

## LAMPIRAN

### Lampiran 1 Pengolahan Data dengan *Propensity score Matching*

```

(R)
@Hak cipta milik IPB University
Statistics/Data Analysis 14.2 Copyright 1985-2015 StataCorp LLC
StataCorp
4905 Lakeway Drive
College Station, Texas 77845 USA
800-STATA-PC http://www.stata.com
979-696-4600 stata@stata.com
979-696-4601 (fax)

Single-user Stata perpetual license:
Serial number: 10699393
Licensed to: Andrey
    
```

- Notes:
1. You are running Small Stata.
  2. Unicode is supported; see help unicode\_advice.

```

. import excel "D:\ACADEMIK IPB-ROSTY\AKADEMIK IPB\DATA HASIL LAPANGAN\DATA PER
LUAS UT\DATA ANALISIS DESKRIPTIF PER LUAS.xlsx", sheet(" GABUNG PER LUAS")
firstrow
    
```

```

. psmatch2 GAP UMUR LAMA PDDK JKEL jarak LLHN PDPTL persenipelig, out(PDPThath
BTOTTha PRODTV hargaalada) common logit
    
```

```

Logistic regression          Number of obs      =          224
                             LR chi2(8)              =          47.66
                             Prob > chi2             =          0.0000
                             Pseudo R2               =          0.1620
Log likelihood = -123.30069
    
```

	GAP	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
	UMUR	.17924	.0837346	2.14	0.032	.0151231	.3433569
	LAMA	-.194229	.0847583	-2.29	0.022	-.3603522	-.0281059
	PDDK	.0964471	.057933	1.66	0.096	-.0170996	.2099938
	JKEL	.3551232	.1681299	2.11	0.035	.0255946	.6846518
	jarak	.009724	.0259546	0.37	0.708	-.0411461	.0605941
	LLHN	.7437998	.3084823	2.41	0.016	.1391856	1.348414
	PDPTL	-1.04e-07	1.32e-07	-0.79	0.430	-3.64e-07	1.55e-07
	persnipelig	7.54091	1.916315	3.94	0.000	3.785002	11.29682
	_cons	-6.185356	1.981135	-3.12	0.002	-10.06831	-2.302402

Variable	Sample	Treated	Controls	Difference	S.E.	T-stat
PDPThath	Unmatched	39862463	20132718.9	19729744.1	4698542.52	4.20
	ATT	40331955.4	25397642.1	14934313.3	5144257.77	2.90
BTOTTha	Unmatched	17777019.4	15364301	2412718.35	1057561.03	2.28
	ATT	17725207.6	15067290.7	2657916.86	1613378.78	1.65
PRODTV	Unmatched	1167.97046	747.218573	420.751884	100.415189	4.19
	ATT	1175.60728	857.532065	318.075217	118.639072	2.68
hargaalada	Unmatched	49656.1033	47508.1301	2147.97321	272.449745	7.88
	ATT	49679.9517	47566.4251	2113.52657	372.058864	5.68

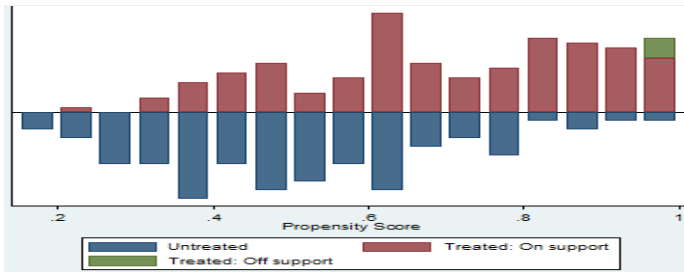
Note: S.E. does not take into account that the propensity score is estimated.

```

psmatch2: | psmatch2: Common
Treatment | support
assignment | Off suppo On suppor | Total
-----+-----+-----+-----
Untreated | 0 82 | 82
Treated | 4 138 | 142
-----+-----+-----+-----
Total | 4 220 | 224
    
```

. psgraph

. graph save Graph "D:\ACADEMIK IPB-ROSTY\ACADEMIK IPB\DATA HASIL LAPANGAN\HASIL OLAHAN STATA\Graph.gph"



pstest (UMUR LAMA PDDK JKEL LLHN persenipelig)

Variable	Mean		%bias	t-test		V(T)/V(C)
	Treated	Control		t	p> t	
UMUR	45.449	45.732	-2.8	-0.23	0.821	0.54*
LAMA	25.08	26.196	-10.9	-0.89	0.375	0.62*
PDDK	9.3478	9.4348	-3.0	-0.23	0.817	0.65*
JKEL	3.2246	3.3406	-11.9	-1.04	0.297	1.40*
LLHN	.96558	1.0254	-10.2	-0.76	0.447	0.82
persenipelig	.17995	.20048	-17.6	-1.17	0.243	0.56*

\* if variance ratio outside [0.71; 1.40]

Ps R2	LR chi2	p>chi2	MeanBias	MedBias	B	R	%Var
0.036	13.75	0.033	9.4	10.5	45.4*	1.25	83

\* if B>25%, R outside [0.5; 2]

. pstest2 (UMUR LAMA PDDK JKEL LLHN persenipelig)

Variable	Sample	Mean		%bias	%reduct  bias	t-test	
		Treated	Control			t	p> t
UMUR	Unmatched	45.317	47.854	-24.9		-1.87	0.063
	Matched	45.449	45.732	-2.8	88.9	-0.23	0.821
LAMA	Unmatched	24.915	28.244	-32.4		-2.41	0.017
	Matched	25.08	26.196	-10.9	66.5	-0.89	0.375
PDDK	Unmatched	9.4014	8.3902	34.9		2.55	0.012
	Matched	9.3478	9.4348	-3.0	91.4	-0.23	0.817
JKEL	Unmatched	3.2465	2.9146	33.9		2.43	0.016
	Matched	3.2246	3.3406	-11.9	65.1	-1.04	0.297
LLHN	Unmatched	.96303	.87012	15.8		1.12	0.263
	Matched	.96558	1.0254	-10.2	35.7	-0.76	0.447
persenipelig	Unmatched	.19131	.10874	70.9		4.83	0.000
	Matched	.17995	.20048	-17.6	75.1	-1.17	0.243

. drop in 23/24  
(2 observations deleted)

. drop in 136/137  
(2 observations deleted)



@Hak cipta milik IPB University

IPB University

```
. pstest2 (UMUR LAMA PDDK JKEL LLHN persenipelig)
```

Variable	Sample	Mean		%bias	%reduct  bias	t-test	
		Treated	Control			t	p> t
UMUR	Unmatched	45.449	47.854	-23.5		-1.75	0.081
	Matched	45.449	45.732	-2.8	88.2	-0.23	0.821
LAMA	Unmatched	25.08	28.244	-30.7		-2.27	0.024
	Matched	25.08	26.196	-10.8	64.7	-0.89	0.375
PDDK	Unmatched	9.3478	8.3902	33.0		2.39	0.018
	Matched	9.3478	9.4348	-3.0	90.9	-0.23	0.817
JKEL	Unmatched	3.2246	2.9146	31.7		2.26	0.025
	Matched	3.2246	3.3406	-11.9	62.6	-1.04	0.297
LLHN	Unmatched	.96558	.87012	16.3		1.15	0.251
	Matched	.96558	1.0254	-10.2	37.4	-0.76	0.447
persnipelig	Unmatched	.17995	.10874	66.4		4.57	0.000
	Matched	.17995	.20048	-19.1	71.2	-1.17	0.243

```
. psmatch2 GAP UMUR LAMA PDDK JKEL LLHN persenipelig, out(PDPThath BTOTHa PRODTV  
hargalada) common logit
```

```
Logistic regression                               Number of obs   =       220
                                                    LR chi2(6)      =       43.15
                                                    Prob > chi2     =       0.0000
Log likelihood = -123.70897                       Pseudo R2      =       0.1485
```

	GAP	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]
UMUR		.1761257	.0802023	2.20	0.028	.0189322 .3333193
LAMA		-.1920185	.0804218	-2.39	0.017	-.3496422 -.0343947
PDDK		.0913475	.0574547	1.59	0.112	-.0212616 .2039566
JKEL		.323587	.1627663	1.99	0.047	.0045709 .6426031
LLHN		.7276729	.2954486	2.46	0.014	.1486043 1.306741
persnipelig		7.415793	1.920301	3.86	0.000	3.652072 11.17951
_cons		-6.060056	1.965254	-3.08	0.002	-9.911883 -2.208229

Note: S.E. does not take into account that the propensity score is estimated.

```
psmatch2: | psmatch2: Common
Treatment | support
assignment | Off suppo On suppor | Total
```

Untreated		0	82		82
Treated		2	136		138
Total		2	218		220

```
. drop in 6
(1 observation deleted)
```

```
. drop in 27
(1 observation deleted)
```

Hak Cipta Dilindungi Undang-undang  
1. Dilarang mengutip sebagian atau seluruh karya tulis ini tanpa mencantumkan dan menyebutkan sumber :  
a. Pengutipan hanya untuk kepentingan pendidikan, penelitian, penulisan karya ilmiah, penyusunan laporan, penulisan kritik atau tinjauan suatu masalah  
b. Pengutipan tidak merugikan kepentingan yang wajar IPB University.  
2. Dilarang mengumunkan dan memperbanyak sebagian atau seluruh karya tulis ini dalam bentuk apapun tanpa izin IPB University.

```
. psmatch2 GAP UMUR LAMA PDDK JKEL LLHN persenipelig, out(PDPThath BTOTha PRODTV
hargalada) common logit
```

```
Logistic regression                               Number of obs   =       218
                                                    LR chi2(6)      =       41.34
                                                    Prob > chi2     =       0.0000
                                                    Pseudo R2      =       0.1432
```

```
Log likelihood = -123.67747
```

	GAP	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
	UMUR	.175615	.080191	2.19	0.029	.0184435	.3327866
	LAMA	-.1913863	.0804258	-2.38	0.017	-.3490179	-.0337546
	PDDK	.0911789	.0574353	1.59	0.112	-.0213922	.20375
	JKEL	.3238248	.162742	1.99	0.047	.0048564	.6427932
	LLHN	.7278016	.2953716	2.46	0.014	.1488839	1.306719
	persenipelig	7.36783	1.93198	3.81	0.000	3.58122	11.15444
	_cons	-6.047486	1.965469	-3.08	0.002	-9.899734	-2.195238

Variable	Sample	Treated	Controls	Difference	S.E.	T-stat
PDPThath	Unmatched	40227952.1	20132718.9	20095233.2	4773748.33	4.21
	ATT	40227952.1	30188808.4	10039143.7	4912335.49	2.04
BTOTha	Unmatched	17696779.5	15364301	2332478.45	1075099.56	2.17
	ATT	17696779.5	14238251.7	3458527.8	1576829.88	2.19
PRODTV	Unmatched	1171.75592	747.218573	424.537345	102.053767	4.16
	ATT	1171.75592	933.517184	238.238735	112.796556	2.11
hargalada	Unmatched	49724.2647	47508.1301	2216.13462	271.852351	8.15
	ATT	49724.2647	47464.4608	2259.80392	366.39093	6.17

Note: S.E. does not take into account that the propensity score is estimated.

```

      | psmatch2:
psmatch2: | Common
Treatment | support
assignment | On suppor | Total
-----+-----+-----
Untreated |      82 |      82
Treated   |     136 |     136
-----+-----+-----
Total     |     218 |     218

```

```
. pstest2 (UMUR LAMA PDDK JKEL LLHN persenipelig)
```

Variable	Sample	Mean		%bias	%reduct	t-test	
		Treated	Control			t	p> t
UMUR	Unmatched	45.654	47.854	-21.6		-1.61	0.110
	Matched	45.654	45.596	0.6	97.3	0.05	0.961
LAMA	Unmatched	25.324	28.244	-28.6		-2.11	0.036
	Matched	25.324	25.853	-5.2	81.9	-0.43	0.667
PDDK	Unmatched	9.3088	8.3902	31.6		2.29	0.023
	Matched	9.3088	9.0221	9.9	68.8	0.77	0.440
JKEL	Unmatched	3.2279	2.9146	32.1		2.28	0.023
	Matched	3.2279	3.2426	-1.5	95.3	-0.13	0.900
LLHN	Unmatched	.97537	.87012	18.0		1.27	0.206
	Matched	.97537	1.0761	-17.2	4.3	-1.28	0.201
persenipelig	Unmatched	.17463	.10874	64.0		4.42	0.000
	Matched	.17463	.1875	-12.5	80.5	-0.76	0.446

```
. teffects psmatch (PDPThath) (GAP UMUR LAMA PDDK JKEL LLHN persenipelig), atet
Treatment-effects estimation      Number of obs      =      218
Estimator      : propensity-score matching  Matches: requested =      1
Outcome model  : matching                min =      1
Treatment model: logit                    max =      1
```

		Coef.	AI Robust Std. Err.	z	P> z	[95% Conf. Interval]	
ATET	GAP						
(1 vs 0)		1.00e+07	4326298	2.32	0.020	1559756	1.85e+07

```
. teffects psmatch (BTOTha) (GAP UMUR LAMA PDDK JKEL LLHN persenipelig), atet
Treatment-effects estimation      Number of obs      =      218
Estimator      : propensity-score matching  Matches: requested =      1
Outcome model  : matching                min =      1
Treatment model: logit                    max =      1
```

		Coef.	AI Robust Std. Err.	z	P> z	[95% Conf. Interval]	
ATET	GAP						
(1 vs 0)		3458528	1044234	3.31	0.001	1411866	5505189

```
. teffects psmatch (PRODTV) (GAP UMUR LAMA PDDK JKEL LLHN persenipelig), atet
Treatment-effects estimation      Number of obs      =      218
Estimator      : propensity-score matching  Matches: requested =      1
Outcome model  : matching                min =      1
Treatment model: logit                    max =      1
```

		Coef.	AI Robust Std. Err.	z	P> z	[95% Conf. Interval]	
ATET	GAP						
(1 vs 0)		238.2387	90.60045	2.63	0.009	60.66512	415.8123

```
. teffects psmatch (hargalada) (GAP UMUR LAMA PDDK JKEL LLHN persenipelig), atet
Treatment-effects estimation      Number of obs      =      218
Estimator      : propensity-score matching  Matches: requested =      1
Outcome model  : matching                min =      1
Treatment model: logit                    max =      1
```

		Coef.	AI Robust Std. Err.	z	P> z	[95% Conf. Interval]	
ATET	GAP						
(1 vs 0)		2259.804	202.3834	11.17	0.000	1863.14	2656.468