

## LAMPIRAN

### 1 Model Pertumbuhan Perusahaan

#### 1.1 Model Pooled Least Square

```
. reg outgrowth age size ms ex d_cred prod
```

Source	SS	df	MS	Number of obs =	897
Model	38680316.9	6	6446719.49	F( 6, 890) =	58.76
Residual	97651396	890	109720.67	Prob > F =	0.0000
				R-squared =	0.2837
				Adj R-squared =	0.2789
Total	136331713	896	152155.93	Root MSE =	331.24

outgrowth	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
age	-70.10463	19.89338	-3.52	0.000	-109.148	-31.06123
size	-110.6694	18.34915	-6.03	0.000	-146.682	-74.65671
ms	219.5406	15.72217	13.96	0.000	188.6838	250.3975
ex	49.57291	15.21276	3.26	0.001	19.71585	79.42998
d_cred	-9.578059	24.44914	-0.39	0.695	-57.56275	38.40663
prod	15.00746	19.39042	0.77	0.439	-23.04881	53.06373
_cons	-107.2334	152.8192	-0.70	0.483	-407.1614	192.6945

#### 1.2 Model Fixed Effects

```
. xtreg outgrowth age size ms ex d_cred prod, fe
```

Fixed-effects (within) regression	Number of obs =	897
Group variable (i): comp	Number of groups =	162
R-sq: within = 0.3895	Obs per group: min =	1
between = 0.1888	avg =	5.5
overall = 0.2761	max =	9
	F(6,729) =	77.50
corr(u_i, Xb) = -0.5285	Prob > F =	0.0000

outgrowth	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
age	-85.45629	37.80752	-2.26	0.024	-159.6809	-11.23168
size	-193.8569	43.78133	-4.43	0.000	-279.8094	-107.9043
ms	300.3883	19.42024	15.47	0.000	262.2621	338.5146
ex	131.6684	22.82569	5.77	0.000	86.85648	176.4804
d_cred	1.656588	39.52843	0.04	0.967	-75.94655	79.25973
prod	-8.222852	24.4903	-0.34	0.737	-56.30278	39.85708
_cons	-603.3603	307.8894	-1.96	0.050	-1207.816	1.095386
sigma_u	238.03117					
sigma_e	310.97642					
rho	.36943745	(fraction of variance due to u_i)				

F test that all u\_i=0: F(161, 729) = 1.74 Prob > F = 0.0000

### 1.3 Model Random Effects

```
. xtreg outgrowth age size ms ex d_cred prod, re
```

```
Random-effects GLS regression           Number of obs   =       897
Group variable (i): comp                Number of groups =       162

R-sq:  within = 0.3830                  Obs per group:  min =        1
      between = 0.1896                      avg =       5.5
      overall = 0.2837                      max =        9

Random effects u_i ~ Gaussian           Wald chi2(6)    =    352.53
corr(u_i, X) = 0 (assumed)              Prob > chi2    =    0.0000
```

outgrowth	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
age	-70.10463	19.89338	-3.52	0.000	-109.0949	-31.11433
size	-110.6694	18.34915	-6.03	0.000	-146.6331	-74.70569
ms	219.5406	15.72217	13.96	0.000	188.7257	250.3555
ex	49.57291	15.21276	3.26	0.001	19.75645	79.38938
d_cred	-9.578059	24.44914	-0.39	0.695	-57.49749	38.34138
prod	15.00746	19.39042	0.77	0.439	-22.99706	53.01198
_cons	-107.2334	152.8192	-0.70	0.483	-406.7535	192.2867
sigma_u	0					
sigma_e	310.97642					
rho	0	(fraction of variance due to u_i)				

### 2 Tes Hausman

```
. quietly xtreg outgrowth age size ms ex d_cred prod, fe
. estimates store fixed
. quietly xtreg outgrowth age size ms ex d_cred prod, re
. estimates store random
. hausman fixed random
```

	---- Coefficients ----			
	(b) fixed	(B) random	(b-B) Difference	sqrt(diag(V_b-V_B)) S.E.
age	-85.45629	-70.10463	-15.35166	32.15062
size	-193.8569	-110.6694	-83.1875	39.75064
ms	300.3883	219.5406	80.84772	11.39996
ex	131.6684	49.57291	82.09551	17.01717
d_cred	1.656588	-9.578059	11.23465	31.06021
prod	-8.222852	15.00746	-23.23031	14.95949

b = consistent under Ho and Ha; obtained from xtreg  
 B = inconsistent under Ha, efficient under Ho; obtained from xtreg

Test: Ho: difference in coefficients not systematic

```
chi2(6) = (b-B)'[(V_b-V_B)^(-1)](b-B)
        =    127.48
Prob>chi2 =    0.0000
```

### 3 Uji Pelanggaran Asumsi

#### 3.1 Multikolinearitas

```
. corr age size d_own d_clust ms ex d_cred prod
(obs=897)
```

	age	size	d_own	d_clust	ms	ex	d_cred	prod
age	1.0000							
size	0.0606	1.0000						
d_own	0.0703	-0.2082	1.0000					
d_clust	-0.0178	-0.3144	0.0614	1.0000				
ms	0.1213	0.4049	-0.2387	-0.1829	1.0000			
ex	0.0088	0.7602	-0.1945	-0.2141	0.5424	1.0000		
d_cred	0.0907	0.2880	0.0072	-0.4141	0.1535	0.2597	1.0000	
prod	0.0547	0.1135	-0.1180	-0.1536	0.4489	0.5133	0.1326	1.0000

#### 3.2 Autokorelasi dan Heteroskedastisitas

```
. xtgls outgrowth age size ms ex d_cred prod
```

Cross-sectional time-series FGLS regression

Coefficients: generalized least squares  
Panels: homoskedastic  
Correlation: no autocorrelation

Estimated covariances	=	1	Number of obs	=	897
Estimated autocorrelations	=	0	Number of groups	=	162
Estimated coefficients	=	7	Obs per group: min	=	1
			avg	=	5.537037
			max	=	9
			Wald chi2(6)	=	355.31
Log likelihood	=	-6474.427	Prob > chi2	=	0.0000

outgrowth	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]
age	-70.10463	19.8156	-3.54	0.000	-108.9425 -31.26676
size	-110.6694	18.27742	-6.05	0.000	-146.4924 -74.84629
ms	219.5406	15.66071	14.02	0.000	188.8462 250.235
ex	49.57291	15.15329	3.27	0.001	19.87302 79.27281
d_cred	-9.578059	24.35356	-0.39	0.694	-57.31015 38.15403
prod	15.00746	19.31461	0.78	0.437	-22.84848 52.8634
_cons	-107.2334	152.2217	-0.70	0.481	-405.5825 191.1157

#### 4 Model Kemampuan Perusahaan Bertahan dalam Industri

```
. probit p_surv outgrowth age size ms ex d_cred prod
```

```
Iteration 0: log likelihood = -4745.9077
Iteration 1: log likelihood = -3229.0911
Iteration 2: log likelihood = -2988.0414
Iteration 3: log likelihood = -2959.7688
Iteration 4: log likelihood = -2956.3219
Iteration 5: log likelihood = -2955.3356
Iteration 6: log likelihood = -2955.0724
Iteration 7: log likelihood = -2954.9963
Iteration 8: log likelihood = -2954.9735
```

```
Probit estimates                               Number of obs =      6879
LR chi2(7) =      3581.87
Prob > chi2 =      0.0000
Pseudo R2 =      0.3774

Log likelihood = -2954.9735
```

p_surv	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]
outgrowth	-.0001306	.0000867	-1.51	0.132	-.0003004 .0000393
age	.0816122	.0027944	29.21	0.000	.0761354 .0870891
size	.0042913	.0002285	18.78	0.000	.0038435 .0047391
ms	-1.120759	.0642063	-17.46	0.000	-1.246601 -.9949174
ex	-3.53e-08	1.26e-08	-2.81	0.005	-5.99e-08 -1.07e-08
d_cred	6.62e-07	1.17e-06	0.57	0.571	-1.63e-06 2.95e-06
prod	.0001623	7.01e-06	23.14	0.000	.0001486 .0001761
_cons	-.9429154	.0265628	-35.50	0.000	-.9949776 -.8908532

note: 0 failures and 34 successes completely determined.

```
. probit p_surv outgrowth age size ms ex d_cred prod, robust
```

```
Iteration 0: log pseudo-likelihood = -4745.9077
Iteration 1: log pseudo-likelihood = -3229.0911
Iteration 2: log pseudo-likelihood = -2988.0414
Iteration 3: log pseudo-likelihood = -2959.7688
Iteration 4: log pseudo-likelihood = -2956.3219
Iteration 5: log pseudo-likelihood = -2955.3356
Iteration 6: log pseudo-likelihood = -2955.0724
Iteration 7: log pseudo-likelihood = -2954.9963
Iteration 8: log pseudo-likelihood = -2954.9735
```

```
Probit estimates                               Number of obs =      6879
Wald chi2(7) =      564.22
Prob > chi2 =      0.0000
Pseudo R2 =      0.3774

Log pseudo-likelihood = -2954.9735
```

p_surv	Coef.	Robust Std. Err.	z	P> z	[95% Conf. Interval]
outgrowth	-.0001306	.0001323	-0.99	0.324	-.0003899 .0001288
age	.0816122	.0078264	10.43	0.000	.0662728 .0969517
size	.0042913	.0005107	8.40	0.000	.0032903 .0052923
ms	-1.120759	.1584603	-7.07	0.000	-1.431336 -.810183
ex	-3.53e-08	2.28e-08	-1.55	0.122	-8.01e-08 9.39e-09
d_cred	6.62e-07	1.51e-06	0.44	0.661	-2.30e-06 3.62e-06
prod	.0001623	.0000178	9.11	0.000	.0001274 .0001972
_cons	-.9429154	.0368757	-25.57	0.000	-1.01519 -.8706405

note: 0 failures and 34 successes completely determined.

```
. dprobit p_surv outgrowth age size ms ex d_cred prod, robust
```

```
Iteration 0: log pseudo-likelihood = -4745.9077
Iteration 1: log pseudo-likelihood = -3229.0911
Iteration 2: log pseudo-likelihood = -2988.0414
Iteration 3: log pseudo-likelihood = -2959.7688
Iteration 4: log pseudo-likelihood = -2956.3219
Iteration 5: log pseudo-likelihood = -2955.3356
Iteration 6: log pseudo-likelihood = -2955.0724
Iteration 7: log pseudo-likelihood = -2954.9963
Iteration 8: log pseudo-likelihood = -2954.9735
```

Probit estimates

```
Number of obs = 6879
Wald chi2(7) = 564.22
Prob > chi2 = 0.0000
Pseudo R2 = 0.3774
```

Log pseudo-likelihood = -2954.9735

p_surv	dF/dx	Robust			x-bar	95% C.I.	
		Std. Err.	z	P> z		[	]
outgro~h	-.0000507	.0000513	-0.99	0.324	21.3054	-.000151	.00005
age	.0316591	.0030041	10.43	0.000	7.00291	.025771	.037547
size	.0016647	.0001946	8.40	0.000	72.8493	.001283	.002046
ms	-.4347668	.0610784	-7.07	0.000	.108858	-.554478	-.315055
ex	-1.37e-08	8.85e-09	-1.55	0.122	317545	-3.1e-08	3.6e-09
d_cred	2.57e-07	5.86e-07	0.44	0.661	4542.17	-8.9e-07	1.4e-06
prod	.000063	6.82e-06	9.11	0.000	2639.69	.00005	.000076
obs. P	.5401948						
pred. P	.5935554	(at x-bar)					

z and P>|z| are the test of the underlying coefficient being 0

### 5 Tes Goodness of Fit

```
. lstat
```

Probit model for p\_surv

Classified	True		Total
	D	~D	
+	3148	484	3632
-	568	2679	3247
Total	3716	3163	6879

Classified + if predicted Pr(D) >= .5  
True D defined as p\_surv != 0

Sensitivity	Pr( +   D)	84.71%
Specificity	Pr( -   ~D)	84.70%
Positive predictive value	Pr( D   +)	86.67%
Negative predictive value	Pr( ~D   -)	82.51%
False + rate for true ~D	Pr( +   ~D)	15.30%
False - rate for true D	Pr( -   D)	15.29%
False + rate for classified +	Pr( ~D   +)	13.33%
False - rate for classified -	Pr( D   -)	17.49%
Correctly classified		84.71%