
                                                                                                                                                                                                                                                                                                                     Number of obs
                                                                                                      : propensity-score matching
           Estimator
                                                                                                                                                                                                                                                                                                                    Matches: requested =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1
            Outcome model
                                                                                                      : matching
                                                                                                                                                                                                                                                                                                                                                                                                                 min =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1
           Treatment model: logit
                                                                                                                                                                                                                                                                                                                                                                                                                   max =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1
                                                                                                                                                                                            AI Robust
                                                 TFPS17
                                                                                                                                         Coef.
                                                                                                                                                                                            Std. Err.
                                                                                                                                                                                                                                                                                                                           P>|z|
                                                                                                                                                                                                                                                                                                                                                                                       [95% Conf. Interval]
                                                                                                                                                                                                                                                                                           Z
           ATE
                                           FDI2016
                                                                                                                       .1721028
                                                                                                                                                                                                   .018644
                                                                                                                                                                                                                                                                              9.23
                                                                                                                                                                                                                                                                                                                           0.000
                                                                                                                                                                                                                                                                                                                                                                                           .1355612
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       .2086444
                               (1 vs 0)
272
                                                                          tebalance summarize
```

Covariate balance summary

	I.a.w	Hacciica
Number of obs =	3,539	7,078
Treated obs =	1,107	3,539
Control obs =	2,432	3,539

Raw

Matched

	Standardized	differences	Varia	nce ratio
	Raw	Matched	Raw	Matched
OWN Subsidiaries Independent State	1276748 .0120872 .1432813	.0379035 0217603 0069098	.8473309 1.004115 1.136897	1.04502 .9928833 .9933102
RD2015 1	.0824806	.0169456	1.193028	1.038603
logwages2015	.0255104	0187561	.9997901	1.053611
TFP2015	2410387	.0237954	.9260925	.983687
emp2015	.074703	.0528976	.6929332	.4838172
DEBTS2015	0640427	0229667	1.051649	1.008139

```
274
275
           outreg2 using $results/05 Tables/Table7 Robustness.tex, append dec(3) ///
            drop(i.OWN i.TECH i.PORT Togwages2015 TFP2015 emp2015 DEBTS2015 RD2015) ///
 >
           nocon eqdrop (TME1)
 C:\Users\Emilie\Documents\Emilie\Master\Nottingham\2_Appl_Microeconometrics\fdimatchin
 > g_deleteEXP/04_results/05_Tables/Table7_Robustness.tex
 dir : seeout
276
277 *=======*
278 * (4) NN1 TECH=4
279 *========*
280
281
           cap drop osa1
282
           cap drop p1
283
           teffects psmatch (TFPS17) ///
                                             (FDI2016 i.($F) c.($C), logit) if TECH==4,
 >
        ///
 >
                                              osample(osal) generate(p1)
 note: 4.TECH omitted because of collinearity
                                                                           1,905
 Treatment-effects estimation
                                                 Number of obs
                : propensity-score matching
 Estimator
                                                 Matches: requested =
                                                                               1
 Outcome model
                 : matching
                                                                min =
                                                                               1
 Treatment model: logit
                                                                               1
                                                                max =
                              AI Robust
       TEPS17
                      Coef.
                                                            [95% Conf. Interval]
                              Std. Err.
                                             7.
                                                  P > |z|
 ATE
      FDI2016
                   .1802721
                              .0541962
                                                  0.001
                                                            .0740494
     (1 vs 0)
                                           3.33
                                                                        .2864947
284
           tebalance summarize
   Covariate balance summary
                                                     Raw
                                                              Matched
                            Number of obs =
                                                   1,905
                                                                3,810
                                                                1,905
                            Treated obs
                                                     247
                            Control obs
                                                   1,658
                                                                1,905
                     Standardized differences
                                                       Variance ratio
                            Raw
                                     Matched
                                                       Raw
                                                              Matched
                OWN
      Subsidiaries
                       -.0779614
                                   .0826873
                                                  .8814802
                                                             1.126006
                        .0522384
                                                  1.044866
                                                             .9587982
      Independent
                                   -.047133
```

-.0427479

.0224257

.1881349

.0580305

.152738

.0230111

1.241433

1.201598

1.050215

1.027535

9.989972

1.1001

.9400229

1.053092

1.12134

1.144253

1.226081

1.019314

.1691889

.0789006

-.0580162

-.2259366

-.1862477

.2584443

State

RD2015

TFP2015

emp2015

DEBTS2015

logwages2015

```
285
286
         outreg2 using $results/05 Tables/Table7 Robustness.tex, append dec(3) ///
         drop(i.OWN i.TECH i.PORT Togwages2015 TFP2015 emp2015 DEBTS2015 RD2015) ///
 >
         nocon eqdrop (TME1)
 C:\Users\Emilie\Documents\Emilie\Master\Nottingham\2_Appl_Microeconometrics\fdimatchin
 > g_deleteEXP/04_results/05_Tables/Table7_Robustness.tex
 dir : seeout
287
288
         // Calculating ATE weighted by each sample size:
289
         display ///
         (0.\bar{1}60\bar{0}066*4194+0.0864057*1685+0.1721028*3539+0.1802721*1905)/11232
 .15750992
290
         /*= 0.15750992*/
291
292
PART 6: Appendix: Frequency of FDI by TECH
296
         tab2 TECH FDI2016, row
297
```

-> tabulation of TECH by FDI2016

Key
frequency row percentage

	FDI/TREATME	16	
Technology intensity	0	1	Total
Low-tech industries	1,869	2,325	4,194
	44 .56	55.44	100.00
Medium low-tech indus	904	781	1,685
	53.65	46.35	100.00
Medium high-tech indu	2,432	1,107	3,539
	68.72	31.28	100.00
High-tech industries	1,658	247	1,905
	87.03	12.97	100.00
Total	6,863	4,460	11,323
	60.61	39.39	100.00

Table output written to: C:\Users\Emilie\Documents\Emilie\Master\Nottingham\2_Appl_Mic > roeconometrics\fdimatching deleteEXP/04 results/05 Tables/Table7a Robustness.tex

```
& \multicolumn{9}{c}{FDI/TREATMENT dummy in 2016} \\
Technology intensity & \multicolumn{3}{c}{0} & \multicolumn{3}{c}{1} & \multicolumn{3}
> {c}{Total} \\
&No.&Col \%&Cum \%&No.&Col \%&Cum \% \\
hline
Low-tech industries&1869&44.6&27.2&2325&55.4&52.1&4194&100.0&37.0 \\
Medium low-tech industries&904&53.6&40.4&781&46.4&69.6&1685&100.0&51.9 \\
Medium high-tech industries&2432&68.7&75.8&1107&31.3&94.5&3539&100.0&83.2 \\
High-tech industries&1658&87.0&100.0&247&13.0&100.0&1905&100.0&100.0 \\
Total&6863&60.6&&4460&39.4&&11323&100.0& \\
```

```
300
 end of do-file
301
302 *-----*
303 * PART 3.3: Analysis by Type of FDI
305
306
              do $scripts/03c by FDITYPE
307 /***************************
                                          BY FDI TYPE DO-FILE
  ******************
 >
                   Applied Microeconometrics
 >
 >
                               Empirical Project
 >
                                         Do-File 03c
 >
              PURPOSE: Estimation of the effect of different types of FDI o
 > n TFP.
              OUTLINE:
                        PART 1: Multinnominal Logit Models
 >
                                      1.1: AIPW
 >
                                      1.2: IPW
 >
                               PART 2: Seperate Models
                                      2.1 AIPW
  ************************
                   PART 1: Mulitnominal Logit Models
308
309 *--
310 *
       PART 1.1: AIPW
311 *-----*
312
313
        teffects aipw (TFPS17 i.($F) c.($C) )(FDITYPE2016 i.($F) c.($C) )
 Treatment-effects estimation
                                   Number of obs =
                                                    11,323
 Estimator : augmented IPW Outcome model : linear by ML
 Treatment model: (multinomial) logit
                      Robust
              Coef. Std. Err.
                              z P>|z| [95% Conf. Interval]
     TFPS17
 ATE
 FDITYPE2016
 (Exports-..
       V.S
             .1435197 .0058746 24.43 0.000 .1320058 .1550337
    No FDI)
 (Technolo..
       VS
    No FDI)
             .1394529 .0045442 30.69
                                   0.000
                                          .1305465 .1483593
 ( Domesti..
    No FDI)
             .1432132 .0040598 35.28 0.000 .1352561 .1511702
 POmean
 FDITYPE2016
   No FDI
            -.0565761 .0094884
                            -5.96 0.000 -.0751731 -.0379792
```

314 315 tebalance summarize

ry	t	Observ	vations
Treatment		Raw	Weighted
No FDI	=	6,863	2,845.1
Exports-ori~I		940	2,863.3
Technology ~I		1,555	2,800.4
Domestic ma~I		1,965	2,814.2
Total		11,323	11,323.0

	Standardized	differences	Vari	ance ratio
	Raw	Weighted	Raw	Weighted
Exports-orien~I OWN Subsidiaries Independent State	.029319	0159056	1.037004	.9793819
	.0711904	0519146	1.026993	.977249
	.0619914	.0177173	1.064555	1.016531
TECH Medium low-t~s Medium high-~s High-tech in~s	.0789971	0130459	1.173675	.974177
	2663044	0193414	.7842619	.9838819
	5946766	.0430247	.222571	1.076075
RD2015 1	1977282	.0562092	.5536423	1.130642
logwages2015	1833482	0587338	.9447749	.9103155
TFP2015	2141912	.0133092	.9704629	1.001579
emp2015	.0249499	.0555541	.3077821	.5456246
DEBTS2015	0665162	.0400558	1.024821	.9617875
Technology in~I OWN Subsidiaries Independent State	0227822	.0149411	.9717411	1.019102
	.0312067	0110143	1.013148	.9956038
	.1341894	.0156322	1.12989	1.01462
TECH Medium low-t~s Medium high-~s High-tech in~s	.1501373	.0016789	1.327181	1.003328
	2403611	0011011	.8089302	.9991046
	5607553	0181223	.2633246	.9676973
RD2015 1	0894951	0019277	.7908312	.9955541
logwages2015	1365085	0151862	.9818968	1.023026
TFP2015	2091214	0276276	.9481316	.9447849
emp2015	.0498435	.0196187	10.65892	1.505357
DEBTS2015	0186904	0394986	1.105096	1.080391
Domestic mark~I				
OWN Subsidiaries Independent State	0381328 .0810348 .0945175	0094519 .0179192 .0001241	.9519123 1.02923 1.094776	.9877872 1.006665 1.000121
TECH Medium low-t~s Medium high-~s High-tech in~s	.1164522	.001678	1.254467	1.003325
	211331	.0001045	.8359902	1.000089
	5049792	011019	.3324869	.9803731
RD2015 1	.2082867	.0056421	1.503124	1.013047
logwages2015	0997247	.0102345	.9871457	1.013854
TFP2015	1378965	0090628	.9336303	.938248

emp2015

DEBTS2015

.0558724

-.0741218

.0075184

-.0206654

3.896824

1.020553

.902008

.979131

```
316
317
             teffects overlap, ptlevel(1) ///
  saving($results\04_bytype\bytype_overlap_11.gph, replace)
(file C:\Users\Emilie\Documents\Emilie\Master\Nottingham\2_Appl_Microeconometrics\fdim
  > atching deleteEXP/04 results\04 bytype\bytype overlap 11.gph saved)
318
319
             teffects overlap, ptlevel(2) ///
 saving($results\04_bytype\bytype_overlap_12.gph, replace)

(file C:\Users\Emilie\Documents\Emilie\Master\Nottingham\2_Appl_Microeconometrics\fdim
> atching_deleteEXP/04_results\04_bytype\bytype_overlap_12.gph_saved)
320
321
             teffects overlap, ptlevel(3) ///
                     saving($results\04_bytype\bytype_overlap_13.gph, replace)
  (file C:\Users\Emilie\Documents\Emilie\Master\Nottingham\2-Appl Microeconometrics\fdim
  > atching deleteEXP/04 results\04 bytype\bytype overlap 13.gph saved)
322
323
             outreg2 using $results\04 bytype\bytype table 1.tex, replace dec(3) /// drop(OWN TECH RD2\overline{0}15 logwages20\overline{1}5 TFP2\overline{0}15 emp2015 DEBTS2015) ///
                      nocon eqdrop(OME0 OME1 OME2 OME3 TME1 TME2 TME3) lab()
  C:\Users\Emilie\Documents\Emilie\Master\Nottingham\2_Appl_Microeconometrics\fdimatchin
  > g deleteEXP/04 results\04 bytype\bytype table 1.tex
  dir : seeout
324
325
326 *-----*
327 *
            PART 1.2: IPW
328 *---
329
330
            teffects ipw (TFPS17 ) (FDITYPE2016 i.($F) c.($C))
  Iteration 0: EE criterion = 5.541e-20
  Iteration 1: EE criterion = 4.471e-33
                                                        Number of obs = 11,323
  Treatment-effects estimation
  Estimator
                  : inverse-probability weights
  Outcome model : weighted mean
Treatment model: (multinomial) logit
                                   Robust
         TFPS17
                         Coef.
                                  Std. Err.
                                                         P>|z|
                                                                    [95% Conf. Interval]
  ATE
   FDITYPE2016
  (Exports-..
      No FDI)
                     .1570882
                                  .0316177
                                                 4.97
                                                         0.000
                                                                     .0951187
                                                                                  .2190577
  (Technolo..
           VS
      No FDI)
                                  .0177869
                      .1123436
                                                 6.32
                                                         0.000
                                                                     .077482
                                                                                  .1472052
  ( Domesti..
            V.S
      No FDI)
                     .1342705
                                  .0106457
                                                12.61
                                                         0.000
                                                                     .1134052
                                                                                  .1551357
  POmean
   FDITYPE2016
       No FDT
                    -.0684059
                                  .0096686
                                               -7.08
                                                         0.000 -.0873559
                                                                                -.0494558
```

331 332

tebalance summarize

Treatment	Observ Raw	vations Weighted
No FDI = Exports-ori~I = Technology ~I = Domestic ma~I = Total =	6,863 940 1,555 1,965 11,323	2,845.1 2,863.3 2,800.4 2,814.2 11,323.0

	Standardized differences			Variance ratio Raw Weighted		
	Raw	Weighted	Kaw	Weighted 		
Exports-orien~I OWN Subsidiaries Independent State	.029319	0159056	1.037004	.9793819		
	.0711904	0519146	1.026993	.977249		
	.0619914	.0177173	1.064555	1.016531		
TECH Medium low-t~s Medium high-~s High-tech in~s	.0789971	0130459	1.173675	.974177		
	2663044	0193414	.7842619	.9838819		
	5946766	.0430247	.222571	1.076075		
RD2015 1	1977282	.0562092	.5536423	1.130642		
logwages2015	1833482	0587338	.9447749	.9103155		
TFP2015	2141912	.0133092	.9704629	1.001579		
emp2015	.0249499	.0555541	.3077821	.5456246		
DEBTS2015	0665162	.0400558	1.024821	.9617875		
Technology in~I OWN Subsidiaries Independent State	0227822	.0149411	.9717411	1.019102		
	.0312067	0110143	1.013148	.9956038		
	.1341894	.0156322	1.12989	1.01462		
TECH Medium low-t~s Medium high-~s High-tech in~s	.1501373	.0016789	1.327181	1.003328		
	2403611	0011011	.8089302	.9991046		
	5607553	0181223	.2633246	.9676973		
RD2015 1	0894951	0019277	.7908312	.9955541		
logwages2015	1365085	0151862	.9818968	1.023026		
TFP2015	2091214	0276276	.9481316	.9447849		
emp2015	.0498435	.0196187	10.65892	1.505357		
DEBTS2015	0186904	0394986	1.105096	1.080391		
Domestic mark~I						
OWN Subsidiaries Independent State	0381328 .0810348 .0945175	0094519 .0179192 .0001241	.9519123 1.02923 1.094776	.9877872 1.006665 1.000121		
TECH Medium low-t~s Medium high-~s High-tech in~s	.1164522	.001678	1.254467	1.003325		
	211331	.0001045	.8359902	1.000089		
	5049792	011019	.3324869	.9803731		
RD2015 1	.2082867	.0056421	1.503124	1.013047		
logwages2015	0997247	.0102345	.9871457	1.013854		
TFP2015	1378965	0090628	.9336303	.938248		

emp2015

DEBTS2015

-.0741218 -.0206654

.0558724

.0075184

.902008

7,803.0

3,925.4

3,877.6

7,803

6,863

940

3.896824

3.896824 ... 1.020553 .979131 333 outreg2 using \$results\04_bytype\bytype_table_1.tex, append dec(3) /// drop(OWN TECH RD2015 logwages2015 TFP2015 emp2015 DEBTS2015) /// nocon eqdrop(OME 0 OME1 OME2 OME3 TME1 TME2 TME3) 334 C:\Users\Emilie\Documents\Emilie\Master\Nottingham\2 Appl Microeconometrics\fdimatchin > g deleteEXP/04 results\04 bytype\bytype table 1.tex <u>dir</u>: <u>seeout</u> 335 336 337 338 340 * PART 2: Seperate Logit Models 342 343 *--344 * PART 2.1: AIPW Logit 345 *-----* 346 347 *========* 348 * Type 1 (Exports-oriented FDI) 349 *======================== 350 // Type 0: No FDI 351 teffects aipw (TFPS17 i.(\$F) c.(\$C))(FDI2016 c.(\$C) i.(\$F)) /// 352 if FDITYPE2016==1 | FDITYPE2016==0 Treatment-effects estimation Number of obs = 7,803 Estimator : augmented IPW Outcome model : linear by ML Treatment model: logit Robust Std. Err. TFPS17 [95% Conf. Interval] Coef. z P>|z| ATE FDI2016 (1 vs 0) .1404936 .0065984 21.29 0.000 .1275609 .1534263 POmean FDI2016 0 -.0124852 .0114371 -1.09 0.275 -.0349014.009931 354 tebalance summarize Covariate balance summary Weighted Raw

Number of obs =

Treated obs =

Control obs

```
355
            outreg2 using $results\04 bytype\bytype table 1.tex, append dec(3) /// drop(OWN TECH RD2\overline{0}15 logwages20\overline{1}5 TFP\overline{2}015 emp2015 DEBTS2015) ///
356
 >
                    nocon eqdrop (OME0 OME1 TME1)
 C:\Users\Emilie\Documents\Emilie\Master\Nottingham\2 Appl Microeconometrics\fdimatchin
 > g_deleteEXP/04_results\04_bytype\bytype_table 1.tex
 dir : seeout
357
358
359 *===========
360 * Type 2(Technology intensive FDI)
361 *========*
362
           teffects aipw (TFPS17 i.($F) c.($C) )(FDI2016 c.($C) i.($F) ) ///
363
                    if FDITYPE2016==2 | FDITYPE2016==0
 Treatment-effects estimation
                                                  Number of obs
                                                                            8,418
 Estimator
                 : augmented IPW
 Outcome model
                 : linear by ML
 Treatment model: logit
                               Robust
       TFPS17
                      Coef.
                              Std. Err.
                                             Z
                                                  P>|z|
                                                            [95% Conf. Interval]
 ATE
       FDI2016
     (1 vs 0)
                   .1393538
                              .0048889
                                          28.50
                                                  0.000
                                                                         .1489358
                                                             .1297718
 POmean
      FDI2016
         0
                  -.0249796
                                  .011
                                          -2.27
                                                  0.023
                                                            -.0465391
                                                                          -.00342
```

tebalance summarize

Covariate balance summary

Naw	Weighted
8,418	8,418.0
1,555	4,169.7
6,863	4,248.3
	1,555

	Standardized	differences	Vari	ance ratio
	Raw	Weighted	Raw	Weighted
logwages2015	1365085	0165004	.9818968	1.025628
TFP2015	2091214	0607962	.9481316	.9409475
emp2015	.0498435	.037521	10.65892	1.875564
DEBTS2015	0186904	0532078	1.105096	1.091496
OWN Subsidiaries Independent State	0227822 .0312067 .1341894	.0006329 017564 .0387922	.9717411 1.013148 1.12989	1.000803 .992243 1.037702
TECH Medium low-t~s Medium high-~s High-tech in~s	.1501373	.0029158	1.327181	1.006
	2403611	0057285	.8089302	.9959361
	5607553	0217103	.2633246	.9682538
RD2015 1	0894951	.0036693	.7908312	1.009067

```
366
            outreg2 using $results\04 bytype\bytype table 1.tex, append dec(3) /// drop(OWN TECH RD2\overline{0}15 logwages20\overline{1}5 TFP\overline{2}015 emp2015 DEBTS2015) ///
367
                     nocon eqdrop (OME0 OME1 TME1)
 C:\Users\Emilie\Documents\Emilie\Master\Nottingham\2_Appl_Microeconometrics\fdimatchin
 > g_deleteEXP/04_results\04_bytype\bytype_table_1.tex
 dir : seeout
368
369
370 *======*
371 * Type 3(Domestic market seeking FDI)
372 *========*
373
374
            teffects aipw (TFPS17 i.($F) c.($C) )(FDI2016 c.($C) i.($F) ) ///
                     if FDITYPE2016==3 | FDITYPE2016==0
 >
```

Iteration 0: EE criterion = 7.443e-19 Iteration 1: EE criterion = 2.227e-33

Number of obs = 8,828 Treatment-effects estimation

Estimator : augmented IPW Outcome model : linear by ML Treatment model: logit

TFPS17	Coef.	Robust Std. Err.	Z	P> z	[95% Conf.	Interval]
ATE FDI2016 (1 vs 0)	.1428096	.0042927	33.27	0.000	.1343961	.1512231
POmean FDI2016	0173178	.0107047	-1.62	0.106	0382987	.0036632

tebalance summarize

Raw	Weighted
8,828	8,828.0
1,965	4,386.6
6,863	4,441.4
	8,828 1,965

	Standardized	differences	Varia	ance ratio
	Raw	Weighted	Raw	Weighted
logwages2015	0997247	.0143064	.9871457	1.018875
TFP2015	1378965	0343519	.9336303	.9395222
emp2015	.0558724	.0171481	3.896824	.9394148
DEBTS2015	0741218	0281171	1.020553	.9867092
OWN Subsidiaries Independent State	0381328 .0810348 .0945175	0225617 .0149455 .0189725	.9519123 1.02923 1.094776	.9708481 1.005709 1.018936
TECH Medium low-t~s Medium high-~s High-tech in~s	.1164522	.0025253	1.254467	1.005217
	211331	0033973	.8359902	.9975718
	5049792	0136332	.3324869	.9796925
RD2015 1	.2082867	.0082827	1.503124	1.017821

```
377
             outreg2 using $results\04 bytype\bytype_table_1.tex, append dec(3) /// drop(OWN TECH RD2\overline{0}15 logwages20\overline{1}5 TFP\overline{2}015 emp2015 DEBTS2015) ///
378
                     nocon eqdrop (OME0 OME1 TME1)
 C:\Users\Emilie\Documents\Emilie\Master\Nottingham\2_Appl_Microeconometrics\fdimatchin
 > g_deleteEXP/04_results\04_bytype\bytype_table_1.tex
 <u>dir</u>: <u>seeout</u>
379
380
381
382
383
384
 end of do-file
385
386
387
388
            log close
        > cs\fdimatching_deleteEXP/log_fdi_matching.smcl
    log type:
                smc\overline{1}
                10 May 2020, 20:57:05
   closed on:
```