

## CHAPTER V

### CONCLUSION, IMPLICATION, LIMITATION, AND SUGGESTION

#### 5.1 Conclusion

Investors have to make a decision to where and when they invest their resources by considering the risk, expected return and which securities they choose. By using advance information technology, especially internet connection, it makes the investors easier to get information and data about the company stock that they choose that give impact to the investor behavior. Investors have a lot of alternatives, and the way they limiting their alternatives is depend on their preferences; usually investors choose stocks that have first caught their attention

From the analysis above, this research found that there are different result between the influenced of investors' attention of company stock information to the stock return, stock liquidity and stock return volatility between Indonesia and India on the period observation from the year 2011 until 2013. The conclusion of this study is derived from the hypotheses testing in answering the problem statement:

- a. The first hypothesis (H.1a) which is attention has positive influence to stock return of manufacture companies in Indonesia is not supported. It is means that investors' attention that measured using Google search volume index is not influenced the stock return of manufacture companies in Indonesia for the observation period from 2011-2013. The result between Indonesia and India is the same where the hypothesis 1b (H.1 b) that stated

attention has positive influence to stock return of manufacture company in India is not supported by the result of hypothesis testing.

- b. Second hypothesis (H.1b) which is attention has positive influence to the stock liquidity of manufacture companies in Indonesia is significantly supported by the result of hypothesis testing. Meanwhile in India, the second hypothesis (H.2b) which is attention has positive influence to the stock liquidity of Manufacture Company in India is not supported.
- c. Third hypothesis for Indonesia (H.3a) which is attention has positive influence to the return volatility manufacture companies in Indonesia and the third hypothesis (H.3b) which is attention has positive influence to the return volatility of manufacture company in India is significantly supported.
- d. Fourth hypothesis (H.4a) which is Indonesia and India has the same result on the influenced of Investors' attention to the return, liquidity, and return volatility is not supported because the result of hypothesis testing is supported the hypothesis 4b (H.4b) that stated Indonesia and India has different result on the influenced Investors' attention to the return, liquidity, and return volatility.

## **5.2 Managerial Implication**

The result of this research is expected to become a benefit for:

### **a. For the Researcher**

This research is expected to give additional references to conduct the similar research for other researchers, in different time period of observation the result could be different and it is interesting to compare between one country to another's.

### **b. For the investors**

This research is expected to give the information about the influence of searching activity that investors did on return, liquidity, and return volatility before they invest their money on stocks that they choose.

## **5.3 Research Limitation and Suggestion for Further Research**

### **5.3.1 Research Limitation**

There are some limitations of this study; first, this study is only focusing on one sector industry which is manufacturing sector. Second is the observation period of this study is only three years from 2011-2013. Third is the limitation of the data availability of Google search volume index that only start from the year 2011, because the previous year data has been removed.

### **5.3.2 Suggestion for Further Research**

For further research, the author suggests that the researcher can add more subsector that not only focus on manufacture sectors, and make longer observation period more than three years also compare more than only two stock exchange or not only compare Asian capital market.

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### Appendix 1: Sample List of India Manufacturing Companies

INDIA-AUTOMOBILES	NO	COMPANY TICKER	COMPANY NAME
	1	BHARATFORG	Bharat Forge Ltd
	2	EXIDEIND	Exide Industries Ltd
	3	HEROMOTOCO	Hero MotoCorp Ltd
	4	M&M	Mahindra & Mahindra
	5	MARUTI	Maruti Suzuki India Ltd
	6	TATAMOTORS	TATAMOTORS
FMCG (Fast Moving Consumer Goods)			
	7	COLPAL	Dabur India Ltd
	8	EMAMILTD	Emami Ltd
	9	GODREJCP	Godrej Consumer Products Ltd
	10	ITC	I T C Ltd
	11	JUBLFOOD	Jubilant Foodworks Ltd
	12	MCLEODRUSS	McLeod Russel India Ltd
	13	UBL	United Breweries Ltd
PHARMACEUTICALS			
	14	DRREDDY	Dr. Reddy's Laboratories Ltd
	15	GLENMARK	Glenmark Pharmaceuticals Ltd
	16	LUPIN	Lupin Ltd
	17	PEL	Piramal Enterprises Ltd
	18	SUNPHARMA	Sun Pharmaceutical Industries Ltd

## Appendix 2: Sample List of Indonesia Manufacturing Companies

INDONESIA-BASIC INDUSTRI & CHEMICAL			
	1	AKPI	Argha Karya Prima Industry Tbk
	2	AMFG	Asahimas Flat Glass Tbk.
	3	APLI	Asiaplast Industries Tbk.
	4	BRPT	Barito Pacific Tbk.
	5	CPIN	Charoen Pokphand Indonesia Tbk
	6	FASW	Fajar Surya Wisesa Tbk.
	7	INKP	Indah Kiat Pulp & Paper Tbk.
	8	INTP	Indocement Tunggul Prakasa Tbk
	9	JPFA	Japfa Comfeed Indonesia Tbk.
	10	MAIN	Malindo Feedmill Tbk.
	11	SIPD	Sierad Produce Tbk.
	12	SMCB	Holcim Indonesia Tbk.
	13	SMGR	Semen Indonesia (Persero) Tbk.
	14	TKIM	Pabrik Kertas Tjiwi Kimia Tbk.
	15	TOTO	Surya Toto Indonesia Tbk.
	16	TPIA	Chandra Asri Petrochemical Tbk
	17	TRST	Trias Sentosa Tbk.
CONSUMPTION			
	18	ADES	Akasha Wira International Tbk.
	19	AISA	Tiga Pilar Sejahtera Food Tbk.
	20	GGRM	Gudang Garam Tbk.
	21	INAF	Indofarma Tbk.
	22	INDF	Indofood Sukses Makmur Tbk.
	23	KAEF	Kimia Farma Tbk.
	24	KLBF	Kalbe Farma Tbk.
	25	MERK	Merck Tbk.
	26	MRAT	Mustika Ratu Tbk.
	27	MYOR	Mayora Indah Tbk
	28	RMBA	Bentoel Internasional Investam
	29	STTP	Siantar Top Tbk.
	30	TSPC	Tempo Scan Pacific Tbk.
	31	ULTJ	Ultra Jaya Milk Industry & Tra
	32	UNVR	Unilever Indonesia Tbk.
MISCELLANEOUS			
	33	ARGO	Argo Pantes Tbk
	34	ASII	Astra International Tbk.
	35	AUTO	Astra Otoparts Tbk.
	36	GDYR	Goodyear Indonesia Tbk.

	37	GJTL	Gajah Tunggal Tbk.
	38	IMAS	Indomobil Sukses Internasional
	39	INDS	Indospring Tbk.
	40	KBLI	KMI Wire & Cable Tbk.
	41	POLY	Asia Pacific Fibers Tbk



**Appendix 3: Number of Manufacturing Companies Sample in Indonesia**

Category	Number of Company
Basic Industry & Chemical	17
Consumption	15
Miscellaneous	9
<b>Total</b>	<b>41</b>

**Appendix 4: Number of Manufacturing Companies Sample in India**

Category	Number of Company
Automobiles	6
FMCG (Fast Moving Consumer Goods)	7
Pharmaceutical	5
<b>Total</b>	<b>18</b>

**Appendix 5: Descriptive Statistic Table of Dependent Variables in Indonesia**

	TV	STDEV	RETURN
Mean	16.28471	0.143082	0.192497
Median	16.78142	0.114423	0.161329
Maximum	20.57248	2.126406	1.584781
Minimum	2.912848	0.031279	-0.907465
Std. Dev.	2.752851	0.194267	0.428522
Skewness	-1.380167	8.832173	0.377815
Kurtosis	6.499756	89.92895	3.697996
Jarque-Bera	101.8221	40326.94	5.423148
Probability	0.000000	0.000000	0.066432
Sum	2003.019	17.59908	23.67712
Sum Sq. Dev.	924.5389	4.604231	22.40297
Observations	123	123	123
Cross sections	41	41	41

**Appendix 6: Descriptive Statistic Table of Dependent Variables in India**

	GI	SIZE	MB	PE	AGE
Mean	32.25000	28.99704	3.421870	26.38748	19.95122
Median	27.33333	29.00974	2.160000	13.92000	21.00000
Maximum	74.66667	35.46788	40.09000	1193.800	35.00000
Minimum	0.000000	21.29261	-0.150000	-239.3900	5.000000
Std. Dev.	21.23518	2.433748	5.910303	122.5600	5.502389
Skewness	0.258957	-0.551407	5.115161	7.954560	0.241908
Kurtosis	1.717259	4.239741	30.72422	72.73042	4.014699
Jarque-Bera	9.807510	14.10993	4475.621	26216.59	6.476421
Probability	0.007419	0.000863	0.000000	0.000000	0.039234
Sum	3966.750	3566.636	420.8900	3245.660	2454.000
Sum Sq. Dev.	55013.83	722.6215	4261.665	1832558.	3693.707
Observations	123	123	123	123	123
Cross sections	41	41	41	41	41

**Appendix 7: Descriptive Statistic Table of Dependent Variables in Indonesia**

	TV	STDEV	RETURN
Mean	15.88547	0.089049	0.198667
Median	15.73525	0.083987	0.188544
Maximum	18.59001	0.255141	1.071793
Minimum	13.77604	0.037026	-0.479875
Std. Dev.	1.201040	0.042388	0.264119
Skewness	0.548673	1.582841	0.408077
Kurtosis	2.790616	6.273827	5.408863
Jarque-Bera	2.808018	46.66386	14.55464
Probability	0.245610	0.000000	0.000691
Sum	857.8153	4.808650	10.72804

Sum Sq. Dev.	76.45234	0.095225	3.697218
Observations	54	54	54
Cross sections	18	18	18

### Appendix 8: Descriptive Statistic Table of Dependent Variables in India

	GI	SIZE	MB	PE	AGE
Mean	26.87685	24.99886	8.101667	36.74259	9.222222
Median	22.62500	25.48685	5.385000	26.27000	9.000000
Maximum	62.08333	28.41067	34.86000	284.6400	17.00000
Minimum	3.750000	15.23700	0.600000	0.000000	1.000000
Std. Dev.	15.43756	2.609170	7.680937	42.12651	4.558495
Skewness	0.666659	-2.729895	2.134452	4.109084	0.127306
Kurtosis	2.566110	10.89471	7.320964	23.58079	2.036471
Jarque-Bera	4.423497	207.3054	83.01211	1104.991	2.234737
Probability	0.109509	0.000000	0.000000	0.000000	0.327140
Sum	1451.350	1349.939	437.4900	1984.100	498.0000
Sum Sq. Dev.	12630.87	360.8117	3126.830	94056.06	1101.333
Observations	54	54	54	54	54
Cross sections	1	1	1	1	1

### Appendix 9: Google Search Volume Index of Manufacture Companies Indonesia vs. India Yearly data (2011-2013)

	2011		2012		2013	
	Indonesia	India	Indonesia	India	Indonesia	India
Average	29.02	35.03	37.43	24.78	30.30	20.83
Maximum	73.08	62.08	74.67	52.25	62.00	48.08
Minimum	0.00	9.75	3.33	5.08	2.08	3.75

**Appendix 10:**

**Trading Volume of Manufacture Companies  
Indonesia vs. India  
Yearly data (2011-2013)**

	2011		2012		2013	
	Indonesia	India	Indonesia	India	Indonesia	India
Average	16.69	16.06	16.00	15.84	16.17	15.76
Maximum	20.42	18.59	20.46	18.44	20.57	18.17
Minimum	9.99	14.28	2.91	13.78	9.94	13.93

**Appendix 11:**

**Standard Deviation of Manufacture Companies  
Indonesia vs. India  
Yearly data (2011-2013)**

	2011		2012		2013	
	Indonesia	India	Indonesia	India	Indonesia	India
Average	0.14	0.10	0.12	0.09	0.17	0.08
Maximum	0.47	0.26	0.27	0.19	2.13	0.13
Minimum	0.06	0.04	0.03	0.04	0.05	0.04

**Appendix 12:**

**Return of Manufacture Companies  
Indonesia vs. India  
Yearly data (2011-2013)**

	2011		2012		2013	
	Indonesia	India	Indonesia	India	Indonesia	India
Average	0.30	0.20	0.19	0.23	0.16	0.09
Maximum	1.58	1.07	0.99	0.92	0.51	1.44
Minimum	-0.44	-0.48	-0.91	-0.03	-0.41	-0.73

**Appendix 13:**

**Size of Manufacture Companies  
Indonesia vs. India  
Yearly data (2011-2013)**

	2011		2012		2013	
	Indonesia	India	Indonesia	India	Indonesia	India
Average	28.82	24.84	28.96	24.97	29.21	25.18
Maximum	35.47	27.86	34.86	28.10	33.27	28.41
Minimum	21.90	15.61	21.99	15.26	21.29	15.24

**Appendix 14:**

**Market to Book ratio of Manufacture Companies  
Indonesia vs. India  
Yearly data (2011-2013)**

	2011		2012		2013	
	Indonesia	India	Indonesia	India	Indonesia	India
Average	3.34	7.70	3.57	8.30	3.36	8.31
Maximum	38.97	28.85	40.09	34.86	36.00	34.62
Minimum	-0.15	0.60	-0.06	0.73	-0.02	1.00

**Appendix 15:**

**Price Earnings ratio of Manufacture Companies  
Indonesia vs. India  
Yearly data (2011-2013)**

	2011		2012		2013	
	Indonesia	India	Indonesia	India	Indonesia	India
Average	23.53	26.10	42.13	36.57	13.50	47.56
Maximum	618.97	87.43	1193.80	115.37	88.69	284.64
Minimum	-239.39	0.54	-15.89	14.26	-50.80	0.00



**Appendix 16:**

**Ages of Manufacture Companies  
Indonesia vs. India  
Yearly data (2011-2013)**

	2011		2012		2013	
	Indonesia	India	Indonesia	India	Indonesia	India
Average	19	8	20	9	21	9
Maximum	33	15	34	16	35	17
Minimum	5	1	6	2	7	3

**Appendix 17:**

**Correlation Matrix for Manufacture Companies in Indonesia  
Yearly data (2011-2013)**

	GI	SIZE	MB	PE	AGE
GI	1.000000	-0.020159	-0.159289	0.054050	-0.109348
SIZE	-0.020159	1.000000	0.376929	0.054654	0.321591
MB	-0.159289	0.376929	1.000000	0.036672	0.323486
PE	0.054050	0.054654	0.036672	1.000000	-0.047101
AGE	-0.109348	0.321591	0.323486	-0.047101	1.000000

**Appendix 18:**

**Correlation Matrix for Manufacture Companies in India  
Yearly data (2011-2013)**

	GI	SIZE	MB	PE	AGE
GI	1.000000	0.064659	-0.242962	0.009921	0.203687
SIZE	0.064659	1.000000	0.175096	0.074985	0.152904
MB	-0.242962	0.175096	1.000000	0.144179	-0.513974
PE	0.009921	0.074985	0.144179	1.000000	-0.039734
AGE	0.203687	0.152904	-0.513974	-0.039734	1.000000

**Appendix 19:**

**CHOW TEST RESULT FOR HYPOTHESIS 1A**

Redundant Fixed Effects Tests

Pool: RETURN

Test cross-section fixed effects

Effects Test	Statistic	d.f.	Prob.
Cross-section F	0.957709	(40,77)	0.5504
Cross-section Chi-square	49.667935	40	0.1406

Cross-section fixed effects test equation:

Dependent Variable: RETURN?

Method: Panel Least Squares

Date: 05/23/14 Time: 21:12

Sample: 2011 2013

Included observations: 3

Cross-sections included: 41

Total pool (balanced) observations: 123

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.792494	0.489751	1.618157	0.1083
GI?	0.001066	0.001840	0.579325	0.5635
SIZE?	-0.014201	0.017545	-0.809407	0.4199
MB?	0.013647	0.007287	1.872857	0.0636
PE?	-0.000454	0.000315	-1.440060	0.1525
AGE?	-0.012898	0.007610	-1.694799	0.0928

R-squared	0.061467	Mean dependent var	0.192497
Adjusted R-squared	0.021358	S.D. dependent var	0.428522
S.E. of regression	0.423921	Akaike info criterion	1.169010
Sum squared resid	21.02593	Schwarz criterion	1.306190
Log likelihood	-65.89414	F-statistic	1.532518
Durbin-Watson stat	2.044769	Prob(F-statistic)	0.184986

**Appendix 20:****Result for hypothesis 1a using common model**

Dependent Variable: RETURN?

Method: Pooled Least Squares

Date: 05/23/14 Time: 21:07

Sample: 2011 2013

Included observations: 3

Cross-sections included: 41

Total pool (balanced) observations: 123

Variable	Coefficient	Std. Error	t-Statistic	Prob.
GI?	0.001337	0.001845	0.724585	0.4701
SIZE?	0.012566	0.005888	2.133954	0.0349
MB?	0.009894	0.006955	1.422543	0.1575
PE?	-0.000468	0.000317	-1.477253	0.1423
AGE?	-0.012095	0.007646	-1.581874	0.1164
R-squared	0.040462	Mean dependent var		0.192497
Adjusted R-squared	0.007936	S.D. dependent var		0.428522
S.E. of regression	0.426818	Akaike info criterion		1.174883
Sum squared resid	21.49649	Schwarz criterion		1.289200
Log likelihood	-67.25532	Durbin-Watson stat		1.991336

**Appendix 21:**

**Chow test result (comparison common effect vs. fixed effect) for hypothesis 1b**

Redundant Fixed Effects Tests

Pool: RETURN

Test cross-section fixed effects

Effects Test	Statistic	d.f.	Prob.
Cross-section F	2.325023	(17,31)	0.0201
Cross-section Chi-square	44.387221	17	0.0003

Cross-section fixed effects test equation:

Dependent Variable: RETURN?

Method: Panel Least Squares

Date: 05/23/14 Time: 21:24

Sample: 2011 2013

Included observations: 3

Cross-sections included: 18

Total pool (balanced) observations: 54

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.175674	0.343550	-0.511350	0.6115
GI?	0.001519	0.002385	0.636805	0.5273
SIZE?	0.012849	0.014451	0.889109	0.3784
MB?	0.007310	0.005776	1.265539	0.2118
PE?	0.000779	0.000851	0.915862	0.3643
AGE?	-0.008192	0.009473	-0.864847	0.3914

R-squared	0.138267	Mean dependent var	0.198667
Adjusted R-squared	0.048503	S.D. dependent var	0.264119
S.E. of regression	0.257634	Akaike info criterion	0.229887
Sum squared resid	3.186017	Schwarz criterion	0.450885
Log likelihood	-0.206940	F-statistic	1.540336
Durbin-Watson stat	1.871671	Prob(F-statistic)	0.195169

**Appendix 22:**

**Hausman test (common effect vs fixed effect) for hypothesis 1b**

Correlated Random Effects - Hausman Test

Pool: RETURN

Test cross-section random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	22.306830	5	0.0005

Cross-section random effects test comparisons:

Variable	Fixed	Random	Var(Diff.)	Prob.
GI?	-0.008439	0.001622	0.000047	0.1414
SIZE?	-0.319998	0.011289	0.019344	0.0172
MB?	0.095672	0.008657	0.000495	0.0001
PE?	-0.000212	0.000565	0.000001	0.3448
AGE?	-0.051785	-0.007171	0.004157	0.4890

Cross-section random effects test equation:

Dependent Variable: RETURN?

Method: Panel Least Squares

Date: 05/23/14 Time: 21:28

Sample: 2011 2013

Included observations: 3

Cross-sections included: 18

Total pool (balanced) observations: 54

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	8.135352	3.364624	2.417908	0.0217
GI?	-0.008439	0.007185	-1.174490	0.2491
SIZE?	-0.319998	0.139775	-2.289381	0.0290

MB?	0.095672	0.022922	4.173704	0.0002
PE?	-0.000212	0.001114	-0.190504	0.8502
AGE?	-0.051785	0.065104	-0.795422	0.4324

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Effects Specification

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Cross-section fixed (dummy variables)

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R-squared	0.621218	Mean dependent var	0.198667
Adjusted R-squared	0.352405	S.D. dependent var	0.264119
S.E. of regression	0.212545	Akaike info criterion	0.037531
Sum squared resid	1.400439	Schwarz criterion	0.884691
Log likelihood	21.98667	F-statistic	2.310968
Durbin-Watson stat	2.694323	Prob(F-statistic)	0.015907

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**Appendix 23:****Result for hypothesis 1b using fixed effect**

Dependent Variable: RETURN?

Method: Pooled Least Squares

Date: 05/23/14 Time: 21:23

Sample: 2011 2013

Included observations: 3

Cross-sections included: 18

Total pool (balanced) observations: 54

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	8.135352	3.364624	2.417908	0.0217
GI?	-0.008439	0.007185	-1.174490	0.2491
SIZE?	-0.319998	0.139775	-2.289381	0.0290
MB?	0.095672	0.022922	4.173704	0.0002
PE?	-0.000212	0.001114	-0.190504	0.8502
AGE?	-0.051785	0.065104	-0.795422	0.4324
Fixed Effects (Cross)				
_BHARATFOR—C	-3.029511			
_COLPAL—C	-2.635729			
_DRREDDY—C	0.555787			
_EMILTD—C	-0.663709			
_EXIDEIND—C	0.305709			
_GLENMARK—C	0.540016			
_GODREJ—C	0.574036			
_HEROMOTOCO—C	0.330168			
_ITC—C	1.274245			
_JUBILAND—C	-1.324774			
_LUPIN—C	0.578071			
_MM—C	0.532355			
_MARUTI—C	1.015476			
_MCLEODRUSS—C	0.052185			

_PIRAMAL—C	0.829400
_SUNPHARMA—C	0.728121
_TATAMOTORS—C	0.555004
_UBL—C	-0.216851

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Effects Specification

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Cross-section fixed (dummy variables)

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R-squared	0.621218	Mean dependent var	0.198667
Adjusted R-squared	0.352405	S.D. dependent var	0.264119
S.E. of regression	0.212545	Akaike info criterion	0.037531
Sum squared resid	1.400439	Schwarz criterion	0.884691
Log likelihood	21.98667	F-statistic	2.310968
Durbin-Watson stat	2.694323	Prob(F-statistic)	0.015907

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**Appendix 24:****Result for hypothesis 2a using common model**

Dependent Variable: TV?

Method: Pooled Least Squares

Date: 06/03/14 Time: 07:38

Sample: 2011 2013

Included observations: 3

Cross-sections included: 41

Total pool (balanced) observations: 123

Variable	Coefficient	Std. Error	t-Statistic	Prob.
GI?	-0.039357	0.011239	-3.501749	0.0007
SIZE?	0.696981	0.035775	19.48261	0.0000
MB?	-0.085512	0.042361	-2.018654	0.0458
AGE?	-0.121468	0.046514	-2.611420	0.0102
R-squared	0.127614	Mean dependent var		16.28471
Adjusted R-squared	0.105621	S.D. dependent var		2.752851
S.E. of regression	2.603415	Akaike info criterion		4.783505
Sum squared resid	806.5544	Schwarz criterion		4.874958
Log likelihood	-290.1855	Durbin-Watson stat		0.974193

**Appendix 25:**

**Chow test result (comparison common effect vs. fixed effect) for hypothesis 2b**

Redundant Fixed Effects Tests

Pool: TV

Test cross-section fixed effects

Effects Test	Statistic	d.f.	Prob.
Cross-section F	2.379766	(17,32)	0.0168
Cross-section Chi-square	44.131169	17	0.0003

Cross-section fixed effects test equation:

Dependent Variable: TV?

Method: Panel Least Squares

Date: 05/23/14 Time: 22:24

Sample: 2011 2013

Included observations: 3

Cross-sections included: 18

Total pool (balanced) observations: 54

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.181391	0.342602	-0.529451	0.5989
GI?	0.001386	0.002374	0.583688	0.5621
SIZE?	0.009364	0.013843	0.676484	0.5019
MB?	0.009965	0.004880	2.042072	0.0465
AGE?	0.000762	0.000849	0.897390	0.3739

R-squared	0.124839	Mean dependent var	0.198667
Adjusted R-squared	0.053397	S.D. dependent var	0.264119
S.E. of regression	0.256971	Akaike info criterion	0.208312
Sum squared resid	3.235663	Schwarz criterion	0.392477
Log likelihood	-0.624424	F-statistic	1.747418
Durbin-Watson stat	1.812346	Prob(F-statistic)	0.154714

**Appendix 26:**

**Hausman test (common effect vs fixed effect) for hypothesis 2b**

Correlated Random Effects - Hausman Test

Pool: TV

Test cross-section random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	21.416765	4	0.0003

Cross-section random effects test comparisons:

Variable	Fixed	Random	Var(Diff.)	Prob.
GI?	-0.004044	0.001568	0.000016	0.1610
SIZE?	-0.350817	0.008108	0.017650	0.0069
MB?	0.092327	0.011050	0.000480	0.0002
AGE?	-0.000120	0.000529	0.000001	0.4221

Cross-section random effects test equation:

Dependent Variable: TV?

Method: Panel Least Squares

Date: 05/23/14 Time: 22:25

Sample: 2011 2013

Included observations: 3

Cross-sections included: 18

Total pool (balanced) observations: 54

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	8.333791	3.336050	2.498101	0.0178
GI?	-0.004044	0.004567	-0.885514	0.3825
SIZE?	-0.350817	0.133525	-2.627360	0.0131
MB?	0.092327	0.022404	4.121039	0.0002

AGE?	-0.000120	0.001102	-0.108652	0.9142
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Effects Specification

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Cross-section fixed (dummy variables)

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R-squared	0.613487	Mean dependent var	0.198667
Adjusted R-squared	0.359839	S.D. dependent var	0.264119
S.E. of regression	0.211322	Akaike info criterion	0.020698
Sum squared resid	1.429021	Schwarz criterion	0.831025
Log likelihood	21.44116	F-statistic	2.418648
Durbin-Watson stat	2.642661	Prob(F-statistic)	0.011825

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## Appendix 27:

### Result for hypothesis 2b using fixed effect

Dependent Variable: TV?

Method: Pooled Least Squares

Date: 05/23/14 Time: 22:23

Sample: 2011 2013

Included observations: 3

Cross-sections included: 18

Total pool (balanced) observations: 54

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	8.333791	3.336050	2.498101	0.0178
GI?	-0.004044	0.004567	-0.885514	0.3825
SIZE?	-0.350817	0.133525	-2.627360	0.0131
MB?	0.092327	0.022404	4.121039	0.0002
AGE?	-0.000120	0.001102	-0.108652	0.9142

#### Fixed Effects (Cross)

_BHARATFOR—C	-3.229885
_COLPAL—C	-2.132269
_DRREDDY—C	0.701279
_EMILTD—C	-0.361221
_EXIDEIND—C	0.401083
_GLENMARK—C	0.452414
_GODREJ—C	0.499594
_HEROMOTOCO—C	0.361085
_ITC—C	1.034316
_JUBILAND—C	-0.930785

_LUPIN—C	0.587691
_MM—C	0.068443
_MARUTI—C	1.083711
_MCLEODRUSS—C	0.137629
_PIRAMAL—C	0.522838
_SUNPHARMA—C	0.428691
_TATAMOTORS—C	0.210263
_UBL—C	0.165125

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Effects Specification

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Cross-section fixed (dummy variables)

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R-squared	0.613487	Mean dependent var	0.198667
Adjusted R-squared	0.359839	S.D. dependent var	0.264119
S.E. of regression	0.211322	Akaike info criterion	0.020698
Sum squared resid	1.429021	Schwarz criterion	0.831025
Log likelihood	21.44116	F-statistic	2.418648
Durbin-Watson stat	2.642661	Prob(F-statistic)	0.011825

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**Appendix 28:**

**Chow test result (comparison common effect vs. fixed effect) for hypothesis 3a**

Redundant Fixed Effects Tests

Pool: STDEV

Test cross-section fixed effects

Effects Test	Statistic	d.f.	Prob.
Cross-section F	4.615512	(40,78)	0.0000
Cross-section Chi-square	149.322136	40	0.0000

Cross-section fixed effects test equation:

Dependent Variable: STDEV?

Method: Panel Least Squares

Date: 05/23/14 Time: 22:31

Sample: 2011 2013

Included observations: 3

Cross-sections included: 41

Total pool (balanced) observations: 123

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.043638	0.225566	0.193462	0.8469
GI?	-0.000796	0.000847	-0.940410	0.3489
SIZE?	0.006329	0.008071	0.784117	0.4345
MB?	-0.003869	0.003355	-1.153272	0.2511
AGE?	-0.002263	0.003498	-0.646981	0.5189

R-squared	0.022195	Mean dependent var	0.143082
Adjusted R-squared	-0.010951	S.D. dependent var	0.194267
S.E. of regression	0.195328	Akaike info criterion	-0.388475
Sum squared resid	4.502042	Schwarz criterion	-0.274159
Log likelihood	28.89124	F-statistic	0.669602
Durbin-Watson stat	1.526851	Prob(F-statistic)	0.614339

**Appendix 29:**

**Hausman test (common effect vs fixed effect) for hypothesis 3a**

Correlated Random Effects - Hausman Test

Pool: STDEV

Test cross-section random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	67.739629	4	0.0000

Cross-section random effects test comparisons:

Variable	Fixed	Random	Var(Diff.)	Prob.
GI?	-0.004038	-0.001487	0.000001	0.0026
SIZE?	0.230398	0.023326	0.000674	0.0000
MB?	-0.026191	-0.006218	0.000332	0.2728
AGE?	-0.028750	-0.003565	0.000220	0.0896

Cross-section random effects test equation:

Dependent Variable: STDEV?

Method: Panel Least Squares

Date: 05/23/14 Time: 22:32

Sample: 2011 2013

Included observations: 3

Cross-sections included: 41

Total pool (balanced) observations: 123

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-5.744332	0.735837	-7.806529	0.0000
GI?	-0.004038	0.001170	-3.451863	0.0009
SIZE?	0.230398	0.027508	8.375643	0.0000
MB?	-0.026191	0.018615	-1.407012	0.1634
AGE?	-0.028750	0.015367	-1.870899	0.0651

Effects Specification



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Cross-section fixed (dummy variables)

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R-squared	0.709585	Mean dependent var	0.143082
Adjusted R-squared	0.545762	S.D. dependent var	0.194267
S.E. of regression	0.130930	Akaike info criterion	-0.952070
Sum squared resid	1.337136	Schwarz criterion	0.076778
Log likelihood	103.5523	F-statistic	4.331399
Durbin-Watson stat	2.563296	Prob(F-statistic)	0.000000

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### Appendix 30:

#### Result for hypothesis 3a using fixed effect

Dependent Variable: STDEV?

Method: Pooled Least Squares

Date: 05/23/14 Time: 22:30

Sample: 2011 2013

Included observations: 3

Cross-sections included: 41

Total pool (balanced) observations: 123

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-5.744332	0.735837	-7.806529	0.0000
GI?	-0.004038	0.001170	-3.451863	0.0009
SIZE?	0.230398	0.027508	8.375643	0.0000
MB?	-0.026191	0.018615	-1.407012	0.1634
AGE?	-0.028750	0.015367	-1.870899	0.0651
Fixed Effects (Cross)				
_ADES—C	-0.034856			
_AISA—C	-0.020569			
_AKPI—C	0.803027			
_AMFG—C	-0.279097			
_APLI—C	0.558837			
_ARGO—C	1.268742			
_ASII—C	-1.203595			
_AUTO—C	-0.445879			
_BRPT—C	-0.254631			
_CPIN—C	-0.366264			
_FASW—C	-0.192788			
_GDYR—C	0.815595			
_GGRM—C	-0.746718			
_GJTL—C	-0.128144			
_IMAS—C	-0.334477			
_INAF—C	1.269170			
_INDF—C	-0.862845			
_INDS—C	0.492075			

_INKP—C	-0.176366
_INTP—C	-0.603238
_JPFA—C	0.181730
_KAEF—C	-0.193475
_KBLI—C	0.413224
_KLBF—C	-0.533658
_MAIN—C	-0.099895
_MERK—C	0.423719
_MRAT—C	0.390630
_MYOR—C	-0.068829
_POLY—C	0.465620
_RMBA—C	-0.150200
_SIPD—C	0.237740
_SMCB—C	-0.119699
_SMGR—C	-0.762416
_STTP—C	0.230190
_TKIM—C	-0.061374
_TOTO—C	0.145933
_TPIA—C	-0.147373
_TRST—C	0.337483
_TSPC—C	-0.312781
_ULTJ—C	-0.104133
_UNVR—C	0.169583

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Effects Specification

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Cross-section fixed (dummy variables)

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R-squared	0.709585	Mean dependent var	0.143082
Adjusted R-squared	0.545762	S.D. dependent var	0.194267
S.E. of regression	0.130930	Akaike info criterion	-0.952070
Sum squared resid	1.337136	Schwarz criterion	0.076778
Log likelihood	103.5523	F-statistic	4.331399
Durbin-Watson stat	2.563296	Prob(F-statistic)	0.000000

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### Appendix 31:

#### Result for hypothesis 3b using common model

Dependent Variable: STDEV?

Method: Pooled Least Squares

Date: 06/03/14 Time: 07:53

Sample: 2011 2013

Included observations: 3

Cross-sections included: 18

Total pool (balanced) observations: 54

Variable	Coefficient	Std. Error	t-Statistic	Prob.
GI?	0.000963	0.000377	2.552880	0.0138
SIZE?	0.003735	0.000892	4.185232	0.0001
MB?	-0.000684	0.000911	-0.751328	0.4560
AGE?	-0.002770	0.001506	-1.839255	0.0718
R-squared	0.115919	Mean dependent var		0.089006
Adjusted R-squared	0.062875	S.D. dependent var		0.042335
S.E. of regression	0.040983	Akaike info criterion		-3.480153
Sum squared resid	0.083979	Schwarz criterion		-3.332821
Log likelihood	97.96413	Durbin-Watson stat		1.178646

**Appendix 32:****Google search volume index manufacture companies in India  
Yearly data (2011-2013)**

Name	2011	2012	2013
Bharatfor	24.25	13.92	9.67
Colpal	11.33	7.92	8.00
Drreddy	20.33	14.58	9.67
Emiltd	9.75	5.08	3.75
Exideind	18.83	22.08	19.67
Glenmark	34.50	22.42	17.25
Godrej	53.17	36.17	30.83
Heromotoco	58.50	45.08	37.00
Itc	33.83	21.83	18.92
Jubiland	36.00	28.50	22.83
Lupin	30.50	18.75	16.25
Mm	55.25	52.25	48.08
Maruti	42.17	30.58	27.25
McLeodruess	60.17	25.33	20.60
Piramal	20.83	8.58	7.00
Sunpharma	34.92	24.83	22.00
Tatamotors	62.08	51.25	41.08
Ubl	24.08	16.83	15.00
Average	35.03	24.78	20.83

**Appendix 33:****Trading volume of manufacture companies in India  
Yearly data (2011-2013)**

Name	2011	2012	2013
bharatfor	15.61	15.26	15.24
colpal	14.28	13.78	13.93
drreddy	15.46	15.23	15.20
emiltd	14.61	14.26	14.32
exideind	16.61	16.80	16.62
glenmark	16.03	15.74	15.65
godrej	14.90	14.78	15.06
heromotoco	15.74	15.18	15.20
itc	18.30	18.34	18.17
jubiland	16.60	16.53	15.53
lupin	16.31	16.14	16.03
m&m	18.59	18.44	18.08
maruti	15.62	15.80	16.10
mcleodruss	15.90	15.28	15.13
piramal	16.23	14.60	14.09
sunpharma	16.28	16.94	16.77
tatamotors	17.08	17.12	16.85
ubl	14.90	14.85	15.73
Average	16.06	15.84	15.76

**Appendix 34:****Return volatility of manufacture companies in India  
Yearly data (2011-2013)**

Name	2011	2012	2013
bharatfor	0.08	0.10	0.05
_colpal	0.04	0.04	0.07
_drreddy	0.07	0.06	0.04
_emiltd	0.10	0.07	0.06
_exideind	0.10	0.11	0.10
_glenmark	0.10	0.04	0.09
_godrej	0.06	0.07	0.05
_heromotoco	0.08	0.07	0.09
_itc	0.05	0.04	0.06
_jubiland	0.15	0.15	0.10
_lupin	0.10	0.05	0.05
_m&m	0.10	0.08	0.06
_maruti	0.10	0.11	0.13
_mcleodruss	0.09	0.11	0.07
_piramal	0.05	0.08	0.08
_sunpharma	0.26	0.05	0.05
_tatamotors	0.13	0.19	0.13
_ubl	0.19	0.12	0.13
Average	0.10	0.09	0.08

**Appendix 35:****Return of manufacture companies in India  
Yearly data (2011-2013)**

Name	2011	2012	2013
_bharatfor	0.26	-0.03	-0.41
_colpal	0.10	0.33	0.13
_drreddy	0.29	0.09	0.01
_emiltd	0.26	0.04	0.42
_exideind	0.21	0.10	-0.09
_glenmark	0.10	0.09	0.45
_godrej	0.25	0.30	0.51
_heromotoco	-0.15	0.31	-0.27
_itc	0.33	0.23	0.33
_jubiland	0.58	0.92	0.11
_lupin	0.25	0.25	0.19
_m&m	0.09	0.54	0.07
_maruti	0.08	0.10	0.29
_mcleodruss	0.19	0.13	0.14
_piramal	-0.23	0.17	0.29
_sunpharma	-0.48	0.27	0.38
_tatamotors	0.40	0.14	0.01
_ubl	1.07	0.19	0.36
Average	0.20	0.23	0.16



**Appendix 36:****Size of manufacturing companies in India  
Yearly data (2011-2013)**

Name	2011	2012	2013
bharatfor	15.61	15.26	15.24
colpal	25.45	25.62	25.87
drreddy	26.27	26.33	26.41
emiltd	24.44	24.46	24.72
exideind	25.53	25.50	25.46
glenmark	25.11	25.16	25.48
godrej	25.50	25.70	26.16
heromotoco	26.62	26.71	26.64
itc	27.86	28.10	28.41
jubiland	24.13	24.78	25.10
lupin	25.92	26.07	26.29
m&m	23.35	23.66	23.89
maruti	26.67	26.54	26.71
mcleodruss	23.90	24.00	24.29
piramal	25.10	24.95	25.20
sunpharma	27.19	26.30	26.60
tatamotors	23.28	24.79	24.93
ubl	25.27	25.51	25.89
Average	24.84	24.97	25.18

**Appendix 37:****Market to book ratio of manufacturing companies in India  
Yearly data (2011-2013)**

Name	2011	2012	2013
bharatfor	4.04	3.49	2.06
colpal	28.85	34.86	34.62
drreddy	4.64	4.48	3.89
emiltd	8.86	8.75	11.70
exideind	4.47	4.17	3.23
glenmark	3.87	3.81	4.97
godrej	7.71	6.47	9.62
heromotoco	10.72	9.57	6.15
itc	8.80	9.50	11.00
jubiland	18.16	25.38	18.61
lupin	5.90	6.30	5.80
m&m	4.00	3.43	3.50
maruti	2.60	2.60	2.10
mcleodruss	2.90	2.70	3.10
piramal	0.60	0.73	1.00
sunpharma	6.85	7.49	10.88
tatamotors	3.96	4.52	4.50
ubl	11.68	11.08	12.82
Average	7.70	8.30	8.31

**Appendix 38:****Price earnings ratio of manufacture companies in India  
Yearly data (2011-2013)**

Name	2011	2012	2013
_bharatfor	25.94	20.64	15.60
_colpal	27.52	33.99	34.12
_drreddy	31.03	32.69	23.70
_emiltd	26.60	15.84	18.72
_exideind	18.21	27.44	21.01
_glenmark	36.12	31.37	32.45
_godrej	27.18	27.01	51.90
_heromotoco	16.43	17.26	14.54
_itc	31.70	31.70	36.40
_jubiland	48.35	71.96	60.10
_lupin	23.50	30.30	22.90
_m&m	15.41	14.26	15.16
_maruti	16.20	24.40	16.40
_mcleodruss	12.40	14.30	18.00
_piramal	0.54	61.91	0.00
_sunpharma	16.53	17.37	82.03
_tatamotors	8.74	70.43	284.64
_ubl	87.43	115.37	108.36
Average	26.10	36.57	47.56

**Appendix 39:****Age of manufacturing companies in India  
Yearly data (2011-2013)**

Name	2011	2012	2013
_bharatfor	7	8	9
_colpal	2	3	4
_dreddy	7	8	9
_emiltd	4	5	6
_exideind	7	8	9
_glenmark	10	11	12
_godrej	9	10	11
_heromotoco	7	8	9
_itc	15	16	17
_jubiland	1	2	3
_lupin	9	10	11
_m&m	14	15	16
_maruti	7	8	9
_mcleodruss	5	6	7
_piramal	15	16	17
_sunpharma	15	16	17
_tatamotors	12	13	14
_ubl	2	3	4
Average	8	9	9

**Appendix 40:****Google search volume index of manufacture companies in Indonesia  
Yearly data (2011-2013)**

Name	2011	2012	2013
ades	1.67	3.33	2.08
aisa	0.00	68.08	61.75
akpi	17.33	55.58	19.08
amfg	22.00	18.00	14.00
apli	47.83	32.92	44.08
argo	37.50	42.50	23.75
asii	43.50	41.08	33.67
auto	65.25	74.67	58.58
brpt	18.42	20.58	21.08
cpin	71.83	61.92	51.08
fasw	39.50	53.25	25.00
gdyr	52.58	68.08	48.92
ggrm	32.92	27.33	19.50
gjtl	57.50	52.33	48.33
imas	22.17	22.50	18.25
inaf	8.42	7.83	6.67
indf	10.25	8.58	9.83
inds	8.33	43.17	35.83
inkp	15.92	12.75	10.58
intp	47.75	53.17	26.08
jpfa	47.75	43.67	40.75
kaef	20.17	17.83	16.83
kbli	24.75	48.83	60.33
klbf	10.42	7.67	7.83
main	16.75	66.00	55.25
merk	42.75	37.00	24.75
mrat	29.42	25.83	19.83
myor	64.75	62.58	59.17
poly	38.83	34.25	26.83
rmba	9.33	8.08	7.00
sipd	27.33	60.58	42.08
smcb	12.25	8.92	8.25
smgr	7.50	5.75	11.83
sttp	41.17	64.17	49.00
tkim	19.75	17.42	13.33

_toto	51.92	60.42	62.00
_tpia	73.08	58.75	54.25
_trst	8.33	66.00	47.08
_tspc	8.33	61.92	47.58
_ultj	6.50	5.42	4.92
_unvr	8.17	5.75	5.25
Average	29.02	37.43	30.30



**Appendix 41:****Trading volume of manufacture companies in Indonesia  
Yearly data (2011-2013)**

Name	2011	2012	2013
Ades	15.73	16.17	16.65
_aisa	18.39	18.91	18.62
_akpi	14.02	13.33	13.32
_amfg	15.09	14.15	13.13
_apli	17.70	17.10	15.11
_argo	14.31	13.91	14.03
_asii	20.10	19.88	19.74
_auto	15.78	14.86	16.31
_brpt	17.53	17.34	16.69
_cpin	19.41	18.71	18.67
_fasw	16.04	13.77	16.16
_gdyr	10.43	10.75	10.59
_ggrm	16.45	16.55	16.75
_gjtl	18.40	17.53	18.10
_imas	17.05	17.63	17.38
_inaf	18.91	18.93	18.20
_indf	18.97	18.78	18.74
_inds	16.47	15.38	14.26
_inkp	17.29	16.82	18.67
_intp	17.67	17.38	17.52
_jpfa	18.89	17.85	18.36
_kaef	18.10	18.22	17.85
_kbli	16.34	17.89	18.20
_klbf	20.42	20.46	20.57
_main	18.41	2.91	18.54
_merk	9.99	10.57	9.94
_mrat	17.07	17.39	14.42
_myor	15.47	15.01	14.41
_poly	18.82	17.59	16.78
_rmba	16.36	15.82	13.65
_sipd	20.40	19.50	19.81
_smcb	18.21	18.01	17.91
_smgr	18.29	18.27	18.46
_sttp	13.36	12.65	11.43
_tkim	15.62	14.61	14.11

_toto	11.54	11.66	11.71
_tpia	14.43	13.66	13.21
_trst	17.40	16.48	15.45
_tspc	15.77	16.10	15.84
_ultj	16.47	16.43	16.54
_unvr	17.03	16.99	17.08
Average	16.69	16.00	16.17





**Appendix 42:**

**Return volatility of manufacture companies in Indonesia  
Yearly data (2011-2013)**

Name	2011	2012	2013
_ades	0.16	0.13	0.24
_aisa	0.12	0.18	0.09
_akpi	0.47	0.10	2.13
_amfg	0.12	0.07	0.09
_apli	0.30	0.19	0.12
_argo	0.06	0.04	0.06
_asii	0.06	0.27	0.06
_auto	0.28	0.05	0.08
_brpt	0.06	0.12	0.10
_cpin	0.17	0.12	0.12
_fasw	0.12	0.16	0.05
_gdyr	0.07	0.12	0.17
_ggrm	0.08	0.08	0.09
_gjtl	0.12	0.04	0.16
_imas	0.17	0.10	0.06
_inaf	0.23	0.14	0.10
_indf	0.09	0.04	0.08
_inds	0.29	0.13	0.16
_inkp	0.12	0.12	0.30
_intp	0.09	0.08	0.10
_jpfa	0.13	0.08	0.14
_kaef	0.19	0.21	0.20
_kbli	0.14	0.18	0.12
_klbf	0.06	0.25	0.09
_main	0.14	0.11	0.17
_merk	0.06	0.03	0.18
_mrat	0.07	0.08	0.05
_myor	0.13	0.12	0.11
_poly	0.46	0.11	0.13
_rmba	0.12	0.11	0.07
_sipd	0.11	0.09	0.08
_smcb	0.08	0.10	0.13
_smgr	0.09	0.08	0.09
_sttp	0.11	0.21	0.17
_tkim	0.10	0.13	0.09
_toto	0.06	0.11	0.05
_tpia	0.12	0.14	0.18

_trst	0.23	0.10	0.11
_tspc	0.12	0.07	0.16
_ultj	0.14	0.06	0.20
_unvr	0.07	0.08	0.08
Average	0.14	0.12	0.17



**Appendix 43:****Return of manufacture companies in Indonesia  
Yearly data (2011-2013)**

Name	2011	2012	2013
_ades	-0.01	0.73	0.31
_aisa	-0.29	0.97	0.33
_akpi	0.93	-0.15	-0.01
_amfg	0.43	0.26	-0.02
_apli	0.20	0.30	-0.20
_argo	-0.19	0.16	0.35
_asii	0.44	-0.91	-0.08
_auto	-0.44	0.05	0.07
_brpt	-0.25	-0.53	0.05
_cpin	0.50	0.57	0.05
_fasw	0.60	-0.41	-0.16
_gdyr	0.01	0.32	0.58
_ggrm	0.55	-0.06	-0.24
_gttl	0.35	-0.30	-0.12
_imas	0.79	-0.14	0.06
_inaf	1.04	0.78	-0.64
_indf	0.02	0.25	0.15
_inds	-0.38	0.61	-0.28
_inkp	-0.17	-0.45	1.09
_intp	0.27	0.32	-0.07
_jpfa	0.32	0.51	0.11
_kaef	1.04	0.99	0.03
_kbli	0.33	0.77	-0.21
_klbf	0.21	-0.35	0.21
_main	0.47	0.93	0.49
_merk	0.36	0.14	0.36
_mrat	0.12	0.01	-0.04
_myor	0.43	0.40	0.51
_poly	1.58	-0.76	-0.73
_rmba	0.19	-0.21	-0.01
_sipd	-0.04	-0.03	0.04
_smcb	0.13	0.34	-0.14
_smgr	0.44	0.35	-0.06
_sttp	0.61	0.71	0.46
_tkim	-0.24	0.01	-0.05
_toto	0.38	0.35	0.16

_tpia	-0.30	0.40	-0.02
trst	0.70	-0.12	-0.19
tspc	0.62	0.39	0.00
_ultj	0.18	0.27	1.44
_unvr	0.25	0.16	0.24
Average	0.30	0.19	0.09



**Appendix 44:****Size of manufacture companies in Indonesia  
Yearly data (2011-2013)**

Name	2011	2012	2013
_ades	28.87	28.96	29.76
_aisa	27.78	28.37	28.97
_akpi	27.00	27.00	31.00
_amfg	29.00	29.00	29.00
_apli	25.90	25.62	25.49
_argo	23.06	23.05	23.37
_asii	35.47	34.86	33.27
_auto	31.07	30.26	30.59
_brpt	29.50	29.01	28.72
_cpin	31.20	31.52	31.86
_fasw	29.69	29.47	29.41
_gdyr	26.75	26.93	27.38
_ggrm	32.19	32.28	32.08
_gjtl	29.86	29.77	29.76
_imas	29.27	29.84	30.30
_inaf	21.90	21.99	21.29
_indf	31.47	31.46	31.74
_inds	25.80	27.48	27.77
_inkp	29.62	29.38	29.48
_intp	31.69	31.91	32.01
_jpfa	28.21	28.31	28.80
_kaef	27.91	28.72	29.12
_kbli	26.71	27.22	27.47
_klbf	31.16	31.09	31.82
_main	26.56	28.55	29.31
_merk	28.57	28.82	29.06
_mrat	26.12	26.20	26.11
_myor	29.77	30.22	30.61
_poly	27.55	27.26	26.54
_rmba	29.39	29.24	29.02
_sipd	27.09	26.95	26.95
_smcb	30.37	30.66	30.71
_smgr	31.64	31.97	32.15
_sttp	27.26	27.62	28.20
_tkim	28.83	28.81	28.59
_toto	28.34	28.69	28.98

_tpia	30.03	29.61	29.83
_trst	27.80	27.61	27.50
_tspc	29.95	30.21	30.46
_ultj	28.85	28.85	30.00
_unvr	32.44	32.79	32.98
Average	28.82	28.96	29.21



**Appendix 45:****Market to book ratio of manufacture companies in Indonesia  
Yearly data (2011-2013)**

Name	2011	2012	2013
_ades	4.74	5.42	4.55
_aisa	0.79	1.55	1.85
_akpi	0.94	0.65	0.50
_amfg	1.33	1.47	1.14
_apli	0.51	0.59	0.46
_argo	3.57	1.52	2.15
_asii	3.95	3.43	2.79
_auto	2.78	2.60	1.94
_brpt	0.56	0.31	0.26
_cpin	5.70	7.32	5.75
_fasw	6.02	3.50	3.06
_gdyr	0.92	0.99	1.20
_ggrm	4.86	4.07	2.85
_gttl	2.36	1.42	1.02
_imas	3.48	2.57	2.16
_inaf	0.83	1.57	0.81
_indf	1.28	1.50	1.50
_inds	1.25	1.16	0.87
_inkp	0.37	0.19	0.30
_intp	3.99	4.26	3.41
_jpfa	2.09	2.75	2.40
_kaef	1.51	2.86	2.14
_kbli	0.58	0.89	0.65
_klbf	5.30	7.30	7.40
_main	3.94	5.90	6.23
_merk	6.01	8.17	8.61
_mrat	0.60	0.54	0.51
_myor	4.51	5.00	6.35
_poly	-0.15	-0.06	-0.02
_rmba	2.55	2.18	3.31
_sipd	0.40	0.37	0.37
_smcb	2.21	2.64	2.07
_smgr	4.65	5.18	4.24
_sttp	1.84	2.37	3.05
_tkim	0.42	0.35	0.26
_toto	3.26	3.67	3.63

_tpia	1.10	1.92	1.19
_trst	0.83	0.72	0.43
_tspc	3.77	5.00	3.84
_ultj	2.22	2.29	6.60
_unvr	38.97	40.09	36.00
Average	3.34	3.57	3.36





**Appendix 46:****Price earnings ratio of manufacture companies in Indonesia  
Yearly data (2011-2013)**

Name	2011	2012	2013
_ades	23.03	13.58	17.69
_aisa	9.66	12.46	14.50
_akpi	13.12	6.91	18.17
_amfg	8.44	10.39	9.38
_apli	5.13	30.69	-23.25
_argo	-3.40	-2.42	-3.53
_asii	14.03	13.70	15.33
_auto	11.86	13.25	20.43
_brpt	618.97	-2.46	-5.89
_cpin	14.95	22.33	18.79
_fasw	81.92	1193.80	-22.20
_gdyr	10.52	7.81	11.46
_ggrm	24.08	26.62	18.73
_gttl	11.05	7.14	21.35
_imas	16.60	16.56	17.88
_inaf	13.66	24.10	-5.80
_indf	8.05	10.54	22.61
_inds	6.54	2.45	9.10
_inkp	-239.39	7.74	3.42
_intp	17.43	17.35	15.30
_jpfa	12.19	12.17	12.72
_kaef	10.99	20.42	20.24
_kbli	6.54	5.98	7.35
_klbf	22.43	30.38	32.17
_main	8.10	13.31	16.66
_merk	12.84	31.58	88.69
_mrat	8.30	6.09	14.04
_myor	22.58	20.64	22.91
_poly	-19.60	-1.55	-0.72
_rmba	18.69	-12.99	-4.68
_sipd	21.62	31.18	29.06
_smcb	15.80	16.09	21.82
_smgr	17.15	19.09	16.11
_sttp	21.18	18.43	17.53
_tkim	6.11	7.67	9.10

_toto	11.32	13.92	14.15
_tpia	9.91	-15.89	-50.80
_trst	7.60	8.63	23.02
_tspc	19.61	26.05	19.09
_ultj	30.79	10.87	35.03
_unvr	34.45	32.87	36.37
Average	23.53	42.13	13.50



**Appendix 47:****Age of manufacture companies in Indonesia  
Yearly data (2011-2013)**

Name	2011	2012	2013
_ades	21	22	23
_aisa	14	15	16
_akpi	18	19	20
_amfg	15	16	17
_apli	11	12	13
_argo	20	21	22
_asii	21	22	23
_auto	13	14	15
_brpt	17	18	19
_cpin	20	21	22
_fasw	16	17	18
_gdyr	31	32	33
_ggrm	21	22	23
_gjtl	21	22	23
_imas	17	18	19
_inaf	10	11	12
_indf	17	18	19
_inds	21	22	23
_inkp	21	22	23
_intp	21	22	23
_jpfa	21	22	23
_kaef	10	11	12
_kbli	19	20	21
_klbf	20	21	22
_main	5	6	7
_merk	30	31	32
_mrat	16	17	18
_myor	21	22	23
_poly	20	21	22
_rmba	21	22	23
_sipd	14	15	16
_smcb	33	34	35
_smgr	20	21	22
_sttp	14	15	16
_tkim	21	22	23

_toto	20	21	22
_tpia	18	19	20
_trst	21	22	23
_tspc	17	18	19
_ultj	21	22	23
_unvr	29	30	31
Average	19	20	21

