Statistics/Data analysis

```
      name:  <unnamed>
       log:  E:\workdata\708030\JOP_article\log_manuscript.smcl
  log type:  smcl
 opened on:  21 May 2024, 09:02:26

1 .
2 . ********************************************************************************
3 . ********************************************************************************
4 . *Data
5 . use "data/aggregate_unemployment.dta", clear
  (DREAM29_CORONA                  )

6 . tsset year_week, weekly

  Time variable: year_week, 2018w1 to 2020w37
          Delta: 1 week

7 .
8 . *Figure 1: Number of Unemployed
9 . tsline unemp_all, xline(3130 3141, lcolor(black*0.8) lp(dash) lwidth(vthin)) ylabel(
  > 4400(200)5400, labsize(small) nogrid) xlabel(3016 3040 3068 3097 3126 3155, labsize(
  > small) nogrid) title("") graphregion(color(white)) ytitle("Number of unemployed", si
  > ze(medium)) xtitle("Year, week", size(medium)) recast(line) recast(line) lwidth(thin
  > ) lcolor(black) ysc(titlegap(+3)) || (pcarrowi 5200 3125 5200 3130 (9) "Lockdown" 54
  > 00 3145 5400 3141 (3) "Reopening", color(black) mlabcolor(black)), legend(off)

10. qui graph export "output\fig_1_unemployment.png", replace

11.
12. *Figure 2: Adjusted Unemployment, Selected Industries
13. tsline unemp_adj_industry_4 unemp_adj_industry_11 unemp_adj_industry_13 unemp_adj_in
  > dustry_15 if year_week >3086, xline(3130 3141, lcolor(black) lp(dash) lwidth(vthin))
  >  ylabel(-1(2)9, labsize(small) nogrid) xlabel(3086 3105 3129 3155, labsize(small) no
  > grid) title("{bf: (a) Unexposed industries}", size(medium) color(black)) graphregion
  > (color(white)) ytitle("Adjusted unemployment", size(medium)) xtitle("Year, week", si
  > ze(medium)) recast(line) lwidth(thin) lpattern(solid dot dash_dot shortdash_dot long
  > dash) lcolor(black black black black) legend(order(1 "Energi supply" 2 "Finance and
  > insurance" 3 "Knowledge service" 4 "Defense and police") size(small) symxsize(7)) ys
  > c(titlegap(+3)) || (pcarrowi 5 3125 5 3130 (9) "Lockdown" 7 3145 7 3141 (3) "Reopeni
  > ng", color(black) mlabcolor(black)), saving(output\unemp_industry_low.gph, replace)
  file output\unemp_industry_low.gph saved

14.
15. tsline unemp_adj_industry_8 unemp_adj_industry_9 unemp_adj_industry_14 unemp_adj_ind
  > ustry_18 if year_week >3086, xline(3130 3141, lcolor(black) lp(dash) lwidth(vthin))
  > ylabel(-1(2)9, labsize(small) nogrid) xlabel(3086 3105 3129 3155, labsize(small) nog
  > rid) title("{bf: (b) Exposed industries}", size(medium) color(black)) graphregion(co
  > lor(white)) ytitle("", size(medium)) xtitle("Year, week", size(medium)) recast(line)
  >  lwidth(thin) lpattern(solid dot dash_dot shortdash_dot longdash) lcolor(black black
  >  black black) legend(order(1 "Transport" 2 "Hotels and restaurants"  3 "Traveling" 4
  >  "Culture and leisure") size(small) symxsize(7)) || (pcarrowi 5 3125 5 3130 (9) "Loc
  > kdown" 7 3145 7 3141 (3) "Reopening", color(black) mlabcolor(black)), saving(output\
  > unemp_industry_high.gph, replace)
  file output\unemp_industry_high.gph saved

16.
17. graph combine output\unemp_industry_low.gph output\unemp_industry_high.gph, graphreg
  > ion(color(white))
```

```
18. graph display, ysize(4) xsize(6)

19. qui graph export "output\fig_2_adjusted_unemployment_industry.png", replace

20.
21. ********************************************************************************
22. ********************************************************************************
23. *Data
24. use "data/aggregate_main.dta", clear
  (DREAM29_Z                          )

25. tsset municip_id year_week, weekly

  Panel variable: municip_id (strongly balanced)
   Time variable: year_week, 2019w1 to 2020w36
           Delta: 1 week

26.
27. *Figure 3: Adjusted Unemployment, Variation in Shock Exposure
28. tsline unemp_adj_low10 if industry_share_low ==1, lcolor(black) lpattern(solid) || /
  > //
  > tsline unemp_adj_top10 if industry_share_top ==1, lcolor(black) lpattern(dash_dot) /
  > //
  > ylabel(-2(1)5, labsize(small) nogrid) xlabel(3068 3097 3126 3155, labsize(small) nog
  > rid) ///
  > title("", size(medium) color(black)) graphregion(color(white)) ytitle("Adjusted unem
  > ployment", size(medium)) ///
  > xtitle("Year, week", size(medium)) legend(size(small) symxsize(7)) ysc(titlegap(+2))
  >  ///
  > xline(3130 3141, lcolor(black) lp(dash) lwidth(vthin)) legend(order(1 "Low share" 2
  > "High share") size(medium) symxsize(7)) || ///
  > (pcarrowi 2 3125 2 3130 (9) "Lockdown" 4 3145 4 3141 (3) "Reopening", color(black) m
  > labcolor(black))

29. graph display, ysize(4) xsize(6)

30. qui graph export "output/fig_3_adjusted_unemployment_extreme.png", replace

31.
32. *Figure 4: Adjusted Unemployment and Caseworker Meetings
33. binscatter meetings unemp_adj if clients >10, nquantiles(50) ytitle("Average casewor
  > ker meetings", size(medium)) xtitle("Adjusted unemployment", size(medium)) xlabel(-1
  > (1)4, labsize(small) nogrid) ylabel(0(0.05)0.2, nogrid labsize(small)) ysc(titlegap(
  > +3)) xsc(titlegap(+3)) mcolors(gs8) lcolors(black)

34. graph display, ysize(4) xsize(6)

35. qui graph export "output\fig_4_adjusted_unemployment_meetings.png", replace

36.
37. *Figure 5: Weekly Caseworker Meetings, Ethnicity and the Unemployment Shock
38. twoway (scatter meetings_dk year_week if island == 0 & meetings_dk <0.4 & clients_dk
  >  >10, msymbol(p) mcolor(gs10)) || ///
  > (lowess meetings_dk year_week if treat_1 == 0 & island == 0, lcolor(black) lwidth(me
  > dthick)) || ///
  > lowess meetings_dk year_week if treat_1 == 1 & island == 0, lcolor(black) lwidth(med
  > thick)  || ///
  > lowess meetings_dk year_week if treat_2 == 1 & island == 0, lcolor(black) lwidth(med
  > thick) || ///
  > (scatter meetings_ethnic year_week if island == 0 & meetings_ethnic <0.4 & clients_e
  > thnic >10, msymbol(p) mcolor(gs10)) || ///
  > (lowess meetings_ethnic  year_week if treat_1 == 0 & island == 0 & clients_ethnic >
  > 10, lcolor(black) lwidth(medthick) lpattern(shortdash) ) || ///
  > lowess meetings_ethnic  year_week if treat_1 == 1 & island == 0 & clients_ethnic > 1
  > 0, lcolor(black) lwidth(medthick) lpattern(shortdash)  || ///
  > lowess meetings_ethnic  year_week if treat_2 == 1 & island == 0 & clients_ethnic > 1
  > 0, lcolor(black) lwidth(medthick) lpattern(shortdash)  ///
  > xline(3130 3141, lcolor(black*0.8) lp(dash) lwidth(vthin)) ylabel(0.0(0.1)0.4, labsi
  > ze(small) nogrid) xlabel(3068 3097 3126 3155, labsize(small)) ///
  > title("", size(medium) color(black) margin(b=3)) graphregion(color(white)) ytitle("A
  > verage meetings", size(medium)) ///
  > xtitle("Year, week", size(medium)) recast(line) legend(order(2 "Danish majority" 6 "
```

```
  > Non-western minority") size(small) symxsize(7)) ysc(titlegap(+3)) ///
  > || (pcarrowi 0.25 3125 0.25 3130 (9) "Lockdown" 0.3 3145 0.3 3141 (3) "Reopening", c
  > olor(black) mlabcolor(black))

39. graph display, ysize(4) xsize(6)

40. qui graph export "output\fig_5_its_meetings.png", replace

41.
42. *Figure 6: Weekly Caseworker Meetings, Ethnicity and Shock Exposure
43.
44. *Low
45. twoway (scatter meetings_dk year_week if industry_share_bi ==0 & meetings_dk <0.25 &
  >  clients_dk >10, msymbol(p) mcolor(gs10)) ///
  > || (lowess meetings_dk year_week if treat_1 == 0 & industry_share_bi ==0, lcolor(bla
  > ck) lwidth(medthick)) ///
  > || lowess meetings_dk year_week if treat_1 == 1 & industry_share_bi ==0, lcolor(blac
  > k) lwidth(medthick) ///
  > || lowess meetings_dk year_week if treat_2 == 1 & industry_share_bi ==0, lcolor(blac
  > k) lwidth(medthick) ///
  > || (scatter meetings_ethnic year_week if industry_share_bi ==0 & meetings_ethnic <0.
  > 25 & clients_ethnic >10, msymbol(p) mcolor(gs16)) ///
  > || (lowess meetings_ethnic year_week if treat_1 == 0 & industry_share_bi ==0, lcolor
  > (black) lpattern(shortdash) lwidth(medthick)) ///
  > || lowess meetings_ethnic year_week if treat_1 == 1 & industry_share_bi ==0, lcolor(
  > black) lpattern(shortdash) lwidth(medthick) ///
  > || lowess meetings_ethnic year_week if treat_2 == 1 & industry_share_bi ==0, lcolor(
  > black) lpattern(shortdash) lwidth(medthick) ///
  > xline(3130 3141, lcolor(black*0.8) lp(dash) lwidth(vthin)) ///
  > ylabel(0.0(0.05)0.25, labsize(small) nogrid) ///
  > xlabel(3068 3097 3126 3155, labsize(small))  ///
  > title("{bf:(a) Low exposure}", size(medium) color(black) margin(b=3)) ///
  > graphregion(color(white)) ytitle("Average meetings", size(medium)) ///
  > xtitle("Year, week", size(medium)) ///
  > recast(line) ///
  > ysc(titlegap(+3)) ///
  > legend(order(2 "Danish majority" 6 "Non-western minority") size(small) symxsize(7))
  > ///
  > || (pcarrowi 0.2 3125 0.2 3130 (9) "Lockdown" 0.24 3145 0.24 3141 (3) "Reopening", c
  > olor(black) mlabcolor(black)), ///
  > saving(output\did_low_industri_bi.gph, replace)
  file output\did_low_industri_bi.gph saved

46.
47. *High
48. twoway (scatter meetings_dk year_week if industry_share_bi ==1 & meetings_dk <0.25 &
  >  clients_dk >10, msymbol(p) mcolor(gs10)) ///
  > || (lowess meetings_dk year_week if treat_1 == 0 & industry_share_bi ==1, lcolor(bla
  > ck) lwidth(medthick)) ///
  > || lowess meetings_dk year_week if treat_1 == 1 & industry_share_bi ==1, lcolor(blac
  > k) lwidth(medthick) ///
  > || lowess meetings_dk year_week if treat_2 == 1 & industry_share_bi ==1, lcolor(blac
  > k) lwidth(medthick) ///
  > || (scatter meetings_ethnic year_week if industry_share_bi ==1 & meetings_ethnic <0.
  > 25 & clients_ethnic >10, msymbol(p) mcolor(gs16)) ///
  > || (lowess meetings_ethnic year_week if treat_1 == 0 & industry_share_bi ==1, lcolor
  > (black) lpattern(shortdash) lwidth(medthick)) ///
  > || lowess meetings_ethnic year_week if treat_1 == 1 & industry_share_bi ==1, lcolor(
  > black) lpattern(shortdash) lwidth(medthick) ///
  > || lowess meetings_ethnic year_week if treat_2 == 1 & industry_share_bi ==1, lcolor(
  > black) lpattern(shortdash) lwidth(medthick) ///
  > xline(3130 3141, lcolor(black*0.8) lp(dash) lwidth(vthin)) ///
  > ylabel(0.0(0.05)0.25, labsize(small) nogrid) ///
  > xlabel(3068 3097 3126 3155, labsize(small))  ///
  > title("{bf:(b) High exposure}", size(medium) color(black) margin(b=3)) ///
  > graphregion(color(white)) ytitle("", size(medium)) ///
  > xtitle("Year, week", size(medium)) ///
  > recast(line) ///
  > ysc(titlegap(+3)) ///
  > legend(order(2 "Danish majority" 6 "Non-western minority") size(small) symxsize(7))
  > ///
  > || (pcarrowi 0.2 3125 0.2 3130 (9) "Lockdown" 0.24 3145 0.24 3141 (3) "Reopening", c
```

```
  > olor(black) mlabcolor(black)), ///
  > saving(output\did_high_industri_bi.gph, replace)
  file output\did_high_industri_bi.gph saved

49.
50. *Combine the two graphs into one
51. grc1leg output\did_low_industri_bi.gph output\did_high_industri_bi.gph, graphregion(
  > color(white)) ycommon

52. graph display, ysize(4) xsize(6)

53. qui graph export "output\fig_6_did_meetings.png", replace

54.
55. ********************************************************************************
56.
57. *Data
58. use "data/micro_duration.dta", clear
  (DREAM29_Z                        )

59.
60. *Figure 7: Ethnicity and Unemployment Duration
61. stset spell, failure(failure==1) //Declare data to be survival data

  Survival-time data settings

          Failure event: failure==1
  Observed time interval: (0, spell]
       Exit on or before: failure

------------------------------------------------------------------------------
     37,189  total observations
          0  exclusions
------------------------------------------------------------------------------
     37,189  observations remaining, representing
     27,801  failures in single-record/single-failure data
    524,186  total analysis time at risk and under observation
                                            At risk from t =         0
                                 Earliest observed entry t =         0
                                      Last observed exit t =        30

62. sts test ethnicity, logrank //Conducts log-rank test

        Failure _d: failure==1
  Analysis time _t: spell

  Equality of survivor functions
  Log-rank test

                     |  Observed       Expected
  ethnicity          |    events         events
---------------------+--------------------------
       Danish majority |     25033       24002.02
  Non-Western minority |      2768        3798.98
---------------------+--------------------------
                 Total |     27801       27801.00

                           chi2(1) =  344.52
                           Pr>chi2 =  0.0000
```

```
63. stcox i.ethnicity //Calculates the hazard ratios

        Failure _d: failure==1
  Analysis time _t: spell

Iteration 0:  Log likelihood = -278471.63
Iteration 1:  Log likelihood = -278297.29
Iteration 2:  Log likelihood = -278294.81
Iteration 3:  Log likelihood = -278294.81
Refining estimates:
Iteration 0:  Log likelihood = -278294.81

Cox regression with Breslow method for ties

No. of subjects =  37,189                         Number of obs = 37,189
No. of failures =  27,801
Time at risk    = 524,186
                                                  LR chi2(1)    = 353.64
Log likelihood = -278294.81                       Prob > chi2   = 0.0000

------------------------------------------------------------------------------
          _t | Haz. ratio   Std. err.      z    P>|z|     [95% conf. interval]
-------------+----------------------------------------------------------------
   ethnicity |
Non-Western  |   .6980965   .0139956   -17.93   0.000     .6711975    .726073
minority > 4 |
------------------------------------------------------------------------------

64.
65. sts graph, by(ethnicity) graphregion(color(white)) plot1opts(color(gs15) lstyle(soli
  > d))  ///
  > ytitle("Propability of staying unemployed", size(medium)) xtitle("Weeks to event", s
  > ize(medium)) ///
  > legend(order(1 "Danish majority" 2 "Non-western minority") ring(0) pos(2) col(1) reg
  > ion(lstyle(none)) symxsize(5)) ///
  > xlabel(1(4)30, labsize(small) nogrid) ylabel(0(0.2)1, labsize(small) nogrid) ///
  > title("", size(medium) color(black)) xsc(titlegap(+1)) ysc(titlegap(+3)) ///
  > note("Hazard ratio, 0.70 (0.66-0.73)" "P=0.00 by log-rank test", ring(0) margin(medi
  > um))

        Failure _d: failure==1
  Analysis time _t: spell

66. qui graph export "output\fig_7_survival.png", replace

67.
68. ********************************************************************************
69.
70. *Data
71. use "data/micro_main.dta", clear
  (DREAM29_Z                       )

72.
73. *Table 1
74. eststo i1: reg meeting treat_1##c.time_w11##ethnic if sample == 1, cluster(municip_i
  > d)

Linear regression                               Number of obs     =  6,396,780
                                                F(7, 97)          =      65.41
                                                Prob > F          =     0.0000
                                                R-squared         =     0.0057
                                                Root MSE          =     .30648
```

(Std. err. adjusted for **98** clusters in **municip_id**)

meeting	Coefficient	Robust std. err.	t	P>|t|	[95% conf.	interval]
1.treat_1	**-.0529845**	**.005763**	**-9.19**	**0.000**	**-.0644225**	**-.0415465**
time_w11	**.0000282**	**.0000622**	**0.45**	**0.651**	**-.0000952**	**.0001516**
treat_1#c.time_w11 1	**-.0012787**	**.0011189**	**-1.14**	**0.256**	**-.0034993**	**.000942**
ethnic Non-Western immigrant/descendant	**-.000899**	**.0022644**	**-0.40**	**0.692**	**-.0053931**	**.0035952**
treat_1#ethnic 1#Non-Western immigrant/descendant	**-.0000641**	**.0036615**	**-0.02**	**0.986**	**-.0073311**	**.0072029**
ethnic#c.time_w11 Non-Western immigrant/descendant	**-.0000595**	**.0000445**	**-1.34**	**0.184**	**-.0001479**	**.0000288**
treat_1#ethnic#c.time_w11 1#Non-Western immigrant/descendant	**.0003846**	**.0004385**	**0.88**	**0.383**	**-.0004858**	**.001255**
_cons	**.1177206**	**.0053826**	**21.87**	**0.000**	**.1070377**	**.1284035**

75. eststo i2: reg meeting treat_1##c.time_w11##ethnic spell_seq c.education c.gender age sick_19 employ_19 if sample == 1, cluster(municip_id)

Linear regression

Number of obs	= **6,277,441**
F(13, 97)	= **50.40**
Prob > F	= **0.0000**
R-squared	= **0.0061**
Root MSE	= **.30667**

(Std. err. adjusted for **98** clusters in **municip_id**)

meeting	Coefficient	Robust std. err.	t	P>|t|	[95% conf.	interval]
1.treat_1	**-.0511593**	**.0061152**	**-8.37**	**0.000**	**-.0632964**	**-.0390223**
time_w11	**-.0000298**	**.0000645**	**-0.46**	**0.645**	**-.0001578**	

```
>        .0000982
                                  |
                 treat_1#c.time_w11 |
                                1 |  -.0012213   .0011143    -1.10   0.276    -.0034
> 328
>        .0009903
                                  |
                             ethnic |
  Non-Western immigrant/descendant |   -.002196   .0021927    -1.00   0.319    -.0065
> 479
>         .002156
                                  |
                     treat_1#ethnic |
1#Non-Western immigrant/descendant |   .0004464   .0036375     0.12   0.903    -.0067
> 731
>        .0076659
                                  |
                  ethnic#c.time_w11 |
  Non-Western immigrant/descendant |  -.0000762   .0000419    -1.82   0.072    -.0001
> 595
>        6.98e-06
                                  |
          treat_1#ethnic#c.time_w11 |
1#Non-Western immigrant/descendant |   .0004229   .0004213     1.00   0.318    -.0004
> 133
>        .0012591
                                  |
                         spell_seq |   .0002456   .0000502     4.89   0.000     .0001
> 459
>        .0003453
                         education |   .0000707   .0008897     0.08   0.937    -.0016
> 951
>        .0018366
                            gender |  -.0036595   .0004892    -7.48   0.000    -.0046
> 305
>       -.0026885
                               age |   .0001111   .0000776     1.43   0.155    -.0000
> 429
>        .0002651
                           sick_19 |  -.0001083   .0000794    -1.36   0.176    -.0002
> 659
>        .0000493
                         employ_19 |  -.0001608   .0000411    -3.91   0.000    -.0002
> 424
>       -.0000792
                             _cons |   .1128408   .0055546    20.31   0.000     .1018
> 166
>        .1238651
------------------------------------+------------------------------------------------------------
  ----------------
```

```
76. eststo i3: reg meeting treat_2##c.time_w22##ethnic if sample == 1, cluster(municip_i
> d)

Linear regression                               Number of obs     =  8,122,908
                                                F(7, 97)          =      48.69
                                                Prob > F          =     0.0000
                                                R-squared         =     0.0019
                                                Root MSE          =     .30594

                                                   (Std. err. adjusted for 98 clusters
>  in municip_id)
------------------------------------+------------------------------------------------------------
  ----------------
                                  |               Robust
                          meeting | Coefficient  std. err.      t    P>|t|     [95%
> con
>    f. interval]
------------------------------------+------------------------------------------------------------
  ----------------
                         1.treat_2 |   .0174564   .0026272     6.64   0.000     .0122
> 421
```

```
>        .0226708
                          time_w22 |  -.0006794   .0000549   -12.37   0.000    -.0007
> 884
>       -.0005703
                                   |
                 treat_2#c.time_w22 |
                                 1 |   .0009732    .000369     2.64   0.010      .000
> 241
>        .0017055
                                   |
                             ethnic |
  Non-Western immigrant/descendant |  -.0012091   .0021438    -0.56   0.574     -.005
> 464
>        .0030458
                                   |
                     treat_2#ethnic |
1#Non-Western immigrant/descendant |  -.0020339   .0028451    -0.71   0.476    -.0076
> 807
>        .0036129
                                   |
                  ethnic#c.time_w22 |
  Non-Western immigrant/descendant |  -.0000539   .0000427    -1.26   0.210    -.0001
> 386
>        .0000308
                                   |
          treat_2#ethnic#c.time_w22 |
1#Non-Western immigrant/descendant |   .0009219   .0003401     2.71   0.008     .0002
> 469
>        .0015968
                                   |
                              _cons |    .081677   .0052594    15.53   0.000     .0712
> 385
>        .0921155
------------------------------------+------------------------------------------------------
  ----------------

77. eststo i4: reg meeting treat_2##c.time_w22##ethnic spell_seq c.education c.gender ag
> e sick_19 employ_19 if sample == 1, cluster(municip_id)

Linear regression                               Number of obs     =  7,978,886
                                                F(13, 97)         =      64.17
                                                Prob > F          =     0.0000
                                                R-squared         =     0.0025
                                                Root MSE          =     .30605

                                                   (Std. err. adjusted for 98 clusters
>  in municip_id)
------------------------------------+------------------------------------------------------
  ----------------
                                   |               Robust
                           meeting | Coefficient  std. err.      t    P>|t|     [95%
> con
>    f. interval]
------------------------------------+------------------------------------------------------
  ----------------
                         1.treat_2 |   .0180312   .0026091     6.91   0.000      .012
> 853
>        .0232095
                          time_w22 |  -.0007225   .0000636   -11.36   0.000    -.0008
> 488
>       -.0005962
                                   |
                 treat_2#c.time_w22 |
                                 1 |   .0010117   .0003606     2.81   0.006     .0002
> 959
>        .0017275
                                   |
                             ethnic |
  Non-Western immigrant/descendant |  -.0022813   .0020871    -1.09   0.277    -.0064
> 237
>         .001861
                                   |
```

```
                     treat_2#ethnic |
1#Non-Western immigrant/descendant  |  -.0015647    .002886    -0.54   0.589    -.0072
> 926
>        .0041632
                                    |
                  ethnic#c.time_w22 |
  Non-Western immigrant/descendant  |  -.0000609   .0000415    -1.47   0.145    -.0001
> 432
>        .0000215
                                    |
          treat_2#ethnic#c.time_w22 |
1#Non-Western immigrant/descendant  |   .0008212   .0003315     2.48   0.015     .0001
> 633
>        .0014791
                                    |
                         spell_seq  |   .0003031   .0000504     6.01   0.000     .0002
> 031
>        .0004032
                         education  |  -.0000337    .000882    -0.04   0.970    -.0017
> 842
>        .0017168
                            gender  |  -.0033279   .0005446    -6.11   0.000    -.0044
> 089
>        -.002247
                               age  |   .0001784   .0000752     2.37   0.020     .0000
> 293
>        .0003276
                           sick_19  |  -.0000897   .0000698    -1.28   0.202    -.0002
> 282
>        .0000489
                         employ_19  |  -.0002015    .000031    -6.50   0.000     -.000
> 263
>       -.0001399
                             _cons  |   .0744954   .0058999    12.63   0.000     .0627
> 857
>         .086205
------------------------------------+------------------------------------------------------
  ______________
```

```
78.
79. esttab i1 i2 using output\tab_1_w11.rtf, replace obslast se b(3) sfmt(2) star(+ 0.10
  >  * 0.05 ** 0.01 *** 0.001) noomitted nobaselevels nogaps title(Table 1: Caseworker m
  > eeting, ethnicity and the unemployment shock) varwidth(40)
  (output written to output\tab_1_w11.rtf)

80.
81. esttab i3 i4 using output\tab_1_w22.rtf, replace obslast se b(3) sfmt(2) star(+ 0.10
  >  * 0.05 ** 0.01 *** 0.001) noomitted nobaselevels nogaps title(Table 1: Caseworker m
  > eeting, ethnicity and the unemployment shock) varwidth(40)
  (output written to output\tab_1_w22.rtf)

82.
83. *Table 2
84. eststo d1: reg meeting treat_1##industry_share_bi##ethnic if benefit == 3, cluster(m
  > unicip_id)

  Linear regression                               Number of obs     =  6,396,780
                                                  F(7, 97)          =      60.86
                                                  Prob > F          =     0.0000
                                                  R-squared         =     0.0060
                                                  Root MSE          =     .30643
```

(Std. err. adjusted for **98** cluste
> rs in **municip_id**)

meeting	Coefficient	Robust std. err.	t	P>|t|	[95 % con f. interval]
1.treat_1	**-.0623012**	**.0042867**	**-14.53**	**0.000**	**-.07 > 08091 -.0537933**
1.industry_share_bi	**-.012159**	**.0069253**	**-1.76**	**0.082**	**-.02 > 59038 .0015859**
treat_1#industry_share_bi 1 1	**.0099154**	**.0066202**	**1.50**	**0.137**	**-.0 > 03224 .0230547**
ethnic Non-Western immigrant/descendant	**.0033696**	**.0021025**	**1.60**	**0.112**	**-.00 > 08033 .0075425**
treat_1#ethnic 1#Non-Western immigrant/descendant	**-.00507**	**.0033183**	**-1.53**	**0.130**	**-.01 > 16559 .001516**
industry_share_bi#ethnic 1#Non-Western immigrant/descendant	**-.0014828**	**.0028079**	**-0.53**	**0.599**	**-.00 > 70557 .0040902**
treat_1#industry_share_bi#ethnic 1#1#Non-Western immigrant/descendant	**.0066933**	**.0053545**	**1.25**	**0.214**	**-.00 > 39339 .0173206**
_cons	**.1214487**	**.0043791**	**27.73**	**0.000**	**.11 > 27575 .13014**

85. eststo d2: reg meeting treat_1##industry_share_bi##ethnic spell_seq c.education c.ge
> nder age sick_19 employ_19 if benefit == 3, cluster(municip_id)

Linear regression

Number of obs	= **6,277,441**
F(13, 97)	= **64.47**
Prob > F	= **0.0000**
R-squared	= **0.0064**
Root MSE	= **.30662**

(Std. err. adjusted for **98** cluste
> rs in **municip_id**)

meeting	Coefficient	Robust std. err.	t	P>|t|	[95 % con f. interval]
1.treat_1	**-.0620492**	**.0043611**	**-14.23**	**0.000**	**-.07 > 07047 -.0533937**
1.industry_share_bi	**-.0121643**	**.0069668**	**-1.75**	**0.084**	**-.02 > 59916**

```
>          .0016629
                                   |
            treat_1#industry_share_bi |
                                1 1 |   .0100062   .0067518     1.48   0.142    -.00
> 33942
>          .0234066
                                   |
                              ethnic |
    Non-Western immigrant/descendant |   .0027273   .0022095     1.23   0.220    -.00
> 16578
>          .0071125
                                   |
                      treat_1#ethnic |
  1#Non-Western immigrant/descendant |  -.0050334   .0033533    -1.50   0.137    -.01
> 16887
>           .001622
                                   |
             industry_share_bi#ethnic |
  1#Non-Western immigrant/descendant |  -.0018194   .0029257    -0.62   0.535    -.00
> 76261
>          .0039872
                                   |
     treat_1#industry_share_bi#ethnic |
1#1#Non-Western immigrant/descendant |   .0069491   .0053575     1.30   0.198     -.0
> 03684
>          .0175822
                                   |
                          spell_seq |   .0002215   .0000574     3.86   0.000     .00
> 01076
>          .0003354
                          education |   .0001028   .0007293     0.14   0.888    -.00
> 13447
>          .0015502
                             gender |  -.0035787    .000528    -6.78   0.000    -.00
> 46266
>         -.0025307
                                age |   .0001086   .0000671     1.62   0.109    -.00
> 00246
>          .0002418
                            sick_19 |  -.0001167   .0000696    -1.68   0.097    -.00
> 02549
>          .0000215
                          employ_19 |  -.0001743   .0000377    -4.63   0.000    -.00
> 02491
>         -.0000996
                              _cons |   .1188807   .0051122    23.25   0.000     .10
> 87343
>          .1290271
------------------------------------+------------------------------------------------------------
  ------------------
```

```
86. eststo d3: reg meeting treat_2##industry_share_bi##ethnic if benefit == 3, cluster(m
> unicip_id)

Linear regression                               Number of obs     =  8,122,908
                                                F(7, 97)          =       1.04
                                                Prob > F          =     0.4063
                                                R-squared         =     0.0003
                                                Root MSE          =     .30619

                                                     (Std. err. adjusted for 98 cluste
> rs in municip_id)
------------------------------------+------------------------------------------------------------
  ------------------
                                   |               Robust
                            meeting | Coefficient  std. err.      t    P>|t|     [95
> % con
>      f. interval]
------------------------------------+------------------------------------------------------------
  ------------------
                          1.treat_2 |  -.0032103   .0036952    -0.87   0.387    -.01
> 05443
```

```
>          .0041236
                 1.industry_share_bi |  -.0103028   .0073671    -1.40   0.165    -.02
> 49245
>          .0043189
                                     |
            treat_2#industry_share_bi |
                                 1 1 |  -.0030719    .006554    -0.47   0.640    -.01
> 60798
>          .0099359
                                     |
                               ethnic |
    Non-Western immigrant/descendant |   .0021186   .0019117     1.11   0.271    -.00
> 16757
>          .0059129
                                     |
                       treat_2#ethnic |
  1#Non-Western immigrant/descendant |   .0026338   .0038613     0.68   0.497    -.00
> 50297
>          .0102974
                                     |
             industry_share_bi#ethnic |
  1#Non-Western immigrant/descendant |  -.0001802   .0027945    -0.06   0.949    -.00
> 57265
>          .0053661
                                     |
     treat_2#industry_share_bi#ethnic |
1#1#Non-Western immigrant/descendant |   .0001461   .0046033     0.03   0.975    -.00
> 89901
>          .0092823
                                     |
                                _cons |   .1094495   .0044104    24.82   0.000      .1
> 00696
>           .118203
------------------------------------+-------------------------------------------------
  ------------------
```

```
87. eststo d4: reg meeting treat_2##industry_share_bi##ethnic spell_seq c.education c.ge
> nder age sick_19 employ_19 if benefit == 3, cluster(municip_id)

Linear regression                               Number of obs     =  7,978,886
                                                F(13, 97)         =      52.94
                                                Prob > F          =     0.0000
                                                R-squared         =     0.0010
                                                Root MSE          =     .30629

                                                     (Std. err. adjusted for 98 cluste
> rs in municip_id)
------------------------------------+-------------------------------------------------
  ------------------
                                     |               Robust
                             meeting | Coefficient  std. err.      t    P>|t|     [95
> % con
>      f. interval]
------------------------------------+-------------------------------------------------
  ------------------
                           1.treat_2 |   -.000382   .0039984    -0.10   0.924    -.00
> 83176
>          .0075537
                 1.industry_share_bi |  -.0102956   .0074382    -1.38   0.169    -.02
> 50584
>          .0044673
                                     |
            treat_2#industry_share_bi |
                                 1 1 |  -.0030347   .0068974    -0.44   0.661    -.01
> 67241
>          .0106546
                                     |
                               ethnic |
    Non-Western immigrant/descendant |   .0016707   .0019177     0.87   0.386    -.00
> 21353
>          .0054767
                                     |
```

```
                      treat_2#ethnic |
  1#Non-Western immigrant/descendant |   .0026983   .0038102     0.71   0.481    -.00
> 48639
>          .0102605
                                     |
             industry_share_bi#ethnic |
  1#Non-Western immigrant/descendant |  -.0006198   .0028384    -0.22   0.828    -.00
> 62534
>          .0050137
                                     |
     treat_2#industry_share_bi#ethnic |
1#1#Non-Western immigrant/descendant |   .0010008   .0047307     0.21   0.833    -.00
> 83883
>            .01039
                                     |
                           spell_seq |  -.0000206   .0000465    -0.44   0.658     -.0
> 00113
>          .0000717
                           education |   .0001313   .0007251     0.18   0.857    -.00
> 13079
>          .0015705
                              gender |  -.0028881   .0005853    -4.93   0.000    -.00
> 40497
>         -.0017265
                                 age |   .0002199   .0000613     3.59   0.001     .00
> 00983
>          .0003416
                            sick_19 |  -.0001701   .0000574    -2.96   0.004     -.0
> 00284
>         -.0000562
                           employ_19 |  -.0004261   .0000329   -12.95   0.000    -.00
> 04915
>         -.0003608
                               _cons |   .1102509   .0044925    24.54   0.000     .10
> 13344
>          .1191674
------------------------------------------------------------------------------------------
  ________________

88.
89. *Esttab
90. esttab d1 d2 using output\tab_2_w11.rtf, replace nobaselevels nogaps title(Table 2:
  > Caseworker meeting, ethnicity and shock exposure) se b(3) noomitted obslast varwidth
  > (40) star(+ 0.10 * 0.05 ** 0.01 *** 0.001)
  (output written to output\tab_2_w11.rtf)

91.
92. esttab d3 d4 using output\tab_2_w22.rtf, replace nobaselevels nogaps title(Table 2:
  > Caseworker meeting, ethnicity and shock exposure) se b(3) noomitted obslast varwidth
  > (40) star(+ 0.10 * 0.05 ** 0.01 *** 0.001)
  (output written to output\tab_2_w22.rtf)

93.
94. ******************************************************************************
95.
96. log close
       name:  <unnamed>
        log:  E:\workdata\708030\JOP_article\log_manuscript.smcl
   log type:  smcl
  closed on:  21 May 2024, 09:11:31
------------------------------------------------------------------------------------------
```