

CHAPTER V

CONCLUSION AND LIMITATION

5.1 Conclusion

The results of this study indicate that the variables of good corporate governance commissioner such as board size, number of meetings of the board commissioner, commissioner of independent board composition, the audit committee size, number of meetings of the audit committee, audit committee, competency, quality audits not have any impact on earnings management through real activities manipulation.

This study does not support the research of Watts and Zimmerman (1986), corporate governance attributes help investors by aligning the interests of managers with the interests of shareholders and by enhancing the reliability of financial information and the integrity of the financial reporting process. But this study support the research of Riyanto (2005) stated that shareholders expect managers can act professional. All that is done by the management should aim to increase the value or quality of the company. But what often happens is that everything is done management is not solely for the welfare of the company, but also to improve the personal well-being.

5.2 Limitation of the Research

This research has limitation, the limitation from this research are:

1. The research sample is restricted by only merchandising companies that listed in Indonesian Stock Exchange (IDX) years 2009-2013.
2. This research only observes real activities manipulation variable, characteristics of board commissioner, characteristics of audit committee, and firm size

5.3 Suggestion

As far as the researchers knowledge, there is no studies in Indonesia that discuss the influence of good corporate governance on earnings management through real activities manipulation. This study is expected to provide ideas for future research related to the influence of corporate governance on the real activities manipulation. In connection with the results documented in this study, there are several opportunities for further research among others:

1. Future research can extend the period of the study sample and the sample companies may use non-merchandise in order to test the consistency of the findings in this research.
2. Future studies can also add variables, one of the variables that can be used are characteristics of board directors. Several characteristics of the board directors in the company may restrict the practice of manipulation of real activity. Therefore, we expect everal characteristic

of board directors could affect the company's decision to engage in the practice of real activities manipulation.



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APPENDIX I

A. Trade, service, and investment sector

| No. | Code | Company | Date of Registration |
|------------|-------------|--|-----------------------------|
| 1. | AIMS | Akbar Indomakmur Stimec Tbk | Jul-20-2001 |
| 2. | AKRA | AKR Corporindo Tbk | Oct-03-1994 |
| 3. | APII | PT Arita Prima Indonesia Tbk | Oct-29-20113 |
| 4. | ASIA | PT Asia Natural Resources Tbk | Jun-11-1997 |
| 5. | BMSR | Bintang Mitra Semesta Raya Tbk | Des-29-1999 |
| 6. | CLPI | Colorpak Indonesia Tbk | Nov-30-2001 |
| 7. | CNKO | Exploitasi Energi Indonesia Tbk | Nov-20-2001 |
| 8. | DSSA | Dian Swastatika Sentosa Tbk | Des-10-2009 |
| 9. | EPMT | Enseval Putra Megatrading Tbk | Aug-01-1994 |
| 10. | FISH | FKS Multi Agro Tbk | Jan-18-2002 |
| 11. | GREN | Evergreen Invesco Tbk | Jul-09-2010 |
| 12. | HEXA | Hexindo Adiperkasa Tbk | Feb-13-1995 |
| 13. | INTA | Intraco Penta Tbk | Aug-23-1993 |
| 14. | INTD | Inter-Delta Tbk | Des-18-1989 |
| 15. | ITMA | SUMBER ENERGI ANDALAN Tbk | Des-10-1990 |
| 16. | ITTG | Leo Investment Tbk | Nov-26-2001 |
| 17. | JKON | Jaya Konstruksi Manggala Pratama Tbk | Des-01-2007 |
| 18. | KARK | PT Dayaindo Resources International Tbk | Feb-05-1999 |
| 19. | KOBX | Kobexindo Tractors Tbk | Jul-05-2012 |
| 20. | KONI | Perdana Bangun Pustaka Tbk | Aug-22-1995 |

| | | | |
|-----|------|---------------------------------------|-------------|
| 21. | LTLS | Lautan Luas Tbk | Jul-21-1997 |
| 22. | MDRN | Modern International Tbk | Jul-16-1991 |
| 23. | MICE | Multi Indocitra Tbk | Nov-02-2005 |
| 24. | MPMX | PT Mitra Pinasthika Mustika Tbk | Mei-29-2013 |
| 25. | OKAS | Ancora Indonesia Resources Tbk | Mar-29-2006 |
| 26. | SDPC | Millenium Pharmacon International Tbk | Mei-07-1990 |
| 27. | SQMI | RENUKA COALINDO Tbk | Jul-15-2004 |
| 28. | TGKA | Tigaraksa Satria Tbk | Jun-11-1990 |
| 29. | TIRA | Tira Austenite Tbk | Jul-21-1993 |
| 30. | TMPI | PT Sigmagold Inti Perkasa Tbk | Jan-26-1995 |
| 31. | TRIL | Triwira Insanlestari Tbk | Jan-26-2008 |
| 32. | TURI | Tunas Ridean Tbk | Mei-06-1995 |
| 33. | UNTR | United Tractors Tbk | Sep-19-1989 |
| 34. | WAPO | Wahana Pronatural Tbk | Jun-22-2001 |
| 35. | WICO | Wicaksana Overseas International Tbk | Aug-08-1994 |

B. Trade and retail sub-sector

| No. | Code | Company | Date of Registration |
|------------|-------------|---------------------------------|-----------------------------|
| 1. | ACES | Ace Hardware Indonesia Tbk | Nov-6-2007 |
| 2. | AMRT | Sumber Alfaria Trijaya Tbk | Jan-15-2009 |
| 3. | CENT | Centrin Online Tbk | Nov-1-2001 |
| 4. | CSAP | Catur Sentosa Adiprana | Dec-12-2007 |
| 5. | ECII | Electronic City Indonesia Tbk | Jul-3-2013 |
| 6. | ERAA | Erajaya Swasembada Tbk | Dec-14-2011 |
| 7. | GLOB | Global Teleshop Tbk | Jul-10-2014 |
| 8. | GOLD | Golden Retailindo Tbk | Jul-7-2010 |
| 9. | HERO | Hero Supermarket Tbk | Dec-2-1989 |
| 10. | KOIN | Kokoh Inti Arebama Tbk | Apr-9-2008 |
| 11. | LPPF | Matahari Departement Store Tbk | Oct-9-1989 |
| 12. | MAPI | Mitra Adiperkasa Tbk | Nov-10-2004 |
| 13. | MIDI | Midi Utama Indonesia Tbk | Nov-30-2010 |
| 14. | MPPA | Matahari Putra Prima Tbk | Dec-21-1992 |
| 15. | RALS | Ramayana Lestari Sentosa Tbk | Jul-24-1996 |
| 16. | RANC | Supra Boga Lestari Tbk | Jun-7-2012 |
| 17. | RIMO | Rimo Catur Lestari Tbk | Nov-10-2000 |
| 18. | SKYB | Skybee Tbk | Jul-7-2010 |
| 19. | SONA | Sona Topas Tourism Industry Tbk | Jul-12-1992 |
| 20. | TELE | Tiphone Mobile Indonesia Tbk | Jan-12-2012 |
| 21. | TKGA | Permata Prima Sakti Tbk | Jan-6-1992 |
| 22. | TRIO | Trikonsel Oke Tbk | Apr-14-2009 |



APPENDIX II

CALCULATION OF ABNORMAL DISCRETIONARY EXPENSES

Table with columns: Company, Year, Advertising, R&D, Sales, General and Administrative, Total Discretionary, and various financial metrics. Rows list companies from AHMS to SONA across years 2010-2012.

CALCULATION OF ABONORMAL CASH FLOW AND ABNORMAL DISCRETIONARY EXPENSES


| Company | Year | Abnormal CFO | Abnormal Discretionary Expense | Total Abn CFO + Abn DISEXP |
|---------|------|-----------------|-----------------------------------|-------------------------------|
| 1 AIMS | 2011 | -0,075940543 | 0,232536507 | -0,156595964 |
| 2 | 2012 | -0,071856516 | 0,238285162 | -0,166428645 |
| 3 | 2013 | -0,176907787 | 0,248231981 | -0,071324194 |
| 4 AKRA | 2009 | 0,104316237 | 0,240609005 | -0,344925242 |
| 5 | 2010 | -0,011127133 | 0,210165061 | -0,199037928 |
| 6 | 2011 | 0,041245562 | 0,183609602 | -0,224855164 |
| 7 | 2012 | -0,005897241 | 0,172914926 | -0,167017685 |
| 8 | 2013 | -0,075588523 | 0,208835778 | -0,133247256 |
| 9 BMSR | 2009 | -0,045759505 | 0,26392559 | -0,218166084 |
| 10 | 2011 | -0,0281196 | 0,267850713 | -0,239731113 |
| 11 | 2012 | 0,009768302 | 0,242465963 | -0,252234265 |
| 12 CLPI | 2011 | -0,214809856 | 0,251847192 | -0,037037336 |
| 13 CNKO | 2011 | -0,162387068 | 0,262368632 | -0,099981564 |
| 14 | 2012 | -0,124754921 | 0,265255342 | -0,140500421 |
| 15 EPMT | 2009 | -0,086254386 | 0,325266583 | -0,239012197 |
| 16 | 2010 | 3,42789714 | 0,327814708 | -3,755711848 |
| 17 | 2011 | 0,00020284 | 0,325233446 | -0,325436286 |
| 18 | 2012 | -0,019329563 | 0,31536922 | -0,296039657 |
| 19 | 2013 | -0,140683945 | 0,328125184 | -0,187441239 |
| 20 FISH | 2010 | -0,09399114 | 0,017877943 | 0,076113197 |
| 21 | 2011 | -0,450167964 | 0,000801861 | 0,449366102 |
| 22 GREN | 2012 | 0,005534974 | 0,286640036 | -0,29217501 |
| 23 | 2013 | -7,73417E-05 | 0,2867307 | -0,286653358 |
| 24 INTA | 2009 | 0,020118563 | 0,332906673 | -0,353025236 |
| 25 | 2010 | -0,002189182 | 0,323062143 | -0,320872962 |
| 26 | 2011 | 0,497684092 | 0,303959584 | -0,801643676 |
| 27 | 2012 | -0,15318327 | 0,311299479 | -0,158116208 |
| 28 | 2013 | 0,249462061 | 0,316483439 | -0,5659455 |
| 29 ITTG | 2012 | 0,096772019 | 0,332984913 | -0,429756932 |
| 30 KONI | 2010 | 0,115453048 | 0,39636462 | -0,511817668 |
| 31 | 2011 | 0,057245613 | 0,385747357 | -0,44299297 |
| 32 | 2012 | 0,035410822 | 0,404321064 | -0,439731886 |
| 33 | 2013 | -0,200486661 | 0,410075384 | -0,209588773 |
| 34 MDRN | 2013 | -0,045473182 | 0,458512893 | -0,413039711 |
| 35 MPMX | 2013 | -0,054064318 | 0,280604331 | -0,226540013 |
| 36 OKAS | 2009 | 0,123756765 | 0,300032212 | -0,423788977 |
| 37 | 2010 | -0,03595844 | 0,306477869 | -0,27051943 |
| 38 | 2011 | -0,023545038 | 0,322033658 | -0,298488619 |
| 39 SDPC | 2009 | -0,143199805 | 0,242774974 | -0,099575168 |
| 40 | 2010 | -0,195056631 | 0,280901102 | -0,085844471 |
| 41 | 2011 | -0,147797107 | 0,262851821 | -0,115054714 |
| 42 | 2012 | -0,101563072 | 0,258528375 | -0,156965303 |
| 43 | 2013 | -0,252462746 | 0,255852259 | -0,003389513 |
| 44 SQMI | 2010 | -0,02210033 | -1,250338682 | 1,272439012 |
| 45 TGKA | 2010 | -0,105900874 | 0,318309591 | -0,212408716 |
| 46 | 2011 | -0,15491248 | 0,305466378 | -0,150553899 |
| 47 | 2012 | -0,092121167 | 0,306041471 | -0,213920304 |
| 48 TIRA | 2010 | -0,062462844 | 0,40170373 | -0,339240886 |
| 49 | 2011 | -0,017521046 | 0,391446052 | -0,373925006 |
| 50 | 2012 | -0,154681745 | 0,409285988 | -0,254604244 |
| 51 | 2013 | -0,033813629 | 0,39995889 | -0,366145261 |
| 52 TMPI | 2010 | -0,062310719 | 0,303378576 | -0,241067857 |
| 53 | 2011 | -0,049152487 | 0,306374399 | -0,257221912 |
| 54 | 2012 | -0,133283003 | 0,300647388 | -0,167364385 |
| 55 TRIL | 2010 | -0,057883423 | -3,621987952 | 3,679871375 |
| 56 | 2011 | -0,023267507 | -19,04647019 | 19,06973769 |
| 57 | 2012 | 0,074972098 | 0,317069126 | -0,392041224 |
| 58 | 2013 | -0,019028747 | 0,335574484 | -0,316545736 |
| 59 TURI | 2010 | 0,064557675 | 0,211772063 | -0,276329739 |
| 60 | 2011 | 0,001373919 | 0,217653467 | -0,219027386 |
| 61 | 2012 | -0,099523333 | 0,146490763 | -0,04696743 |
| 62 | 2013 | -0,008359611 | 0,170956124 | -0,162596512 |
| 63 WAPO | 2011 | 0,016608033 | 0,41154552 | -0,428153553 |
| 64 | 2012 | -0,00739357 | 0,298760941 | -0,291367371 |
| 65 | 2013 | -0,01881188 | 0,278227767 | -0,259416579 |
| 66 WICO | 2011 | -0,147112869 | 0,402988535 | -0,255875666 |
| 67 | 2012 | -0,183815672 | 0,412861936 | -0,229046264 |
| 68 | 2013 | -0,179560007 | 0,436862168 | -0,257302161 |
| 69 CENT | 2012 | -0,007106685 | 0,500169286 | -0,493062602 |
| 70 CSAP | 2010 | -0,137876819 | 0,348560932 | -0,210684113 |
| 71 | 2011 | -0,085460892 | 0,392470387 | -0,307009494 |
| 72 | 2012 | -0,034112042 | 0,407815583 | -0,373703542 |
| 73 | 2013 | -0,101467114 | 0,424044878 | -0,322577764 |
| 74 GLOB | 2013 | 0,003201762 | 0,309334277 | -0,312536039 |
| 75 MAPI | 2010 | 0,152151609 | 0,224999357 | -0,377150967 |
| 76 | 2011 | 0,052598769 | 0,214532848 | -0,267131617 |
| 77 | 2012 | 0,002113212 | 0,19572023 | -0,197833442 |
| 78 | 2013 | -0,061169367 | 0,200626727 | -0,13945736 |
| 79 MPPA | 2013 | 0,050472774 | 0,31441928 | -0,364892055 |
| 80 SKYB | 2012 | -0,055150177 | 0,223368884 | -0,168218707 |
| 81 | 2013 | -0,081734495 | 0,239578144 | -0,157843648 |
| 82 SONA | 2012 | 0,214274331 | 0,478728658 | -0,693002989 |
| 83 | 2013 | -0,081467233 | 0,372515504 | -0,291048271 |

CALCULATION OF GOOD CORPORATE GOVERNANCE VARIABLES

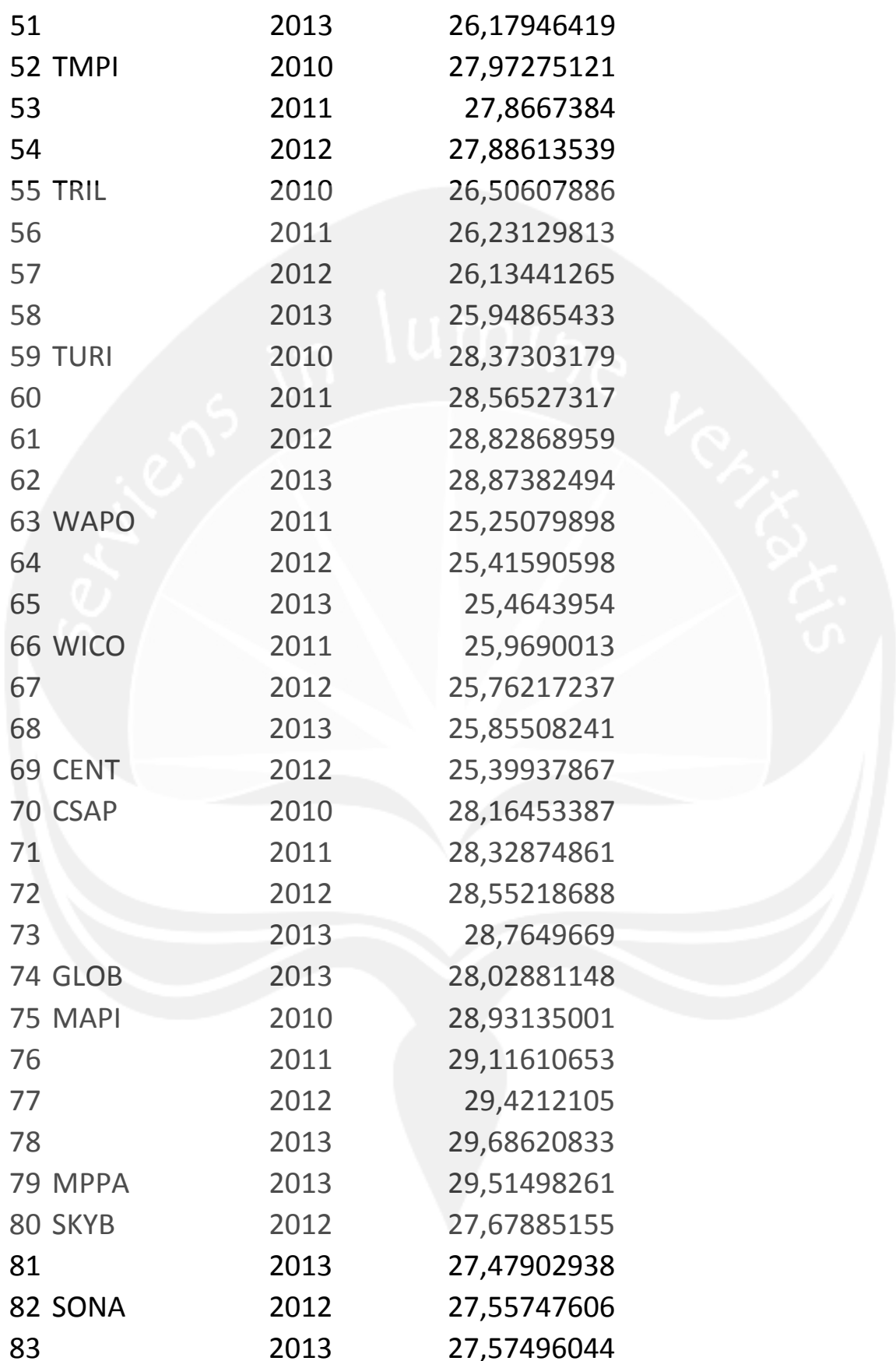
| Company | Year | Board Commissioner Size | Board of Commissioners Meeting | Independent Board of Commissioner Composition | Size of Audit Committee | Audit Committee Meeting | Audit Committee Competency | Quality Audit |
|---------|------|-------------------------|--------------------------------|---|-------------------------|-------------------------|----------------------------|---------------|
| 1 AIMS | 2011 | 2 | 4 | 0,5 | 3 | 4 | 0,66666667 | 0 |
| 2 | 2012 | 2 | 6 | 0,5 | 3 | 4 | 0,66666667 | 0 |
| 3 | 2013 | 2 | 2 | 0,5 | 3 | 1 | 0,66666667 | 0 |
| 4 AKRA | 2009 | 4 | 9 | 0,25 | 3 | 10 | 1 | 1 |
| 5 | 2010 | 3 | 8 | 0,33333333 | 3 | 8 | 1 | 1 |
| 6 | 2011 | 3 | 7 | 0,33333333 | 3 | 12 | 0,66666667 | 1 |
| 7 | 2012 | 3 | 5 | 0,33333333 | 3 | 12 | 0,66666667 | 1 |
| 8 | 2013 | 3 | 4 | 0,33333333 | 3 | 16 | 0,66666667 | 1 |
| 9 BMSR | 2009 | 2 | 4 | 0,5 | 3 | 4 | 1 | 0 |
| 10 | 2011 | 2 | 4 | 0,5 | 3 | 4 | 0,66666667 | 0 |
| 11 | 2012 | 2 | 4 | 0,5 | 3 | 4 | 0,66666667 | 0 |
| 12 CLPI | 2011 | 3 | 2 | 0,33333333 | 2 | 4 | 0,5 | 1 |
| 13 CNKO | 2011 | 3 | 6 | 0,33333333 | 3 | 3 | 0,33333333 | 0 |
| 14 | 2012 | 5 | 4 | 0,4 | 3 | 3 | 0,33333333 | 0 |
| 15 EPMT | 2009 | 4 | 4 | 0,5 | 4 | 4 | 0,25 | 1 |
| 16 | 2010 | 3 | 4 | 0,33333333 | 3 | 4 | 0,66666667 | 1 |
| 17 | 2011 | 3 | 4 | 0,33333333 | 3 | 4 | 0,66666667 | 1 |
| 18 | 2012 | 3 | 4 | 0,33333333 | 3 | 4 | 0,66666667 | 1 |
| 19 | 2013 | 3 | 4 | 0,33333333 | 3 | 4 | 0,66666667 | 1 |
| 20 FISH | 2010 | 2 | 4 | 0,5 | 3 | 4 | 1 | 0 |
| 21 | 2011 | 3 | 5 | 0,33333333 | 3 | 4 | 0,66666667 | 0 |
| 22 GREN | 2012 | 2 | 4 | 0,5 | 3 | 4 | 0,66666667 | 0 |
| 23 | 2013 | 2 | 7 | 0,5 | 3 | 5 | 0,66666667 | 0 |
| 24 INTA | 2009 | 3 | 12 | 0,33333333 | 3 | 6 | 1 | 0 |
| 25 | 2010 | 3 | 12 | 0,33333333 | 3 | 6 | 1 | 0 |
| 26 | 2011 | 3 | 12 | 0,33333333 | 3 | 6 | 1 | 0 |
| 27 | 2012 | 3 | 12 | 0,33333333 | 3 | 6 | 1 | 0 |
| 28 | 2013 | 3 | 12 | 0,33333333 | 3 | 6 | 1 | 0 |
| 29 ITTG | 2012 | 2 | 4 | 0,5 | 3 | 4 | 1 | 0 |
| 30 KONI | 2010 | 3 | 4 | 0,33333333 | 3 | 5 | 1 | 1 |
| 31 | 2011 | 3 | 4 | 0,33333333 | 3 | 5 | 1 | 1 |
| 32 | 2012 | 3 | 4 | 0,33333333 | 3 | 5 | 1 | 1 |
| 33 | 2013 | 3 | 4 | 0,33333333 | 3 | 5 | 1 | 1 |
| 34 MDRN | 2013 | 3 | 4 | 0,33333333 | 3 | 4 | 0,66666667 | 1 |
| 35 MPMX | 2013 | 3 | 12 | 0,33333333 | 3 | 4 | 1 | 0 |
| 36 OKAS | 2009 | 3 | 12 | 0,33333333 | 3 | 6 | 1 | 0 |
| 37 | 2010 | 3 | 4 | 0,33333333 | 3 | 4 | 1 | 0 |
| 38 | 2011 | 4 | 2 | 0,25 | 4 | 7 | 0,75 | 1 |
| 39 SDPC | 2009 | 4 | 2 | 0,5 | 4 | 6 | 0,75 | 1 |
| 40 | 2010 | 4 | 4 | 0,5 | 3 | 4 | 0,33333333 | 0 |
| 41 | 2011 | 6 | 5 | 0,33333333 | 4 | 4 | 0,25 | 0 |
| 42 | 2012 | 5 | 5 | 0,6 | 4 | 4 | 0,5 | 0 |
| 43 | 2013 | 5 | 4 | 0,6 | 4 | 4 | 0,25 | 0 |
| 44 SQMI | 2010 | 3 | 2 | 0,66666667 | 3 | 6 | 1 | 0 |
| 45 TGKA | 2010 | 5 | 9 | 0,4 | 3 | 3 | 1 | 1 |
| 46 | 2011 | 5 | 9 | 0,4 | 3 | 3 | 1 | 1 |
| 47 | 2012 | 5 | 9 | 0,4 | 3 | 3 | 1 | 1 |
| 48 TIRA | 2010 | 4 | 6 | 0,25 | 3 | 6 | 0,66666667 | 0 |
| 49 | 2011 | 3 | 4 | 0,33333333 | 3 | 4 | 0,66666667 | 0 |
| 50 | 2012 | 3 | 5 | 0,33333333 | 3 | 5 | 1 | 0 |
| 51 | 2013 | 3 | 5 | 0,33333333 | 3 | 5 | 1 | 0 |
| 52 TMPI | 2010 | 4 | 5 | 0,25 | 3 | 2 | 0,66666667 | 0 |
| 53 | 2011 | 4 | 5 | 0,5 | 3 | 2 | 0,66666667 | 0 |
| 54 | 2012 | 4 | 6 | 0,5 | 3 | 4 | 0,66666667 | 0 |
| 55 TRIL | 2010 | 3 | 12 | 0,66666667 | 3 | 4 | 1 | 0 |
| 56 | 2011 | 3 | 12 | 0,66666667 | 3 | 4 | 1 | 0 |
| 57 | 2012 | 4 | 12 | 0,75 | 3 | 4 | 1 | 0 |
| 58 | 2013 | 4 | 12 | 0,75 | 3 | 4 | 1 | 0 |
| 59 TURI | 2010 | 5 | 4 | 0,4 | 4 | 4 | 0,75 | 1 |
| 60 | 2011 | 5 | 4 | 0,4 | 4 | 4 | 0,75 | 1 |
| 61 | 2012 | 5 | 4 | 0,4 | 4 | 4 | 0,75 | 1 |
| 62 | 2013 | 5 | 4 | 0,4 | 4 | 4 | 0,75 | 1 |
| 63 WAPO | 2011 | 2 | 3 | 0,5 | 3 | 4 | 1 | 0 |
| 64 | 2012 | 2 | 3 | 0,5 | 3 | 4 | 1 | 0 |
| 65 | 2013 | 2 | 3 | 0,5 | 3 | 4 | 1 | 0 |
| 66 WICO | 2011 | 3 | 4 | 0,33333333 | 3 | 4 | 0,33333333 | 1 |
| 67 | 2012 | 3 | 3 | 0,33333333 | 3 | 4 | 0,33333333 | 1 |
| 68 | 2013 | 3 | 4 | 0,66666667 | 3 | 4 | 0,33333333 | 1 |
| 69 CENT | 2012 | 4 | 1 | 0,5 | 3 | 1 | 1 | 1 |
| 70 CSAP | 2010 | 5 | 4 | 0,4 | 3 | 5 | 1 | 1 |
| 71 | 2011 | 5 | 4 | 0,4 | 3 | 5 | 1 | 1 |
| 72 | 2012 | 5 | 4 | 0,4 | 3 | 5 | 1 | 1 |
| 73 | 2013 | 5 | 4 | 0,4 | 3 | 4 | 1 | 1 |
| 74 GLOB | 2013 | 3 | 3 | 0,33333333 | 3 | 4 | 1 | 1 |
| 75 MAPI | 2010 | 5 | 4 | 0,4 | 3 | 4 | 0,66666667 | 1 |
| 76 | 2011 | 5 | 4 | 0,4 | 3 | 4 | 0,66666667 | 1 |
| 77 | 2012 | 5 | 4 | 0,4 | 3 | 4 | 0,66666667 | 1 |
| 78 | 2013 | 5 | 4 | 0,4 | 3 | 4 | 0,66666667 | 1 |
| 79 MPPA | 2013 | 7 | 4 | 0,428571429 | 3 | 4 | 1 | 0 |
| 80 SKYB | 2012 | 2 | 5 | 0,5 | 3 | 4 | 1 | 0 |
| 81 | 2013 | 2 | 4 | 0,5 | 3 | 5 | 1 | 0 |
| 82 SONA | 2012 | 6 | 2 | 0,33333333 | 3 | 4 | 0,66666667 | 0 |
| 83 | 2013 | 6 | 2 | 0,33333333 | 3 | 4 | 0,66666667 | 0 |

CALCULATION OF FIRM SIZE

| Company | Year | Firm Size |
|----------------|-------------|------------------|
| 1 AIMS | 2011 | 25,81882862 |
| 2 | 2012 | 24,54681108 |
| 3 | 2013 | 23,92800053 |
| 4 AKRA | 2009 | 22,52482223 |
| 5 | 2010 | 22,76000737 |
| 6 | 2011 | 22,84051408 |
| 7 | 2012 | 22,72671706 |
| 8 | 2013 | 22,76750948 |
| 9 BMSR | 2009 | 27,38342072 |
| 10 | 2011 | 27,22367803 |
| 11 | 2012 | 27,23079511 |
| 12 CLPI | 2011 | 26,64743951 |
| 13 CNKO | 2011 | 28,03881672 |
| 14 | 2012 | 29,1631926 |
| 15 EPMT | 2009 | 28,7250169 |
| 16 | 2010 | 28,81114281 |
| 17 | 2011 | 29,10595511 |
| 18 | 2012 | 29,23074956 |
| 19 | 2013 | 29,34085945 |
| 20 FISH | 2010 | 27,72754237 |
| 21 | 2011 | 28,3341685 |
| 22 GREN | 2012 | 27,08814899 |
| 23 | 2013 | 27,14635124 |
| 24 INTA | 2009 | 27,7898433 |



| | | |
|---------|------|-------------|
| 25 | 2010 | 28,12260511 |
| 26 | 2011 | 28,94954989 |
| 27 | 2012 | 29,08239487 |
| 28 | 2013 | 29,18768 |
| 29 ITTG | 2012 | 25,26633666 |
| 30 KONI | 2010 | 25,16404921 |
| 31 | 2011 | 25,04468993 |
| 32 | 2012 | 25,13920066 |
| 33 | 2013 | 25,40300168 |
| 34 MDRN | 2013 | 27,33985958 |
| 35 MPMX | 2013 | 26,7930816 |
| 36 OKAS | 2009 | 26,87457227 |
| 37 | 2010 | 27,16698074 |
| 38 | 2011 | 27,88342673 |
| 39 SDPC | 2009 | 28,07084965 |
| 40 | 2010 | 26,34553417 |
| 41 | 2011 | 26,42275096 |
| 42 | 2012 | 26,67809163 |
| 43 | 2013 | 26,87956129 |
| 44 SQMI | 2010 | 23,81555906 |
| 45 TGKA | 2010 | 28,1860408 |
| 46 | 2011 | 28,3333699 |
| 47 | 2012 | 28,48802729 |
| 48 TIRA | 2010 | 26,10701133 |
| 49 | 2011 | 26,13435089 |
| 50 | 2012 | 26,20525371 |



| | | |
|---------|------|-------------|
| 51 | 2013 | 26,17946419 |
| 52 TMPI | 2010 | 27,97275121 |
| 53 | 2011 | 27,8667384 |
| 54 | 2012 | 27,88613539 |
| 55 TRIL | 2010 | 26,50607886 |
| 56 | 2011 | 26,23129813 |
| 57 | 2012 | 26,13441265 |
| 58 | 2013 | 25,94865433 |
| 59 TURI | 2010 | 28,37303179 |
| 60 | 2011 | 28,56527317 |
| 61 | 2012 | 28,82868959 |
| 62 | 2013 | 28,87382494 |
| 63 WAPO | 2011 | 25,25079898 |
| 64 | 2012 | 25,41590598 |
| 65 | 2013 | 25,4643954 |
| 66 WICO | 2011 | 25,9690013 |
| 67 | 2012 | 25,76217237 |
| 68 | 2013 | 25,85508241 |
| 69 CENT | 2012 | 25,39937867 |
| 70 CSAP | 2010 | 28,16453387 |
| 71 | 2011 | 28,32874861 |
| 72 | 2012 | 28,55218688 |
| 73 | 2013 | 28,7649669 |
| 74 GLOB | 2013 | 28,02881148 |
| 75 MAPI | 2010 | 28,93135001 |
| 76 | 2011 | 29,11610653 |
| 77 | 2012 | 29,4212105 |
| 78 | 2013 | 29,68620833 |
| 79 MPPA | 2013 | 29,51498261 |
| 80 SKYB | 2012 | 27,67885155 |
| 81 | 2013 | 27,47902938 |
| 82 SONA | 2012 | 27,55747606 |
| 83 | 2013 | 27,57496044 |

CALCULATION OF RETURN ON ASSETS

| Company | Year | ROA | | Result |
|---------|------|-------------------|--------------------------|--------|
| | | Net Income t | Total Asset t-1 | |
| 1 AIMS | 2011 | 3886431345 Rp | 146.194.762.172,00 Rp | 0,03 |
| 2 | 2012 | 5956349169 Rp | 163.295.719.132,00 Rp | 0,04 |
| 3 | 2013 | 1611032383 Rp | 45.766.173.346,00 Rp | 0,04 |
| 4 AKRA | 2009 | 9,53631E+11 Rp | 4.874.850.950.000,00 Rp | 0,20 |
| 5 | 2010 | 9,59684E+11 Rp | 6.059.070.429.000,00 Rp | 0,16 |
| 6 | 2011 | 1,0184E+12 Rp | 7.665.590.356.000,00 Rp | 0,13 |
| 7 | 2012 | 1,26128E+12 Rp | 8.308.243.768.000,00 Rp | 0,15 |
| 8 | 2013 | 1,36764E+12 Rp | 11.787.524.999.000,00 Rp | 0,12 |
| 9 BMSR | 2009 | 59706741518 Rp | 543.472.914.016,00 Rp | 0,11 |
| 10 | 2011 | 66403365045 Rp | 736.913.618.738,00 Rp | 0,09 |
| 11 | 2012 | 63459031252 Rp | 665.415.859.006,00 Rp | 0,10 |
| 12 CLPI | 2011 | 79.044.591.224 Rp | 275.390.730.449,00 Rp | 0,29 |
| 13 CNKO | 2011 | 1,76354E+11 Rp | 1.212.738.774.000,00 Rp | 0,15 |
| 14 | 2012 | 2,15188E+11 Rp | 1.503.499.818.000,00 Rp | 0,14 |
| 15 EPMT | 2009 | 1,09605E+12 Rp | 2.513.339.649.109,00 Rp | 0,44 |
| 16 | 2010 | 1,69224E+11 Rp | 2.986.182.416.539,00 Rp | 0,06 |
| 17 | 2011 | 1,20934E+12 Rp | 3.254.770.280.292,00 Rp | 0,37 |
| 18 | 2012 | 1,43642E+12 Rp | 4.370.747.246.546,00 Rp | 0,33 |
| 19 | 2013 | 1,7633E+12 Rp | 4.951.687.572.380,00 Rp | 0,36 |
| 20 FISH | 2010 | 1,50601E+11 Rp | 557.385.176.818,00 Rp | 0,27 |
| 21 | 2011 | 2,38918E+11 Rp | 1.101.332.993.367,00 Rp | 0,22 |
| 22 GREN | 2012 | 25092955458 Rp | 566.946.300.470,00 Rp | 0,04 |
| 23 | 2013 | 90606375398 Rp | 581.076.926.718,00 Rp | 0,16 |
| 24 INTA | 2009 | 2,36313E+11 Rp | 1.137.218.196.524,00 Rp | 0,21 |
| 25 | 2010 | 3,16642E+11 Rp | 1.039.510.978.420,00 Rp | 0,30 |
| 26 | 2011 | 5,23649E+11 Rp | 1.634.903.848.219,00 Rp | 0,32 |
| 27 | 2012 | 5,76051E+11 Rp | 3.737.918.000.000,00 Rp | 0,15 |
| 28 | 2013 | 5,48227E+11 Rp | 4.268.975.000.000,00 Rp | 0,13 |
| 29 ITTG | 2012 | 91606385398 Rp | 1.641.974.270.457,00 Rp | 0,25 |
| 30 KONI | 2010 | 14398045505 Rp | 93.116.815.117,00 Rp | 0,15 |
| 31 | 2011 | 16225623196 Rp | 84.841.378.260,00 Rp | 0,19 |
| 32 | 2012 | 19973000813 Rp | 75.295.780.109,00 Rp | 0,27 |
| 33 | 2013 | 25006801838 Rp | 82.759.169.568,00 Rp | 0,30 |
| 34 MDRN | 2013 | 4,92369E+11 Rp | 1.734.346.315.702,00 Rp | 0,28 |
| 35 MPMX | 2013 | 2,02377E+12 Rp | 9.070.064.000.000,00 Rp | 0,22 |
| 36 OKAS | 2009 | 2,62334E+11 Rp | 643.583.742.684,00 Rp | 0,41 |
| 37 | 2010 | 2,41556E+11 Rp | 1.005.868.493.667,00 Rp | 0,24 |
| 38 | 2011 | 1,86278E+11 Rp | 1.287.118.000.000,00 Rp | 0,14 |
| 39 SDPC | 2009 | 94386364500 Rp | 308.657.795.162,00 Rp | 0,31 |
| 40 | 2010 | 80234415613 Rp | 268.013.405.356,00 Rp | 0,30 |

| | | | | | | |
|---------|------|--------------|----|----------------------|----|--------|
| 41 | 2011 | 87219616918 | Rp | 276.515.903.232,00 | Rp | 0,32 |
| 42 | 2012 | 1,04459E+11 | Rp | 323.469.491.127,00 | Rp | 0,32 |
| 43 | 2013 | 1,20462E+11 | Rp | 385.609.729.257,00 | Rp | 0,31 |
| 44 SQMI | 2010 | 2606214672 | Rp | 26.568.599.172,00 | Rp | 0,10 |
| 45 TGKA | 2010 | 5,43285E+11 | Rp | 1.466.078.753.943,00 | Rp | 0,37 |
| 46 | 2011 | 6,34891E+11 | Rp | 1.741.975.270.457,00 | Rp | 0,36 |
| 47 | 2012 | 7,33677E+11 | Rp | 2.018.488.134.855,00 | Rp | 0,36 |
| 48 TIRA | 2010 | 94530647390 | Rp | 201.789.482.852,00 | Rp | 0,47 |
| 49 | 2011 | 1,02135E+11 | Rp | 217.836.655.892,00 | Rp | 0,47 |
| 50 | 2012 | 96594137539 | Rp | 223.874.372.071,00 | Rp | 0,43 |
| 51 | 2013 | 89497686830 | Rp | 240.323.965.247,00 | Rp | 0,37 |
| 52 TMPI | 2010 | 12460912192 | Rp | 1.378.733.701.528,00 | Rp | 0,01 |
| 53 | 2011 | 10879540595 | Rp | 1.407.380.389.156,00 | Rp | 0,01 |
| 54 | 2012 | 12141295135 | Rp | 1.265.816.392.124,00 | Rp | 0,01 |
| 55 TRIL | 2010 | 30455504216 | Rp | 270.576.772.699,00 | Rp | 0,11 |
| 56 | 2011 | 24210404460 | Rp | 324.671.213.641,00 | Rp | 0,07 |
| 57 | 2012 | -13964249756 | Rp | 246.665.284.387,00 | Rp | (0,06) |
| 58 | 2013 | -34351135465 | Rp | 223.888.198.580,00 | Rp | (0,15) |
| 59 TURI | 2010 | 5,56236E+11 | Rp | 1.770.692.000.000,00 | Rp | 0,31 |
| 60 | 2011 | 7,06357E+11 | Rp | 2.100.154.000.000,00 | Rp | 0,34 |
| 61 | 2012 | 8,44985E+11 | Rp | 2.545.309.000.000,00 | Rp | 0,33 |
| 62 | 2013 | 7,094E+11 | Rp | 3.312.385.000.000,00 | Rp | 0,21 |
| 63 WAPO | 2011 | -2195615422 | Rp | 204.816.973.280,00 | Rp | (0,01) |
| 64 | 2012 | 5938218692 | Rp | 79.991.260.539,00 | Rp | 0,07 |
| 65 | 2013 | 3727091848 | Rp | 97.486.142.886,00 | Rp | 0,04 |
| 66 WICO | 2011 | 41425795465 | Rp | 213.288.722.115,00 | Rp | 0,19 |
| 67 | 2012 | 41595086754 | Rp | 189.755.322.378,00 | Rp | 0,22 |
| 68 | 2013 | 43776575394 | Rp | 154.301.199.970,00 | Rp | 0,28 |
| 69 CENT | 2012 | 27946363172 | Rp | 105.416.183.403,00 | Rp | 0,27 |
| 70 CSAP | 2010 | 4,10841E+11 | Rp | 1.385.588.393.000,00 | Rp | 0,30 |
| 71 | 2011 | 5,2957E+11 | Rp | 1.704.910.741.000,00 | Rp | 0,31 |
| 72 | 2012 | 6,32322E+11 | Rp | 2.009.181.636.000,00 | Rp | 0,31 |
| 73 | 2013 | 8,35335E+11 | Rp | 2.512.217.434.000,00 | Rp | 0,33 |
| 74 GLOB | 2013 | 3,45777E+11 | Rp | 1.030.124.606.526,00 | Rp | 0,34 |
| 75 MAPI | 2010 | 2376409771 | Rp | 3.379.394.233.000,00 | Rp | 0,00 |
| 76 | 2011 | 3042602958 | Rp | 3.670.503.683.000,00 | Rp | 0,00 |
| 77 | 2012 | 3858920359 | Rp | 4.415.342.528.000,00 | Rp | 0,00 |
| 78 | 2013 | 4848702577 | Rp | 5.990.586.903.000,00 | Rp | 0,00 |
| 79 MPPA | 2013 | 1,88882E+12 | Rp | 8.225.206.000.000,00 | Rp | 0,23 |
| 80 SKYB | 2012 | 39521001453 | Rp | 851.372.523.027,00 | Rp | 0,05 |
| 81 | 2013 | 18936113165 | Rp | 1.048.992.763.319,00 | Rp | 0,02 |
| 82 SONA | 2012 | 3,68544E+11 | Rp | 677.549.653.060,00 | Rp | 0,54 |
| 83 | 2013 | 4,58244E+11 | Rp | 929.094.279.617,00 | Rp | 0,49 |

CALCULATION OF ΔE

| Company | Year | ΔE | | | | Result | |
|---------|------|----------------|---------------|-----------------|-----------------------|--------|------|
| | | Net Income t | NetIncome t-1 | Total Asset t-1 | | | |
| 1 AIMS | 2011 | 3886431345 | 3089465595 | Rp | 146.194.762.172,00 | Rp | 0,00 |
| 2 | 2012 | 5956349169 | 3886431345 | Rp | 163.295.719.132,00 | Rp | 0,00 |
| 3 | 2013 | 1611032383 | 5956349169 | Rp | 45.766.173.346,00 | Rp | 0,00 |
| 4 AKRA | 2009 | 9,53631E+11 | 1,04891E+12 | Rp | 4.874.850.950.000,00 | Rp | 0,00 |
| 5 | 2010 | 9,59684E+11 | 9,53631E+11 | Rp | 6.059.070.429.000,00 | Rp | 0,00 |
| 6 | 2011 | 1,0184E+12 | 9,59684E+11 | Rp | 7.665.590.356.000,00 | Rp | 0,00 |
| 7 | 2012 | 1,26128E+12 | 1,0184E+12 | Rp | 8.308.243.768.000,00 | Rp | 0,00 |
| 8 | 2013 | 1,36764E+12 | 1,26128E+12 | Rp | 11.787.524.999.000,00 | Rp | 0,00 |
| 9 BMSR | 2009 | 59706741518 | 2382013926 | Rp | 543.472.914.016,00 | Rp | 0,00 |
| 10 | 2011 | 66403365045 | 59706741518 | Rp | 736.913.618.738,00 | Rp | 0,00 |
| 11 | 2012 | 63459031252 | 66403365045 | Rp | 665.415.859.006,00 | Rp | 0,00 |
| 12 CLPI | 2011 | 79.044.591.224 | 62009766595 | Rp | 275.390.730.449,00 | Rp | 0,00 |
| 13 CNKO | 2011 | 1,76354E+11 | 1,38268E+11 | Rp | 1.212.738.774.000,00 | Rp | 0,00 |
| 14 | 2012 | 2,15188E+11 | 1,76354E+11 | Rp | 1.503.499.818.000,00 | Rp | 0,00 |
| 15 EPMT | 2009 | 1,09605E+12 | 9,23161E+11 | Rp | 2.513.339.649.109,00 | Rp | 0,00 |
| 16 | 2010 | 1,69224E+11 | 1,09605E+12 | Rp | 2.986.182.416.539,00 | Rp | 0,00 |
| 17 | 2011 | 1,20934E+12 | 1,69224E+11 | Rp | 3.254.770.280.292,00 | Rp | 0,00 |
| 18 | 2012 | 1,43642E+12 | 1,20934E+12 | Rp | 4.370.747.246.546,00 | Rp | 0,00 |
| 19 | 2013 | 1,7633E+12 | 1,43642E+12 | Rp | 4.951.687.572.380,00 | Rp | 0,00 |
| 20 FISH | 2010 | 1,50601E+11 | 38801938896 | Rp | 557.385.176.818,00 | Rp | 0,00 |
| 21 | 2011 | 2,38918E+11 | 1,50601E+11 | Rp | 1.101.332.993.367,00 | Rp | 0,00 |
| 22 GREN | 2012 | 25092955458 | 20849177957 | Rp | 566.946.300.470,00 | Rp | 0,00 |
| 23 | 2013 | 90606375398 | 25092955458 | Rp | 581.076.926.718,00 | Rp | 0,00 |
| 24 INTA | 2009 | 2,36313E+11 | 2,34401E+11 | Rp | 1.137.218.196.524,00 | Rp | 0,00 |
| 25 | 2010 | 3,16642E+11 | 2,36313E+11 | Rp | 1.039.510.978.420,00 | Rp | 0,00 |
| 26 | 2011 | 5,23649E+11 | 3,16642E+11 | Rp | 1.634.903.848.219,00 | Rp | 0,00 |
| 27 | 2012 | 5,76051E+11 | 5,23649E+11 | Rp | 3.737.918.000.000,00 | Rp | 0,00 |
| 28 | 2013 | 5,48227E+11 | 5,76051E+11 | Rp | 4.268.975.000.000,00 | Rp | 0,00 |
| 29 ITTG | 2012 | 91606385398 | 20849177957 | Rp | 1.641.974.270.457,00 | Rp | 0,00 |
| 30 KONI | 2010 | 14398045505 | 13637595739 | Rp | 93.116.815.117,00 | Rp | 0,00 |
| 31 | 2011 | 16225623196 | 14398045505 | Rp | 84.841.378.260,00 | Rp | 0,00 |
| 32 | 2012 | 19973000813 | 16225623196 | Rp | 75.295.780.109,00 | Rp | 0,00 |
| 33 | 2013 | 25006801838 | 19973000813 | Rp | 82.759.169.568,00 | Rp | 0,00 |
| 34 MDRN | 2013 | 4,92369E+11 | 3,70233E+11 | Rp | 1.734.346.315.702,00 | Rp | 0,00 |
| 35 MPMX | 2013 | 2,02377E+12 | 1,61822E+12 | Rp | 9.070.064.000.000,00 | Rp | 0,00 |
| 36 OKAS | 2009 | 2,62334E+11 | 2,4482E+11 | Rp | 643.583.742.684,00 | Rp | 0,00 |
| 37 | 2010 | 2,41556E+11 | 2,62334E+11 | Rp | 1.005.868.493.667,00 | Rp | 0,00 |
| 38 | 2011 | 1,86278E+11 | 2,41556E+11 | Rp | 1.287.118.000.000,00 | Rp | 0,00 |
| 39 SDPC | 2009 | 94386364500 | 84176060991 | Rp | 308.657.795.162,00 | Rp | 0,00 |
| 40 | 2010 | 80234415613 | 94386364500 | Rp | 268.013.405.356,00 | Rp | 0,00 |
| 41 | 2011 | 87219616918 | 80234415613 | Rp | 276.515.903.232,00 | Rp | 0,00 |
| 42 | 2012 | 1,04459E+11 | 87219616918 | Rp | 323.469.491.127,00 | Rp | 0,00 |

| | | | | | | | |
|---------|------|--------------|--------------|----|----------------------|----|--------|
| 43 | 2013 | 1,20462E+11 | 1,04459E+11 | Rp | 385.609.729.257,00 | Rp | 0,00 |
| 44 SQMI | 2010 | 2606214672 | 821562205 | Rp | 26.568.599.172,00 | Rp | 0,00 |
| 45 TGKA | 2010 | 5,43285E+11 | 4,65927E+11 | Rp | 1.466.078.753.943,00 | Rp | 0,00 |
| 46 | 2011 | 6,34891E+11 | 5,43285E+11 | Rp | 1.741.975.270.457,00 | Rp | 0,00 |
| 47 | 2012 | 7,33677E+11 | 6,34891E+11 | Rp | 2.018.488.134.855,00 | Rp | 0,00 |
| 48 TIRA | 2010 | 94530647390 | 89638857438 | Rp | 201.789.482.852,00 | Rp | 0,00 |
| 49 | 2011 | 1,02135E+11 | 94530647390 | Rp | 217.836.655.892,00 | Rp | 0,00 |
| 50 | 2012 | 96594137539 | 1,02135E+11 | Rp | 223.874.372.071,00 | Rp | 0,00 |
| 51 | 2013 | 89497686830 | 96594137539 | Rp | 240.323.965.247,00 | Rp | 0,00 |
| 52 TMPI | 2010 | 12460912192 | 34323803840 | Rp | 1.378.733.701.528,00 | Rp | 0,00 |
| 53 | 2011 | 10879540595 | 12460912192 | Rp | 1.407.380.389.156,00 | Rp | 0,00 |
| 54 | 2012 | 12141295135 | 10879540595 | Rp | 1.265.816.392.124,00 | Rp | 0,00 |
| 55 TRIL | 2010 | 30455504216 | 25393219692 | Rp | 270.576.772.699,00 | Rp | 0,00 |
| 56 | 2011 | 24210404460 | 30455504216 | Rp | 324.671.213.641,00 | Rp | 0,00 |
| 57 | 2012 | -13964249756 | 24210404460 | Rp | 246.665.284.387,00 | Rp | (0,00) |
| 58 | 2013 | -34351135465 | -13964249756 | Rp | 223.888.198.580,00 | Rp | 0,00 |
| 59 TURI | 2010 | 5,56236E+11 | 4,06535E+11 | Rp | 1.770.692.000.000,00 | Rp | 0,00 |
| 60 | 2011 | 7,06357E+11 | 5,56236E+11 | Rp | 2.100.154.000.000,00 | Rp | 0,00 |
| 61 | 2012 | 8,44985E+11 | 7,06357E+11 | Rp | 2.545.309.000.000,00 | Rp | 0,00 |
| 62 | 2013 | 7,094E+11 | 8,44985E+11 | Rp | 3.312.385.000.000,00 | Rp | 0,00 |
| 63 WAPO | 2011 | -2195615422 | 5928230585 | Rp | 204.816.973.280,00 | Rp | (0,00) |
| 64 | 2012 | 5938218692 | -2195615422 | Rp | 79.991.260.539,00 | Rp | (0,00) |
| 65 | 2013 | 3727091848 | 5938218692 | Rp | 97.486.142.886,00 | Rp | 0,00 |
| 66 WICO | 2011 | 41425795465 | 45694458571 | Rp | 213.288.722.115,00 | Rp | 0,00 |
| 67 | 2012 | 41595086754 | 41425795465 | Rp | 189.755.322.378,00 | Rp | 0,00 |
| 68 | 2013 | 43776575394 | 41595086754 | Rp | 154.301.199.970,00 | Rp | 0,00 |
| 69 CENT | 2012 | 27946363172 | 34281492190 | Rp | 105.416.183.403,00 | Rp | 0,00 |
| 70 CSAP | 2010 | 4,10841E+11 | 3,54077E+11 | Rp | 1.385.588.393.000,00 | Rp | 0,00 |
| 71 | 2011 | 5,2957E+11 | 4,10841E+11 | Rp | 1.704.910.741.000,00 | Rp | 0,00 |
| 72 | 2012 | 6,32322E+11 | 5,2957E+11 | Rp | 2.009.181.636.000,00 | Rp | 0,00 |
| 73 | 2013 | 8,35335E+11 | 6,32322E+11 | Rp | 2.512.217.434.000,00 | Rp | 0,00 |
| 74 GLOB | 2013 | 3,45777E+11 | 3,37633E+11 | Rp | 1.030.124.606.526,00 | Rp | 0,00 |
| 75 MAPI | 2010 | 2376409771 | 2057893888 | Rp | 3.379.394.233.000,00 | Rp | 0,00 |
| 76 | 2011 | 3042602958 | 2376409771 | Rp | 3.670.503.683.000,00 | Rp | 0,00 |
| 77 | 2012 | 3858920359 | 3042602958 | Rp | 4.415.342.528.000,00 | Rp | 0,00 |
| 78 | 2013 | 4848702577 | 3858920359 | Rp | 5.990.586.903.000,00 | Rp | 0,00 |
| 79 MPPA | 2013 | 1,88882E+12 | 1,89756E+12 | Rp | 8.225.206.000.000,00 | Rp | 0,00 |
| 80 SKYB | 2012 | 39521001453 | 1,09195E+11 | Rp | 851.372.523.027,00 | Rp | 0,00 |
| 81 | 2013 | 18936113165 | 39521001453 | Rp | 1.048.992.763.319,00 | Rp | 0,00 |
| 82 SONA | 2012 | 3,68544E+11 | 3,26755E+11 | Rp | 677.549.653.060,00 | Rp | 0,00 |
| 83 | 2013 | 4,58244E+11 | 3,68544E+11 | Rp | 929.094.279.617,00 | Rp | 0,00 |



APPENDIX III

DESCRIPTIVES

Descriptive Statistics

| | N | Minimum | Maximum | Mean | Std. Deviation |
|--------------------|----|---------|---------|---------|----------------|
| EMTRA | 83 | -3.76 | 19.07 | .0000 | 2.20919 |
| BCS | 83 | 2.00 | 7.00 | 3.5542 | 1.19198 |
| NMBC | 83 | 1.00 | 12.00 | 5.3614 | 3.02662 |
| IBCC | 83 | .25 | .75 | .4180 | .11208 |
| ACS | 83 | 2.00 | 4.00 | 3.1084 | .34964 |
| NACM | 83 | 1.00 | 16.00 | 4.6627 | 2.13723 |
| ACC | 83 | .25 | 1.00 | .7861 | .23252 |
| AQ | 83 | .00 | 1.00 | .4578 | .50125 |
| FS | 83 | 22.52 | 29.69 | 27.0273 | 1.77967 |
| ROA | 83 | -.18 | .69 | .2076 | .16027 |
| E | 83 | .00 | .00 | .0000 | .00000 |
| Valid N (listwise) | 83 | | | | |



APPENDIX IV

NORMALITY TESTS

One-Sample Kolmogorov-Smirnov Test

| | | Unstandardized Residual |
|----------------------------------|----------------|-------------------------|
| N | | 83 |
| Normal Parameters ^{a,b} | Mean | .0000000 |
| | Std. Deviation | 1.99279635 |
| Most Extreme Differences | Absolute | .277 |
| | Positive | .277 |
| | Negative | -.211 |
| Kolmogorov-Smirnov Z | | 2.524 |
| Asymp. Sig. (2-tailed) | | .000 |

a. Test distribution is Normal.

b. Calculated from data.

One-Sample Kolmogorov-Smirnov Test

| | | Unstandardized Residual |
|----------------------------------|----------------|-------------------------|
| N | | 82 |
| Normal Parameters ^{a,b} | Mean | -.1963451 |
| | Std. Deviation | .88373928 |
| Most Extreme Differences | Absolute | .098 |
| | Positive | .076 |
| | Negative | -.098 |
| Kolmogorov-Smirnov Z | | .890 |
| Asymp. Sig. (2-tailed) | | .407 |

a. Test distribution is Normal.

b. Calculated from data.



APPENDIX V

MULTICOLLINEARITY TESTS

Variables Entered/Removed^a

| Model | Variables Entered | Variables Removed | Method |
|-------|--|-------------------|--------|
| 1 | E, NACM, ACS, ROA, NMBC, ACC, AQ, IBCC, BCS, FS ^a | . | Enter |

a. All requested variables entered.

b. Dependent Variable: EMTRA

Coefficients^a

| Model | | Collinearity Statistics | |
|-------|------|-------------------------|-------|
| | | Tolerance | VIF |
| 1 | BCS | .561 | 1.782 |
| | NMBC | .675 | 1.482 |
| | IBCC | .665 | 1.504 |
| | ACS | .750 | 1.334 |
| | NACM | .545 | 1.835 |
| | ACC | .768 | 1.302 |
| | AQ | .681 | 1.469 |
| | FS | .523 | 1.911 |
| | ROA | .537 | 1.861 |
| | E | .804 | 1.244 |

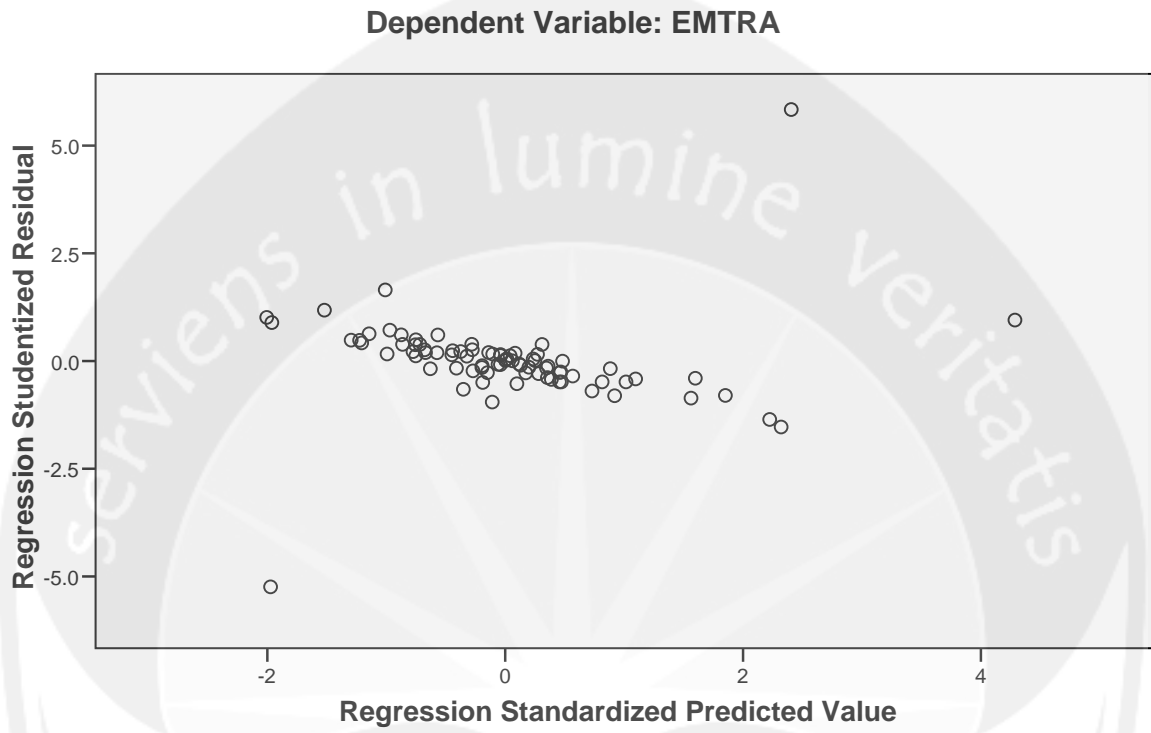
a. Dependent Variable: EMTRA



APPENDIX VI

HETEROSCEDASTICITY TEST

Scatterplot





serviens in lumine veritatis

APPENDIX VII

AUTOCORRELATION TEST

Variables Entered/Removed^d

| Model | Variables Entered | Variables Removed | Method |
|-------|--|-------------------|--------|
| 1 | E, NACM, ACS, ROA, NMBC, ACC, AQ, IBCC, BCS, FS ^a | . | Enter |

a. All requested variables entered.

b. Dependent Variable: EMTRA

Model Summary^d

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Durbin-Watson |
|-------|-------------------|----------|-------------------|----------------------------|---------------|
| 1 | .444 ^a | .197 | .084 | .60257 | 2.073 |

a. Predictors: (Constant), E, NACM, ACS, ROA, NMBC, ACC, AQ, IBCC, BCS, FS

b. Dependent Variable: EMTRA

ANOVA^b

| Model | | Sum of Squares | df | Mean Square | F | Sig. |
|-------|------------|----------------|----|-------------|-------|-------------------|
| 1 | Regression | 6.332 | 10 | .633 | 1.744 | .088 ^a |
| | Residual | 25.780 | 71 | .363 | | |
| | Total | 32.112 | 81 | | | |

a. Predictors: (Constant), E, NACM, ACS, ROA, NMBC, ACC, AQ, IBCC, BCS, FS

b. Dependent Variable: EMTRA



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APPENDIX VIII

REGRESSION

Coefficients^a

| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|-------|------------|-----------------------------|------------|---------------------------|-------|------|
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | -.385 | 1.567 | | -.246 | .807 |
| | BCS | -.005 | .075 | -.010 | -.070 | .944 |
| | NMBC | .035 | .028 | .165 | 1.271 | .208 |
| | IBCC | 1.856 | .751 | .322 | 2.469 | .016 |
| | ACS | .082 | .220 | .046 | .371 | .712 |
| | NACM | .012 | .042 | .042 | .290 | .773 |
| | ACC | .027 | .328 | .010 | .083 | .934 |
| | AQ | -.140 | .162 | -.112 | -.866 | .390 |
| | FS | -.047 | .052 | -.135 | -.915 | .363 |
| | ROA | .957 | .568 | .244 | 1.685 | .096 |
| | E | 6E+009 | 5E+009 | .149 | 1.259 | .212 |

a. Dependent Variable: EMTRA