



```

        name: <unnamed>
        log:  \\wsl.localhost\Debian\home\lsys\gusto\scripts\tfpfas\logs\tf-pfas-sprest
> o.smcl
    log type:  smcl
    opened on:  6 Dec 2025, 09:55:36

1 .
2 . * =====
3 . * Program Setup
4 . * =====
5 . cls                                // Clear results window

6 . clear all                        // Start with a clean slate

7 . set more off                     // Disable partitioned output

8 . macro drop _all                  // Clear all macros to avoid namespace conflicts

9 . set linesize 120                 // Line size limit to make output more readable, affects log
> s

10.
11. // Still on version 13 :(
12. version 13

13. local stata_version : display c(version)

14.
15. // Add path to ados
16. adopath ++ ./ado
    [1]                "./ado"
    [2]                "../..../assets/stata-utils"
    [3] (BASE)         "C:\Program Files (x86)\Stata13\ado\base/"
    [4] (SITE)         "C:\Program Files (x86)\Stata13\ado\site/"
    [5]                "."
    [6] (PERSONAL)     "c:\ado\personal/"
    [7] (PLUS)         "c:\ado\plus/"
    [8] (OLDPLACE)     "c:\ado/"

17.
18. tictoc tic

----- Time log -----
Start time:  6 Dec 2025 09:55:37

19.
20. use ./data/edc-sprest.dta, clear

21. // =====
22. * PFAS
23. global pfas pfhxs pfos_linear pfos_branched pfoa_linear pfna pfhps pfda pfhpa

24.
25. * Prep basic family demo
26. encode pcvl_working_status, gen(employed)

27. encode pcvl_highest_education_completed, gen(educ)

```

```

28. encode pcv1_marital_status, gen(marital)
29. encode ethnic_group, gen(ethnic)
30. encode hhincome_txt, gen(hhincome)
31.
32. global baselines c.age_at_recruitment##c.age_at_recruitment i.employed i.educ i.mari
   > tal i.ethnic i.hhincome
33.
34. // =====
35. local storespecs_file ./data/pfas-tf-sprest0
36.
37. cap erase `storespecs_file'.dta
38. local x buff500m_transport_facilities
39. preserve
40. qui su `x'
41. replace `x' = `x' / r(sd) if !missing(`x')
   (531 real changes made)
42.
43. foreach pfas of global pfas {
    2.      qui su `pfas'
    3.      replace `pfas' = `pfas' / r(sd) if !missing(`pfas')
    4.      reghdfe `pfas' `x' $baselines, abs(subzone2014) cluster(planning_area2014
> ) keeping
    5.      storespecs `x', spec_name(`pfas') file(`storespecs_file')
    6. }
(384 real changes made)
WARNING: Singleton observations not dropped; statistical significance is biased (link)
(MWFE_estimator converged in 1 iterations)
warning: missing F statistic; dropped variables due to collinearity or too few cluster
> s

```

```

HDFE Linear regression          Number of obs   =          313
Absorbing 1 HDFE group         F( 25, 26) =          .
Statistics robust to heteroskedasticity   Prob > F      =          .
                                         R-squared     =       0.7742
                                         Adj R-squared =       0.5832
                                         Within R-sq.  =       0.2572
Number of clusters (planning_area2014) = 27 Root MSE   =       0.7013

```

(Std. Err. adjusted for

> 27 clusters in planning_area2014)

			pfhxs	Coef.	Robust Std. Err.	t
> P> t						
> [95% Con						
> f. Interval]						
> 0.202			buff500m_transport_facilities	.0376407	.0287351	1.31
> -.0214252						
> .0967066						
> 0.559			age_at_recruitment	.1823725	.3082483	0.59
> -.4512409						
> .8159858						
> 0.575			c.age_at_recruitment#c.age_at_recruitment	-.0028081	.0049402	-0.57
> -.0129629						
> .0073468						

			employed Working			
>	0.030			.2581198	.1120604	2.30
>		.0277764				
>			.4884632			
			educ			
		Institute of Technical Education ITE/NTC, NITEC, h..		.6377905	.349373	1.83
>	0.079					
>		-.0803561				
>			1.355937			
		Junior College/Centralised Institute GCE 'A' Level..		.3692983	.1715651	2.15
>	0.041					
>		.0166411				
>			.7219554			
		Postgraduate Masters degree/Doctorate		.2128909	.2403967	0.89
>	0.384					
>		-.2812515				
>			.7070334			
		Secondary GCE 'O'/'N' Level		-.4162745	.548011	-0.76
>	0.454					
>		-1.542727				
>			.7101782			
		Trade or work qualification not from University		-1.22306	.2791256	-4.38
>	0.000					
>		-1.796811				
>			-.6493092			
		University Bachelor's Degree/Postgrad Diploma/Prof..		-.01238	.137819	-0.09
>	0.929					
>		-.295671				
>			.2709109			
			marital			
		Married/civil partnership/civil union		.1319542	.2055076	0.64
>	0.526					
>		-.2904728				
>			.5543811			
			Never married			
>	0.973			-.0118303	.340816	-0.03
>		-.7123876				
>			.688727			
			Separated			
>	0.035			.7084292	.3179481	2.23
>		.0548775				
>			1.361981			
			ethnic			
			Indian			
>	0.092			-.3240837	.1854227	-1.75
>		-.7052254				
>			.0570581			
			Malay			
>	0.070			.2957507	.1564391	1.89
>		-.0258144				
>			.6173158			
			Mix			
>	0.250			.4400099	.3739358	1.18
>		-.3286261				
>			1.208646			
			hhincome			
			1,622 - 3,273/month			
>	0.180			2.509124	1.821819	1.38
>		-1.235679				
>			6.253927			
			10,694 - 13,188/month			
>	0.181			2.626927	1.909403	1.38
>		-1.297907				
>			6.551762			
			13,189 - 16,601/month			
>	0.176			2.64543	1.901464	1.39

```

>           -1.263085
>           6.553945      16,601 and above |      3.018504      1.822292      1.66
>    0.110
>           -.7272698
>           6.764278      3,274 - 4,676/month |      2.565353      1.961397      1.31
>    0.202
>           -1.466357
>           6.597063      4,677 - 6,144/month |      2.879868      1.951746      1.48
>    0.152
>           -1.132003
>           6.891739      6,145 - 7,423/month |      2.599617      1.976159      1.32
>    0.200
>           -1.462437
>           6.661671      7,424 - 9,082/month |      2.421553      1.977557      1.22
>    0.232
>           -1.643372
>           6.486479      9,083 - 10,693/month |      2.745775      1.979111      1.39
>    0.177
>           -1.322347
>           6.813896
>
>                                     _cons |      -4.742555      6.134979      -0.77
>    0.446
>           -17.35319
>           7.868075

```

Absorbed degrees of freedom:

Absorbed FE	Categories	- Redundant	= Num. Coefs
subzone2014	119	119	0 *

* = FE nested within cluster; treated as redundant for DoF computation
 (note: file C:\Users\Admin\AppData\Local\Temp\ST_1i000002.tmp not found)
 file C:\Users\Admin\AppData\Local\Temp\ST_1i000002.tmp saved

obs was 0, now 1

(1 real change made)
 (1 real change made)
 (1 real change made)
 (1 real change made)
 (1 real change made)
 (1 real change made)
 (1 real change made)
 (1 real change made)
 (1 real change made)
 (1 real change made)

(note: file ./data/pfas-tf-sprest0.dta not found)

file ./data/pfas-tf-sprest0.dta saved

(384 real changes made)

WARNING: Singleton observations not dropped; statistical significance is biased ([link](#))
 (MWFE estimator converged in 1 iterations)

warning: missing F statistic; dropped variables due to collinearity or too few cluster
 > s

```

HDFE Linear regression      Number of obs   =      313
Absorbing 1 HDFE group     F( 25, 26)     =      .
Statistics robust to heteroskedasticity  Prob > F       =      .
                                   R-squared        =      0.5092
                                   Adj R-squared     =      0.0940
                                   Within R-sq.      =      0.1861
Number of clusters (planning_area2014) = 27Root MSE      =      0.9986

```

					(Std. Err. adjusted for		
> 27 clusters in planning_area2014)							

>	0.001		Indian		-1.400036	.3800403	-3.68
>		-2.18122					
>			-.6188519				
>	0.533		Malay		.1596157	.2526792	0.63
>		-.3597739					
>			.6790053				
>	0.950		Mix		-.0150611	.2362114	-0.06
>		-.5006006					
>			.4704783				
			hhincome				
>	0.420		1,622 - 3,273/month		-.5881246	.718065	-0.82
>		-2.064128					
>			.8878791				
>	0.572		10,694 - 13,188/month		-.4602625	.8037647	-0.57
>		-2.112424					
>			1.1919				
>	0.392		13,189 - 16,601/month		-.7413634	.8512425	-0.87
>		-2.491117					
>			1.008391				
>	0.943		16,601 and above		-.0545417	.7600454	-0.07
>		-1.616837					
>			1.507754				
>	0.705		3,274 - 4,676/month		-.316723	.8278715	-0.38
>		-2.018437					
>			1.384991				
>	0.641		4,677 - 6,144/month		-.3961499	.8406386	-0.47
>		-2.124107					
>			1.331807				
>	0.464		6,145 - 7,423/month		-.5980991	.8047039	-0.74
>		-2.252192					
>			1.055993				
>	0.609		7,424 - 9,082/month		-.4529519	.874969	-0.52
>		-2.251476					
>			1.345573				
>	0.406		9,083 - 10,693/month		-.6228902	.7372703	-0.84
>		-2.138371					
>			.8925906				
			_cons		5.412545	5.216024	1.04
>	0.309						
>		-5.309147					
>			16.13424				

Absorbed degrees of freedom:

Absorbed FE	Categories	- Redundant	= Num. Coefs
subzone2014	119	119	0 *

* = FE nested within cluster; treated as redundant for DoF computation
 (note: file C:\Users\Admin\AppData\Local\Temp\ST_1i000002.tmp not found)
 file C:\Users\Admin\AppData\Local\Temp\ST_1i000002.tmp saved
 obs was 1, now 2
 (1 real change made)
 (1 real change made)
 (1 real change made)
 (1 real change made)

```

(1 real change made)
(1 real change made)
(1 real change made)
(1 real change made)
(1 real change made)
file ./data/pfas-tf-sprest0.dta saved
(384 real changes made)
WARNING: Singleton observations not dropped; statistical significance is biased (link)
(MWFE estimator converged in 1 iterations)
warning: missing F statistic; dropped variables due to collinearity or too few cluster
> s

```

```

HDFE Linear regression          Number of obs   =       313
Absorbing 1 HDFE group         F( 25, 26)    =       .
Statistics robust to heteroskedasticity  Prob > F      =       .
                                   R-squared        =     0.5023
                                   Adj R-squared     =     0.0812
                                   Within R-sq.      =     0.1476
                                   Root MSE       =     1.0190
Number of clusters (planning_area2014) = 27

```

(Std. Err. adjusted for

> 27 clusters in planning_area2014)

		pfos_branched	Coef.	Robust Std. Err.	t
P> t	[95% Con f. Interval]				
		buff500m_transport_facilities	.0608093	.0480536	1.27
0.217					
	-.0379663				
	.159585	age_at_recruitment	-.0969608	.3450017	-0.28
0.781					
	-.8061219				
	.6122003	c.age_at_recruitment#c.age_at_recruitment	.0015148	.0055727	0.27
0.788					
	-.0099401				
	.0129697	employed Working	.4818575	.1458318	3.30
0.003					
	.1820959				
	.7816192	educ	.5741739	.4295833	1.34
0.193		Institute of Technical Education ITE/NTC, NITEC, h..			
	-.3088473				
	1.457195	Junior College/Centralised Institute GCE 'A' Level..	.0582311	.4518865	0.13
0.898					
	-.8706349				
	.9870972	Postgraduate Masters degree/Doctorate	.1683954	.4198843	0.40
0.692					
	-.6946892				
	1.03148	Secondary GCE 'O'/'N' Level	.4973447	.5327111	0.93
0.359					
	-.5976587				
	1.592348	Trade or work qualification not from University	-1.597208	.5609492	-2.85
0.008					
	-2.750256				
	-.4441606				

University Bachelor's Degree/Postgrad Diploma/Prof..		.10348	.2963161	0.35
> 0.730				
>	- .5056065			
>		.7125665		
>				
	Married/civil partnership/civil union			
> 0.407		- .2620949	.3108429	-0.84
>	- .9010417			
>		.3768518		
	Never married			
> 0.246		- .8183818	.6894232	-1.19
>	-2.235511			
>		.5987479		
	Separated			
> 0.655		.2542793	.562118	0.45
>	- .9011707			
>		1.409729		
		ethnic Indian		
> 0.002		- .8242353	.2443375	-3.37
>	-1.326478			
>		- .3219923		
		Malay		
> 0.197		.2239552	.1691561	1.32
>	- .1237501			
>		.5716606		
		Mix		
> 0.151		.4870767	.3294019	1.48
>	- .1900186			
>		1.164172		
		hhincome 1,622 - 3,273/month		
> 0.757		.3411176	1.090461	0.31
>	-1.900357			
>		2.582592		
		10,694 - 13,188/month		
> 0.682		.5052839	1.218942	0.41
>	-2.000288			
>		3.010856		
		13,189 - 16,601/month		
> 0.953		- .074035	1.247193	-0.06
>	-2.637676			
>		2.489606		
		16,601 and above		
> 0.525		.7502336	1.164887	0.64
>	-1.644225			
>		3.144692		
		3,274 - 4,676/month		
> 0.631		.6251209	1.284249	0.49
>	-2.014691			
>		3.264933		
		4,677 - 6,144/month		
> 0.741		.4224881	1.265909	0.33
>	-2.179625			
>		3.024601		
		6,145 - 7,423/month		
> 0.972		.043466	1.217209	0.04
>	-2.458543			
>		2.545475		
		7,424 - 9,082/month		
> 0.924		.1215377	1.264658	0.10
>	-2.478003			
>		2.721079		
		9,083 - 10,693/month		
> 0.958		.063855	1.210478	0.05
>	-2.424319			
>		2.552029		
		cons		
		2.783688	5.957118	0.47


```
> 0.644
> -9.461343
> 15.02872
```

Absorbed degrees of freedom:

Absorbed FE	Categories	- Redundant	= Num. Coefs
subzone2014	119	119	0 *

* = FE nested within cluster; treated as redundant for DoF computation
(note: file C:\Users\Admin\AppData\Local\Temp\ST_1i000002.tmp not found)
file C:\Users\Admin\AppData\Local\Temp\ST_1i000002.tmp saved

obs was 2, now 3

(1 real change made)
(1 real change made)
(1 real change made)
(1 real change made)
(1 real change made)
(1 real change made)
(1 real change made)
(1 real change made)
(1 real change made)
(1 real change made)

file ./data/pfas-tf-spresto.dta saved

(384 real changes made)

WARNING: Singleton observations not dropped; statistical significance is biased ([link](#))
(MWFE_estimator converged in 1 iterations)

warning: missing F statistic; dropped variables due to collinearity or too few cluster
> s

```
HDFE Linear regression          Number of obs   =       313
Absorbing 1 HDFE group         F( 25, 26)    =       .
Statistics robust to heteroskedasticity  Prob > F      =       .
                                   R-squared         =     0.3241
                                   Adj R-squared      =    -0.2478
                                   Within R-sq.       =     0.0973
Number of clusters (planning_area2014) = 27 Root MSE   =     1.1426
```

(Std. Err. adjusted for

> 27 clusters in planning_area2014)

	pfoa_linear	Coef.	Robust Std. Err.	t
> P> t				
> [95% Con				
> f. Interval]				
> 0.469	buff500m_transport_facilities	.0280335	.0381116	0.74
> -0.050306				
> .106373	age_at_recruitment	-.9411302	.8745694	-1.08
> 0.292				
> -2.738833				
> .8565729	c.age_at_recruitment#c.age_at_recruitment	.0142936	.01338	1.07
> 0.295				
> -.0132093				
> .0417966	employed Working	-.7424534	.8386541	-0.89
> 0.384				
> -2.466332				
> .9814247	educ			


```

>          -.7248476
>          1.726022
>          4,677 - 6,144/month | .5830525 .5298574 1.10
> 0.281
>          -.5060849
>          1.67219
>          6,145 - 7,423/month | .463296 .6897244 0.67
> 0.508
>          -.9544529
>          1.881045
>          7,424 - 9,082/month | .8438829 .7176749 1.18
> 0.250
>          -.6313191
>          2.319085
>          9,083 - 10,693/month | .6564056 .6428544 1.02
> 0.317
>          -.6650006
>          1.977812
>
>          _cons | 17.39278 14.67414 1.19
> 0.247
>          -12.77034
>          47.5559

```

Absorbed degrees of freedom:

Absorbed FE	Categories	- Redundant	= Num. Coefs
subzone2014	119	119	0 *

* = FE nested within cluster; treated as redundant for DoF computation
(note: file C:\Users\Admin\AppData\Local\Temp\ST_li000002.tmp not found)

file C:\Users\Admin\AppData\Local\Temp\ST_li000002.tmp saved

obs was 3, now 4

(1 real change made)

(1 real change made)

(1 real change made)

(1 real change made)

(1 real change made)

(1 real change made)

(1 real change made)

(1 real change made)

(1 real change made)

file ./data/pfas-tf-sprest0.dta saved

(358 real changes made)

WARNING: Singleton observations not dropped; statistical significance is biased ([link](#))

(MWFE estimator converged in 1 iterations)

warning: missing F statistic; dropped variables due to collinearity or too few cluster

> s

```

HDFE Linear regression          Number of obs   =      313
Absorbing 1 HDFE group         F( 25, 26) =      .
Statistics robust to heteroskedasticity  Prob > F      =      .
                                   R-squared       =    0.4594
                                   Adj R-squared    =    0.0019
                                   Within R-sq.     =    0.1210
Number of clusters (planning_area2014) = 27 Root MSE   =    0.9935

```

(Std. Err. adjusted for

> 27 clusters in planning_area2014)

```

>          P>|t|
>          [95% Con
>          f. Interval]
>
>          buff500m_transport_facilities | .1122647 .0483486 2.32

```

>	0.028							
>		.0128828						
>			.2116466					
>				age_at_recruitment		-.2285194	.3441945	-0.66
>	0.513							
>		-.9360213						
>			.4789825					
>				c.age_at_recruitment#c.age_at_recruitment		.0031291	.0054792	0.57
>	0.573							
>		-.0081336						
>			.0143918					
>				employed				
>				Working		.4557845	.1960773	2.32
>	0.028							
>		.0527418						
>			.8588272					
>				educ				
>				Institute of Technical Education ITE/NTC, NITEC, h..		.1546007	.2370864	0.65
>	0.520							
>		-.3327373						
>			.6419387					
>				Junior College/Centralised Institute GCE 'A' Level..		.3291351	.2924729	1.13
>	0.271							
>		-.2720516						
>			.9303218					
>				Postgraduate Masters degree/Doctorate		-.043132	.2341987	-0.18
>	0.855							
>		-.5245344						
>			.4382704					
>				Secondary GCE 'O'/'N' Level		-.2472896	.4185989	-0.59
>	0.560							
>		-1.107732						
>			.6131527					
>				Trade or work qualification not from University		1.141939	.2609903	4.38
>	0.000							
>		.6054657						
>			1.678412					
>				University Bachelor's Degree/Postgrad Diploma/Prof..		-.0237371	.1757219	-0.14
>	0.894							
>		-.3849386						
>			.3374645					
>				marital				
>				Married/civil partnership/civil union		-.5098428	.262809	-1.94
>	0.063							
>		-1.050054						
>			.0303689					
>				Never married		.5693419	.9205225	0.62
>	0.542							
>		-1.322819						
>			2.461503					
>				Separated		.2531918	.4584917	0.55
>	0.586							
>		-.6892514						
>			1.195635					
>				ethnic				
>				Indian		-.2453735	.2675666	-0.92
>	0.368							
>		-.7953645						
>			.3046176					
>				Malay		-.1990544	.1754155	-1.13
>	0.267							
>		-.5596262						
>			.1615174					
>				Mix		-.0062645	.344198	-0.02
>	0.986							
>		-.7137737						
>			.7012447					

		hhincome			
		1,622 - 3,273/month	.2664156	.2670649	1.00
>	0.328				
>		-.2825443			
>		.8153754			
		10,694 - 13,188/month	.3313978	.3541418	0.94
>	0.358				
>		-.3965511			
>		1.059347			
		13,189 - 16,601/month	.1703613	.249594	0.68
>	0.501				
>		-.3426865			
>		.6834091			
		16,601 and above	.4656135	.4977136	0.94
>	0.358				
>		-.5574515			
>		1.488678			
		3,274 - 4,676/month	.1749424	.2380646	0.73
>	0.469				
>		-.3144064			
>		.6642911			
		4,677 - 6,144/month	.2359064	.2671721	0.88
>	0.385				
>		-.3132736			
>		.7850864			
		6,145 - 7,423/month	-.1851507	.305532	-0.61
>	0.550				
>		-.8131806			
>		.4428793			
		7,424 - 9,082/month	-.069331	.2630948	-0.26
>	0.794				
>		-.6101301			
>		.4714681			
		9,083 - 10,693/month	.054263	.302586	0.18
>	0.859				
>		-.5677113			
>		.6762374			
		_cons	5.140083	5.426258	0.95
>	0.352				
>		-6.013749			
>		16.29391			

Absorbed degrees of freedom:

Absorbed FE	Categories	- Redundant	= Num. Coefs
subzone2014	119	119	0 *

* = FE nested within cluster; treated as redundant for DoF computation
(note: file C:\Users\Admin\AppData\Local\Temp\ST_li000002.tmp not found)
file C:\Users\Admin\AppData\Local\Temp\ST_li000002.tmp saved

obs was 4, now 5

(1 real change made)

(1 real change made)

(1 real change made)

(1 real change made)

(1 real change made)

(1 real change made)

(1 real change made)

(1 real change made)

(1 real change made)

file ./data/pfas-tf-sprest0.dta saved

(384 real changes made)

WARNING: Singleton observations not dropped; statistical significance is biased ([link](#))

(MWFE estimator converged in 1 iterations)

warning: missing F statistic; dropped variables due to collinearity or too few cluster

> s

HDFE Linear regression
 Absorbing 1 HDFE group
 Statistics robust to heteroskedasticity

Number of obs = 313
 F(25, 26) = .
 Prob > F = .
 R-squared = 0.5477
 Adj R-squared = 0.1649
 Within R-sq. = 0.1945
 Root MSE = 0.9445

Number of clusters (planning_area2014) =

(Std. Err. adjusted for

> 27 clusters in planning_area2014)

			pfhps	Coef.	Robust Std. Err.	t
P> t	[95% Con f. Interval]					
		buff500m_transport_facilities		.0969932	.0406147	2.39
0.024						
	.0135085					
		.180478				
		age_at_recruitment		.062008	.3025847	0.20
0.839						
	-.5599636					
		.6839797				
		c.age_at_recruitment#c.age_at_recruitment		-.0010681	.0047996	-0.22
0.826						
	-.0109339					
		.0087977				
		employed Working		.5278219	.1444754	3.65
0.001						
	.2308483					
		.8247954				
		educ				
		Institute of Technical Education ITE/NTC, NITEC, h..		.6554129	.3704914	1.77
0.089						
	-.1061431					
		1.416969				
		Junior College/Centralised Institute GCE 'A' Level..		.1265449	.7151753	0.18
0.861						
	-1.343519					
		1.596609				
		Postgraduate Masters degree/Doctorate		.0901534	.3234839	0.28
0.783						
	-.5747772					
		.755084				
		Secondary GCE 'O'/'N' Level		-.3201941	.4821074	-0.66
0.512						
	-1.31118					
		.6707918				
		Trade or work qualification not from University		-1.376733	.3381339	-4.07
0.000						
	-2.071777					
		-.681689				
		University Bachelor's Degree/Postgrad Diploma/Prof..		-.0367224	.239717	-0.15
0.879						
	-.5294677					
		.4560229				
		marital				
		Married/civil partnership/civil union		-.532839	.2588333	-2.06
0.050						
	-1.064879					
		-.0007994				
		Never married		-1.319216	.5574191	-2.37
0.026						

>	-2.465008					
>		-1.1734251				
>	0.904		Separated		.0682692	.55942 0.12
>		-1.081635				
>		1.218173				
>			ethnic			
>	0.000		Indian		-.9308332	.1693277 -5.50
>		-1.278891				
>		-.5827751				
>			Malay		.0440945	.1863622 0.24
>	0.815					
>		-.3389785				
>		.4271674				
>			Mix		.556569	.2619445 2.12
>	0.043					
>		.0181344				
>		1.095004				
>			hhincome			
>	0.147		1,622 - 3,273/month		1.366959	.9153509 1.49
>		-.5145719				
>		3.24849				
>			10,694 - 13,188/month		1.047716	.9833978 1.07
>	0.296					
>		-.9736875				
>		3.069119				
>			13,189 - 16,601/month		.8732468	.9747702 0.90
>	0.379					
>		-1.130422				
>		2.876916				
>			16,601 and above		1.510867	.989933 1.53
>	0.139					
>		-.5239689				
>		3.545704				
>			3,274 - 4,676/month		1.311183	.9706473 1.35
>	0.188					
>		-.6840111				
>		3.306377				
>			4,677 - 6,144/month		1.135832	.9721237 1.17
>	0.253					
>		-.8623968				
>		3.134061				
>			6,145 - 7,423/month		.7696029	.9775355 0.79
>	0.438					
>		-1.23975				
>		2.778956				
>			7,424 - 9,082/month		.6896741	1.019311 0.68
>	0.505					
>		-1.405549				
>		2.784897				
>			9,083 - 10,693/month		.7277396	.9342663 0.78
>	0.443					
>		-1.192672				
>		2.648152				
>			_cons		4.52808	5.227429 0.87
>	0.394					
>		-6.217054				
>		15.27321				

Absorbed degrees of freedom:

Absorbed FE	Categories	- Redundant	= Num. Coefs
subzone2014	119	119	0 *

* = FE nested within cluster; treated as redundant for DoF computation
(note: file C:\Users\Admin\AppData\Local\Temp\ST_1i000002.tmp not found)
file C:\Users\Admin\AppData\Local\Temp\ST_1i000002.tmp saved

obs was 5, now 6

(1 real change made)
(1 real change made)
(1 real change made)
(1 real change made)
(1 real change made)
(1 real change made)
(1 real change made)
(1 real change made)
(1 real change made)
(1 real change made)

file ./data/pfas-tf-spresto.dta saved

(383 real changes made)

WARNING: Singleton observations not dropped; statistical significance is biased ([link](#))

(MWFE estimator converged in 1 iterations)

warning: missing F statistic; dropped variables due to collinearity or too few cluster
> s

HDFE Linear regression

Absorbing 1 HDFE group

Statistics robust to heteroskedasticity

Number of obs = 313

F(25, 26) = .

Prob > F = .

R-squared = 0.3727

Adj R-squared = -0.1581

Within R-sq. = 0.1364

Root MSE = 0.7500

Number of clusters (planning_area2014) = 27

(Std. Err. adjusted for

> 27 clusters in planning_area2014)

		pfda	Coef.	Robust Std. Err.	t
> P> t					
> [95% Con					
> f. Interval]					
	buff500m_transport_facilities		.0311462	.0218596	1.42
> 0.166					
> -.0137868					
> .0760793					
	age_at_recruitment		-.0583047	.3012139	-0.19
> 0.848					
> -.6774587					
> .5608492					
	c.age_at_recruitment#c.age_at_recruitment		.0006425	.0047213	0.14
> 0.893					
> -.0090623					
> .0103472					
	employed Working		.0899211	.0979037	0.92
> 0.367					
> -.1113229					
> .2911651					
	educ				
Institute of Technical Education ITE/NTC, NITEC, h..			-.3378504	.2304043	-1.47
> 0.155					
> -.8114532					
> .1357525					
Junior College/Centralised Institute GCE 'A' Level..			-.0575796	.1939329	-0.30
> 0.769					

>	- .4562144				
>		.3410552			
>	0.827	Postgraduate Masters degree/Doctorate		.0258584	.1172071 0.22
>		- .2150642			
>		.266781			
>	0.401	Secondary GCE 'O'/'N' Level		.2280744	.2670937 0.85
>		- .3209445			
>		.7770934			
>	0.022	Trade or work qualification not from University		-.8917413	.3658318 -2.44
>		-1.643719			
>		-.1397633			
>	University Bachelor's Degree/Postgrad Diploma/Prof..			.0526619	.1354587 0.39
>	0.701				
>		- .2257774			
>		.3311012			
>			marital		
>	0.914	Married/civil partnership/civil union		.0207129	.190691 0.11
>		- .3712581			
>		.4126839			
>			Never married		.8625207 .8065465 1.07
>	0.295				
>		- .7953594			
>		2.520401			
>			Separated		.1626317 .2858274 0.57
>	0.574				
>		- .4248949			
>		.7501584			
>			ethnic		
>	0.432		Indian		-.1143002 .1430805 -0.80
>		- .4084065			
>		.179806			
>			Malay		.3042679 .1807772 1.68
>	0.104				
>		- .067325			
>		.6758608			
>			Mix		-.4105918 .2891623 -1.42
>	0.168				
>		-1.004973			
>		.1837898			
>			hhincome		
>	0.808	1,622 - 3,273/month		-.0872397	.3558598 -0.25
>		- .81872			
>		.6442406			
>		10,694 - 13,188/month		.2320233	.308971 0.75
>	0.459				
>		- .4030757			
>		.8671224			
>		13,189 - 16,601/month		-.1106932	.3781767 -0.29
>	0.772				
>		- .8880466			
>		.6666601			
>		16,601 and above		.7534687	.3248374 2.32
>	0.028				
>		.0857558			
>		1.421181			
>		3,274 - 4,676/month		-.0425383	.3193273 -0.13
>	0.895				
>		- .698925			
>		.6138484			
>		4,677 - 6,144/month		.0710829	.2522998 0.28
>	0.780				
>		- .4475268			
>		.5896925			

```

        6,145 - 7,423/month | -.0480516 .3436864 -0.14
> 0.890
> -.7545092
> .658406
        7,424 - 9,082/month | .2647812 .2976716 0.89
> 0.382
> -.3470914
> .8766539
        9,083 - 10,693/month | .4781817 .2812867 1.70
> 0.101
> -.1000113
> 1.056375
        _cons | 1.78277 4.979751 0.36
> 0.723
> -8.453254
> 12.01879

```

Absorbed degrees of freedom:

Absorbed FE	Categories	- Redundant	= Num. Coefs
subzone2014	119	119	0 *

* = FE nested within cluster; treated as redundant for DoF computation
 (note: file C:\Users\Admin\AppData\Local\Temp\ST_1i000002.tmp not found)
 file C:\Users\Admin\AppData\Local\Temp\ST_1i000002.tmp saved
 obs was 6, now 7

(1 real change made)
 (1 real change made)
 (1 real change made)
 (1 real change made)
 (1 real change made)
 (1 real change made)
 (1 real change made)
 (1 real change made)
 (1 real change made)
 (1 real change made)

file ./data/pfas-tf-spresto.dta saved
 (384 real changes made)

WARNING: Singleton observations not dropped; statistical significance is biased ([link](#))
 (MWFE estimator converged in 1 iterations)

warning: missing F statistic; dropped variables due to collinearity or too few cluster
 > s

```

HDFE Linear regression          Number of obs   =       313
Absorbing 1 HDFE group         F( 25, 26)    =       .
Statistics robust to heteroskedasticity  Prob > F      =       .
                                   R-squared       =    0.4709
                                   Adj R-squared    =    0.0231
                                   Within R-sq.    =    0.1218
Number of clusters (planning_area2014) = 27 Root MSE =    1.0168

```

(Std. Err. adjusted for

> 27 clusters in planning_area2014)

		pfhpa	Coef.	Robust Std. Err.	t
> P> t					
> [95% Con					
> f. Interval]					
> 0.004	buff500m_transport_facilities		.1237955	.0390253	3.17
> .0435779					
> .2040132					
> 0.547	age_at_recruitment		.1976435	.323973	0.61
> -.4682926					

>		.8635795				
>		c.age_at_recruitment#c.age_at_recruitment		-.0034311	.0053324	-0.64
>	0.526					
>		-.014392				
>		.0075299				
>			employed			
>			Working			
>	0.573			-.1101721	.1928928	-0.57
>		-.5066689				
>		.2863248				
>			educ			
>		Institute of Technical Education ITE/NTC, NITEC, h..		-.3272055	.1980072	-1.65
>	0.110					
>		-.734215				
>		.0798041				
>		Junior College/Centralised Institute GCE 'A' Level..		.6392033	.3306618	1.93
>	0.064					
>		-.0404818				
>		1.318888				
>		Postgraduate Masters degree/Doctorate		-.0884468	.2108764	-0.42
>	0.678					
>		-.5219095				
>		.3450159				
>		Secondary GCE 'O'/'N' Level		.5785457	.5907783	0.98
>	0.336					
>		-.6358164				
>		1.792908				
>		Trade or work qualification not from University		-.4737362	.2935502	-1.61
>	0.119					
>		-1.077137				
>		.1296648				
>		University Bachelor's Degree/Postgrad Diploma/Prof..		.0686831	.2032917	0.34
>	0.738					
>		-.3491891				
>		.4865552				
>			marital			
>		Married/civil partnership/civil union		.9888064	.2733858	3.62
>	0.001					
>		.4268539				
>		1.550759				
>			Never married			
>	0.006			1.578179	.5218382	3.02
>		.5055256				
>		2.650833				
>			Separated			
>	0.108			.8825871	.5305981	1.66
>		-.2080729				
>		1.973247				
>			ethnic			
>			Indian			
>	0.476			-.1934835	.2673238	-0.72
>		-.7429756				
>		.3560085				
>			Malay			
>	0.098			.6411691	.3737353	1.72
>		-.1270549				
>		1.409393				
>			Mix			
>	0.298			-.3178772	.2993621	-1.06
>		-.9332249				
>		.2974704				
>			hhincome			
>		1,622 - 3,273/month		.9951784	.2460876	4.04
>	0.000					
>		.4893381				
>		1.501019				

>	0.000		10,694 - 13,188/month		1.184288	.2691948	4.40
>		.63095					
>			1.737625				
>			13,189 - 16,601/month		.9773143	.3294718	2.97
>	0.006						
>		.3000752					
>			1.654553				
>			16,601 and above		1.097496	.4109856	2.67
>	0.013						
>		.2527032					
>			1.942289				
>			3,274 - 4,676/month		.4694578	.2713331	1.73
>	0.095						
>		-.0882753					
>			1.027191				
>			4,677 - 6,144/month		.6649111	.2575027	2.58
>	0.016						
>		.1356067					
>			1.194216				
>			6,145 - 7,423/month		1.008506	.4080825	2.47
>	0.020						
>		.16968					
>			1.847331				
>			7,424 - 9,082/month		.9097052	.2519547	3.61
>	0.001						
>		.391805					
>			1.427605				
>			9,083 - 10,693/month		1.052497	.2579007	4.08
>	0.000						
>		.5223748					
>			1.58262				
>				_cons	-2.956209	4.920471	-0.60
>	0.553						
>		-13.07038					
>			7.157964				

Absorbed degrees of freedom:

Absorbed FE	Categories	- Redundant	= Num. Coefs
subzone2014	119	119	0 *

[illegible]

44. restore

45.

46. // =====

47. * -----

48. tictoc toc

```

----- Time log -----
Start time:  6 Dec 2025 09:55:36
End time:   6 Dec 2025 09:55:39
Elapsed seconds:      2
Elapsed minutes:      0
Elapsed hours:        0
    
```

49. log close

name: <unnamed>

log: \\wsl.localhost\Debian\home\lsys\gusto\scripts\tfpfas\logs\tf-pfas-sprest

> o.smcl

log type: smcl

closed on: 6 Dec 2025, 09:55:39
