



**THE PERFORMANCE OF PRIVATISED AND PRIVATE FIRMS:
EMPIRICAL EVIDENCE FROM EGYPT**

A thesis submitted to the University of Plymouth Business School

In partial fulfillment for the degree of

**DOCTOR OF PHILOSOPHY
IN ACCOUNTING AND FINANCE**

By

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The University of Plymouth Business School

Volume 2

June 2008

APPENDIX 3-1

Graphs depicting selected economic indicators

before and after

the economic reform program

Chart 1: Total external debt before and after the economic reform program

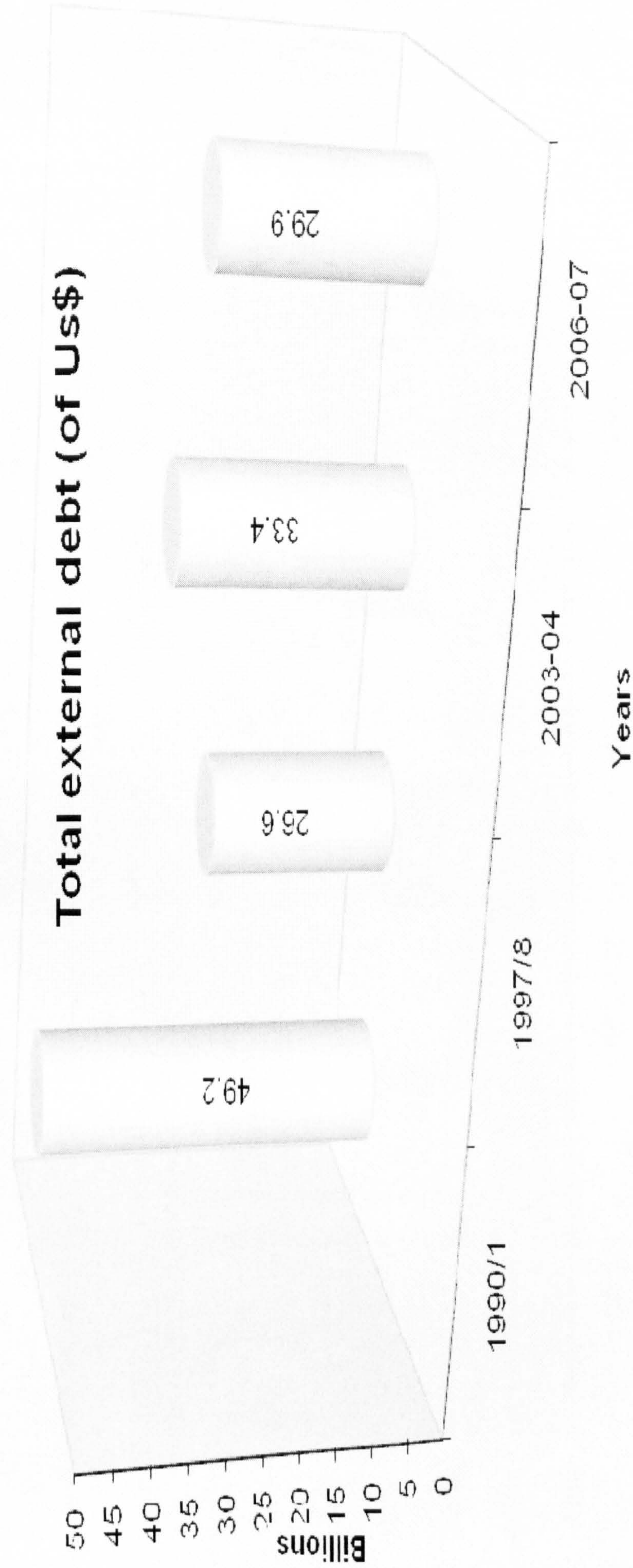


Chart 2: Total external debt as a percentage of GDP before and after the economic reform program

Total external debt as a percentage of GDP

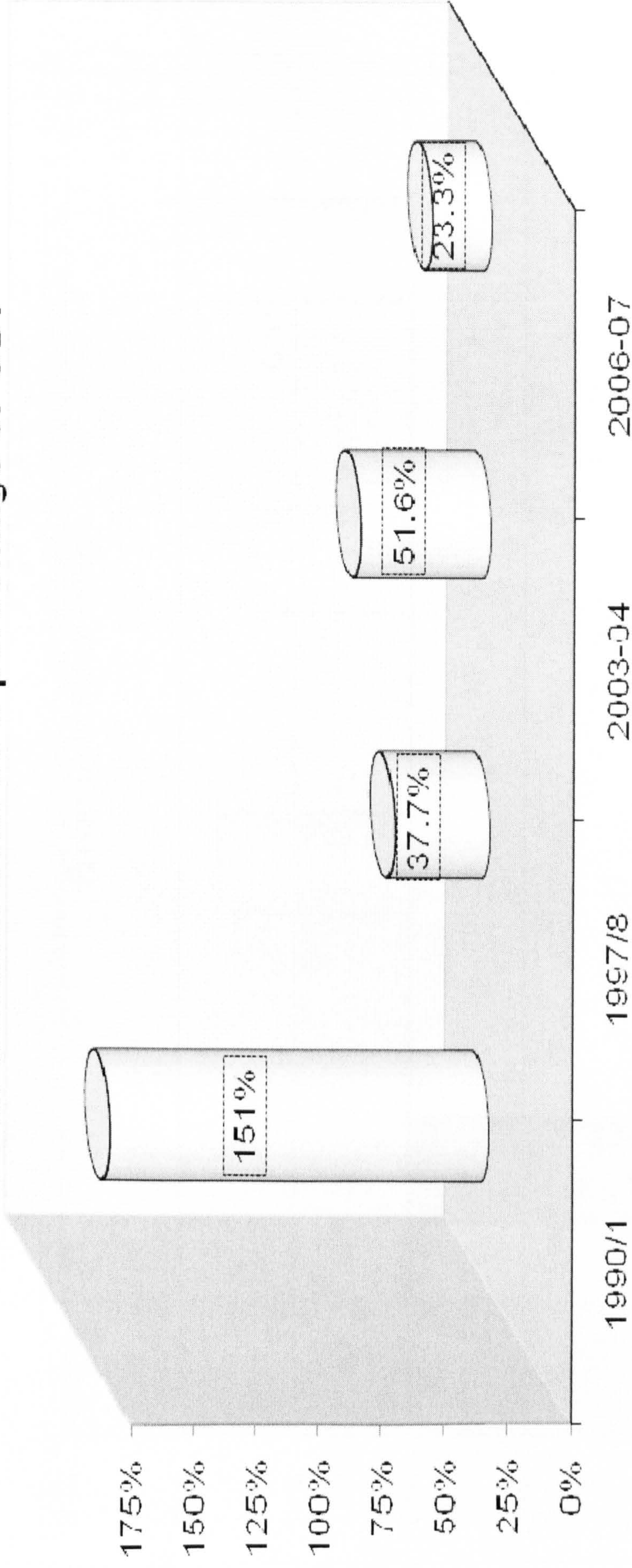


Chart 3: Real interest rate before and after the economic reform program

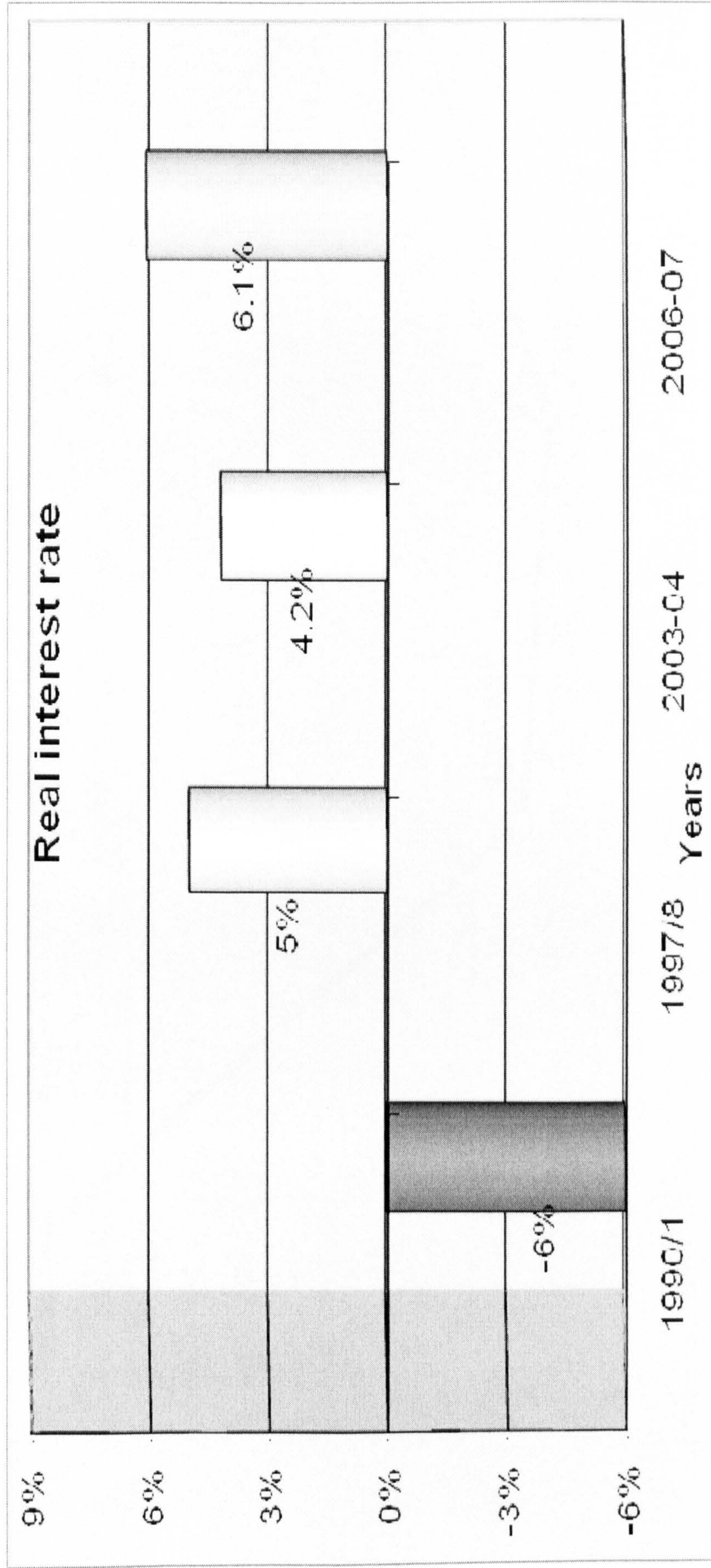


Chart 4: Inflation rate before and after the economic reform program

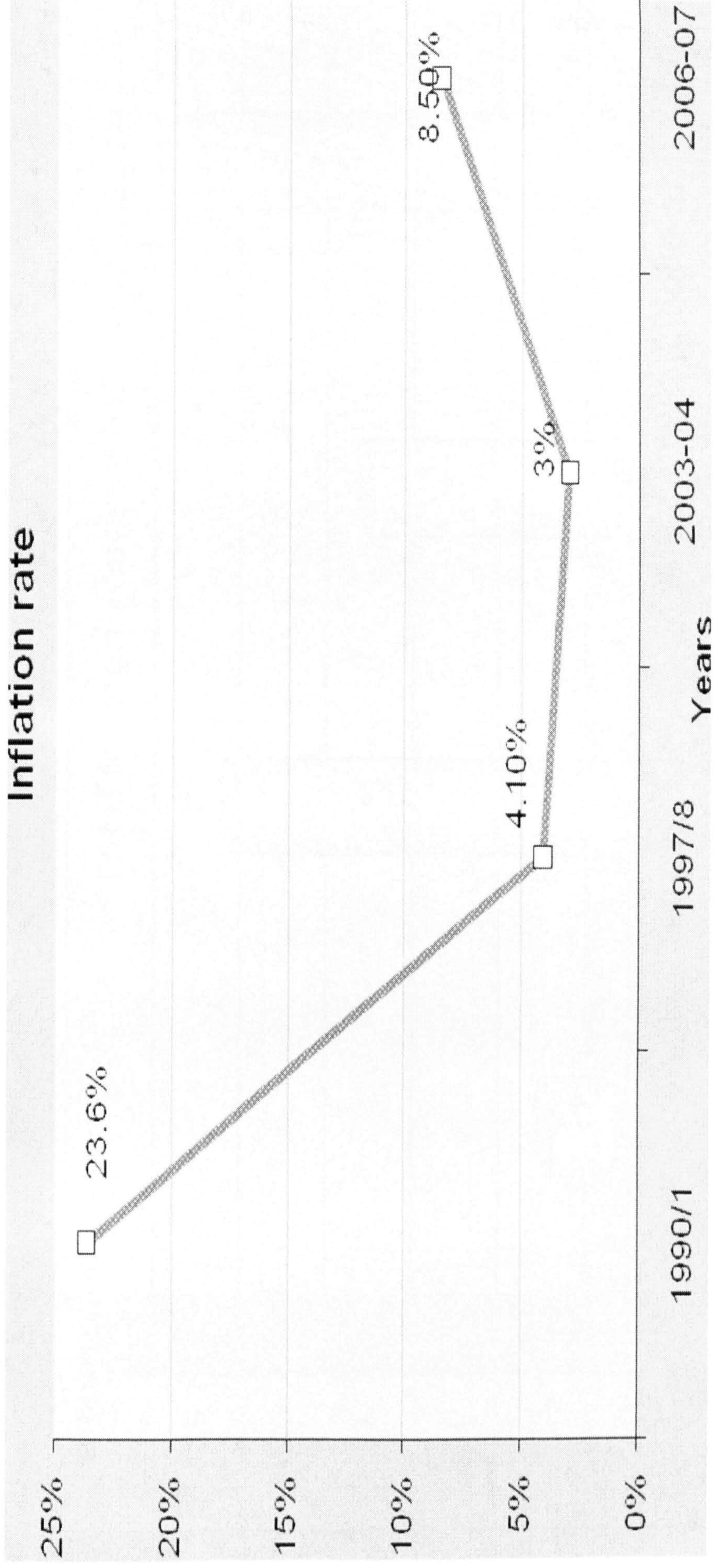


Chart 5: Total foreign reserve before and after the economic reform program

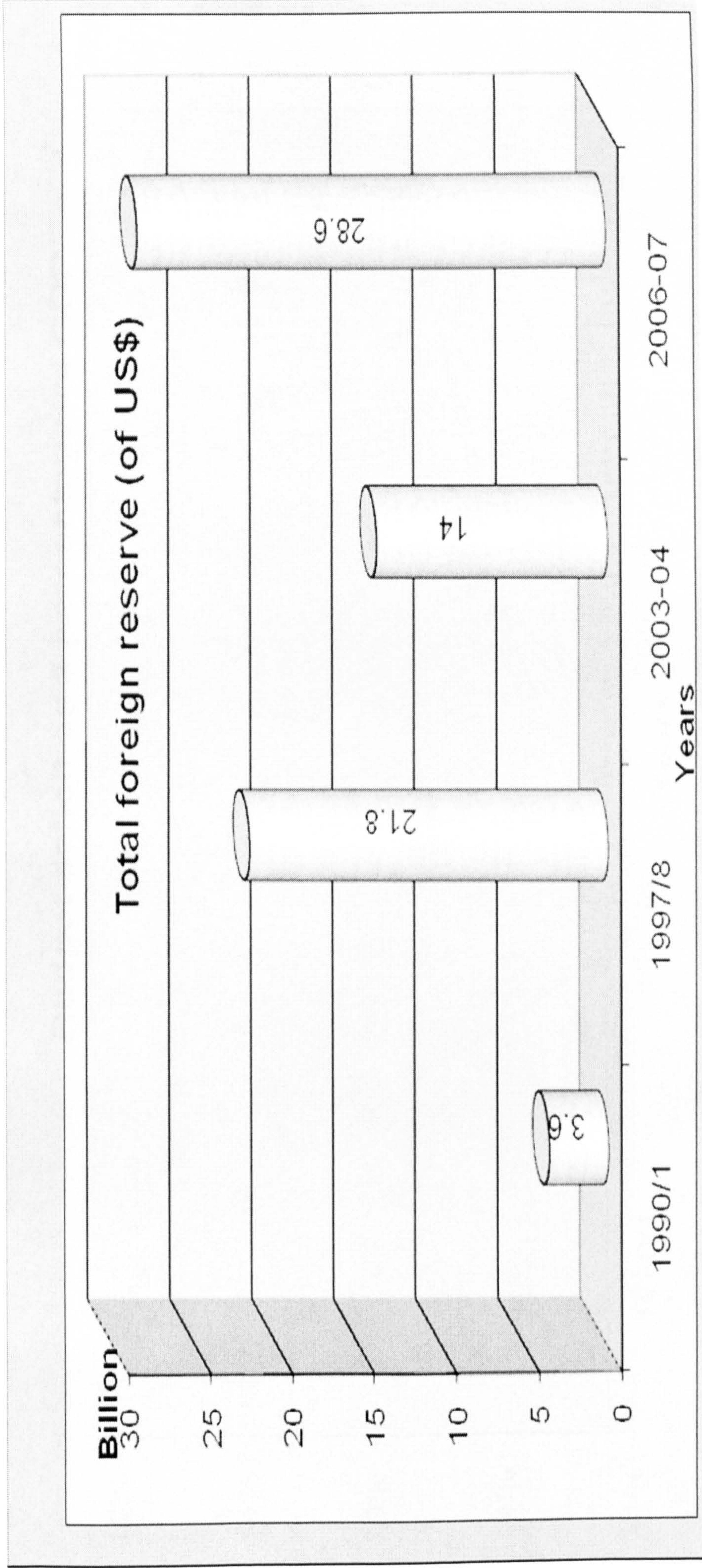


Chart 6: Budget deficit as a percentage of GDP before and after the economic reform program

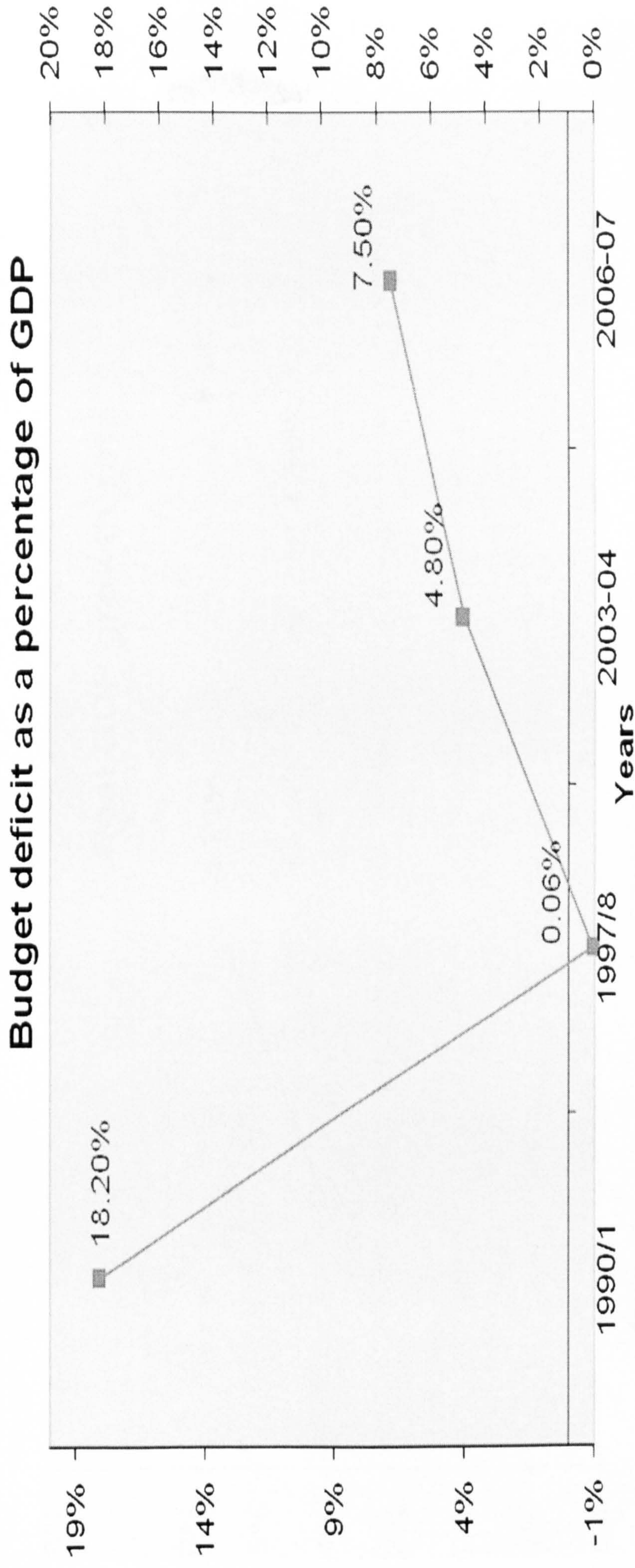
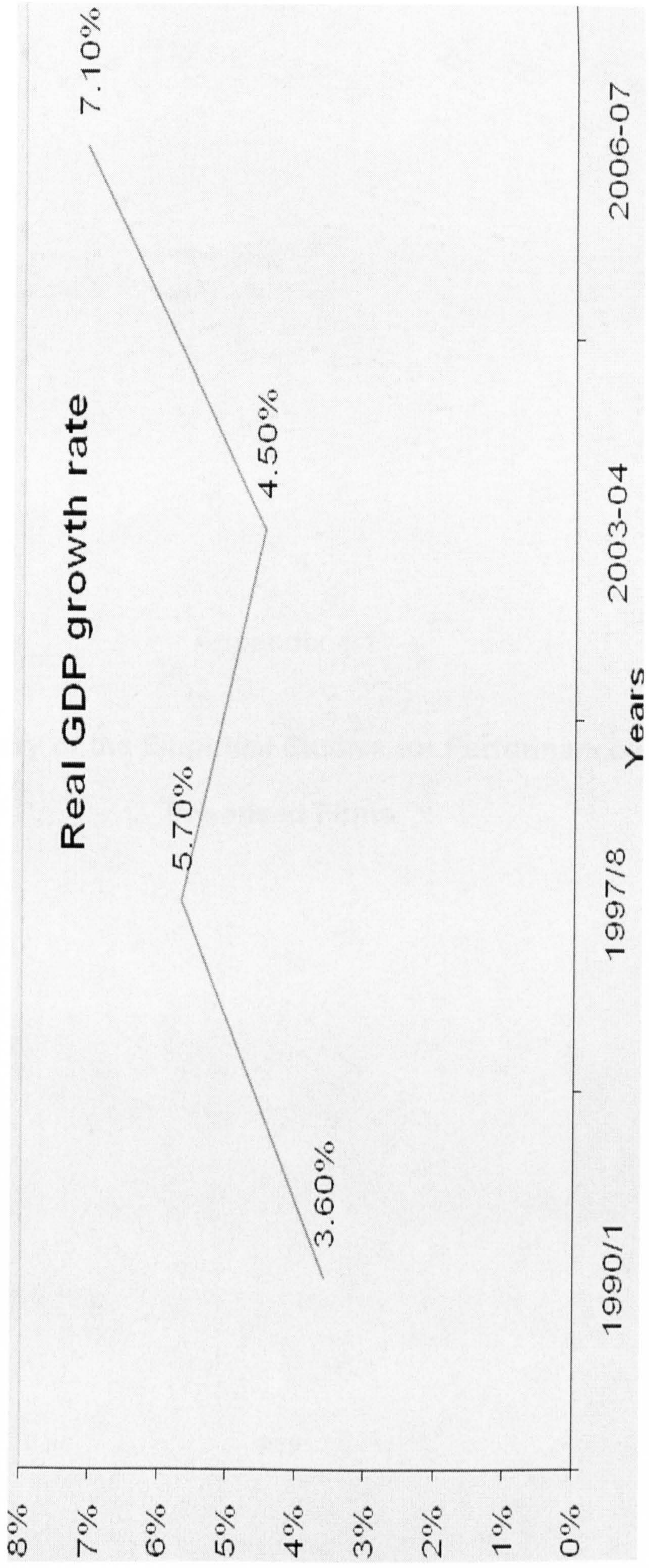


Chart 7: Real GDP growth rate before and after the economic reform program



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Appendix 4-1

Summary of the Empirical Studies for Performance of Privatised Firms.

Study	Study period	Country	Sample and Methodology	Summary of Results
Ashour, et al (1988)	1979-1984	Egypt	Investigated the effect of ownership structure types on the performance of 21 Egyptian SOEs, which have a negative average on the operating income, and no one firm was able to achieve stable on return. Only one third of the sample was able to achieve return on borrowed funds that exceed 5% and 50 % from the sample failed to achieve any return.	The Egyptian SOEs did not have any clear policy for collection liquidity although they were enjoying a monopoly. Also, the Egyptian SOEs were depending on the expensive short-term debts, and not depend on the less expensive longer term debts, thus increasing their cost of capital. Furthermore, total asset turnover was found to range between 1 to 2.5 turn per year. The study stressed that private ownership is better than SOEs.
Boardman & Vining (1989)	1983	U.S	Investigated the performance on ownership structure change of the 500 largest non- industrial firms. Using four profitability ratios and two measures of X-efficiency.	Both state-owned and mixed firms are significantly less profitable and productive than privately owned firms and mixed ownership firms are not more profitable than pure state-owned firms.
Boardman, Larrin, Vining (2003)	1988-1995	Canada	Examined the performance of 9 Canadian firms. Compared 3-year post-privatisation financial and operating performance ratios to the 5-year pre-privatisation. Employed the MNR methodology to estimate the magnitude of privatisation related performance.	The profitability firm increases more than doubles after privatisation, while the efficiency and sales also increase significantly. Leverage and employment declined significantly, while the capital spending increases significantly.
Boubakri, Cosset (2003)	1989-1996	Africa	Investigated the performance change pre-privatisation versus post-privatisation performance of 16 African firms privatised through public share offering. Used the same methodology of MNR 1994.	There are a significantly increases capital investment spending by privatised firms, but only insignificant changes in profitability, efficiency, output, and leverage.

Study	Study period	Country	Sample and Methodology	Summary of Results
Boubakri and Cosset (1998)	1980-1992	Developing and developed countries	Examined the performance of 79 privatised firms from 21 developing countries and 32 developed countries. Compared 3 year post-privatisation financial and operating performance ratios to the 3-year pre-privatisation. Using the same methodology of MNR 1994.	The performance firm was increased; in generally, increase more than those documented by MNR, the mean and median levels of profitability, real sales and operating efficiency increase significantly as well as significant decreases in leverage. In addition, capital investment spending increases but insignificantly, while employment declines significantly.
Bortolotti, D'Souza, Fantini, Megginson (2002)	1981-1998	Different countries	Analysed the pre-privatisation vs post-privatisation performance of 31 national telecommunications firms fully or partially privatised by IPO. Used the MNR methodology and employed control such as GDP per capita in their regression estimations to make cross-country comparisons possible; then, run panel data estimations to analyse performance over time in concepts of ownership changes and structural changes due to regulatory reforms occurring during 1981-98.	After privatisation, profitability, output, efficiency, and capital investment spending increase significantly; but leverage and employment decrease significantly. In addition to that, the financial and operating performance of telecommunication firms improves significantly after privatisation, but a significant fraction of the observed improvement results from regulatory change (alone or in combination with ownership change) rather than from privatisation alone.
Boubakri, Cosset, and Guedhami (2002)	1980-2001	developing countries	Used sample include 209 privatised firms from 39 developing countries to examine what are the ownership structure results from privatisation and how it changes subsequently; how the level of ownership protection impacts post-privatisation ownership structure; and how ownership structure and investor protection are related to firm performance.	Successful privatisation requires that relinquishing governments control of the privatised firms over the first three years after initial sale directly. In addition, there is a significant negative impact on the firm's performance in the case of interaction between the legal protection and concentration of ownership.
Brau and Florio (2002)	1979-1997	UK	Compared the actual effects generated against what they feel would have happened if the privatised firms had remained state owned. Considered the impact on five types of agents: firms, employees, shareholders, consumers, and taxpayers.	Privatisation has modest effects on efficiency of production and consumption, in the same time, has important effects on distribution of income and wealth. In addition, the UK privatisation program yielded benefit to British consumers with a NPV of less than 1000 pound per capita.

Study	Study period	Country	Sample and Methodology	Summary of Results
Cabanda and Arif (2002)		Japan, Philippines, Malaysia, Australia	Analysed the financial and operating performance for telecommunications privatised firms in Japan, Philippines, Malaysia, and Australia which, fully or partially privatised over an extended time period (more than twelve years). Used the MNR testing and use Data Envelope Analysis (DEA) to measure performance changes.	The privatised firms achieve productivity gains around 3% to 50%; and three of four countries' telecommunication saw a significant increases in total factor productivity (Japan, Philippines, and Australia). Also, the profitability increases in two of four countries (Malaysia, and Australia).
Chiwa (2004)	1984-1997	Malawian	Analysed data from six privatised Malawian firms, three SOEs, and six private firms. Used panel regression analysis to examine data collected of these firms from 1970-1997.	Privatisation process increased the technical efficiency of privatised firms, also increased the efficiency of all firms. In addition, other factors affected the technical firm's efficiency such as capital intensity, and structural adjustment program.
Claessens and Djankov (2002)	1991-1995	Seven transition economies	Compared the changes in the performance of 6354 privatised firms and SOEs in seven transition economies, including all manufacturing firms that were registered as state-owned in 1991 and had more than 25 employees through 1991-95. Pperformance was measured by sales and labour productivity, which increased.	In six of seven countries, privatised firms showed higher sales growth or smaller decline in sales than SOEs. Also, privatised firms reduced their sales by 6.11% versus 7.42% for SOEs. Thus, privatisation program is related with significantly increased sales and productivity growth rate.
D'Souza and Megginson (1999)	1990-1996	Developing and developed countries	Tested the success of privatisation programs in 85 firms from 13 developing countries and 15 developed countries. Compared 3-year average post-privatisation financial and operating performance ratios to the 3-year pre-privatisation.	The mean and median levels of profitability, real sales and operating efficiency increase significantly as well as a significant decrease in leverage and employment. Also, capital investment spending increases, but insignificantly. Furthermore, privatised firms that work in competitive industries are likely to yield solid and rapid economic benefits.

Study	Study period	Country	Sample and Methodology	Summary of Results
Dewenter and Malatesta (2000)	1975-1995	U.S	Investigated the impact of privatisation and ownership structures on the 500 largest international firms. as reported in Fortune magazine for 1975, 1985, and 1995, and used 1369 total firm years and more recent data for 147 SOEs. Selected the matching private firm, according to firm size, industry and business cycles. Used the same approach of Boardman and Vining 1989.	Private firms are significantly more profitable than SOEs. Also, private firms have significantly less debt and less labour-intensive production processes. Thus, this study stressed that private ownership is better than SOEs.
Dewenter and Malatesta (2001)	1975, 1985, 1995.	Developed countries	Examined the performance of 63 large information privatised firms. Compared pre- versus post-privatisation performance over both short-term and long-term. Also tested long-run stock return performance of privatised firms and compared the relative performance of a large sample (around 1,500 total firm-years) of SOEs and private firms from three separate periods 1975, 1985, and 1995.	There are a significant increase in profitability and a significant decrease in leverage and labour force over both short and long-term comparison horizons. Operating profits increased only prior to privatisation. Also, there are a significantly positive long-term abnormal stock return, mostly concentrated in Hungary, Poland, and the United Kingdom.
Fare (1998)	1994	Russia (Soviet Republics)	Examined the effect of ownership structure types on the performance of 430 firms included 86 SOEs, 299 privatised firms (partially), 45 private firms. Using OLS regressions and adjusted empirical methods to explain the tendency of insiders to claim dominant ownership in the best of privatised firms.	There is a positive effect of private ownership, relative to state ownership, on the firm's productivity. Also, outsider ownerships are significantly related with productivity improvement.
El-Shahat (2003)	1994-1998	Egypt	Compared the pre- and post privatisation financial and operating performance of a sample of the Egyptian constructing sector. Used T- test to measure the significance of the changes in the operating and financial indicators.	Following the privatisation program, there was a general increase in the profitability and labour productivity, as well as a general improvement in the financial risk. Also, there are declines in the liquidity of accounts receivables after the privatisation.

Study	Study period	Country	Sample and Methodology	Summary of Results
Ehrlich, G. Hamomo, Liu, and Lutter (1994)	1973-1983	Different countries	Tested the productivity differences between state-owned and privately owned firms. The sample of study consisted of 23 comparable international airlines of different ownership categories (state owned, private owned, and mixed owned) over period 1973-83.	There is a significant link between ownership types and rates of productivity growth; private ownership leads to higher rates of productivity growth and declining costs in the long run. Furthermore, in the long run, the change from complete state ownership to private ownership lead to increase the rate productivity growth and decrease the rate of unit cost; but the partial change has little effect on long run productivity growth.
Feng, Sun, and Tong (2004)	1964-1998	Singapore	Investigated the financial and operating performance changes for 31 Singaporean firms privatised through IPO during 1964-98. Used MNR tests first then used regression analysis to show that output and leverage improve after privatisation.	There is a little positive performance changes after privatisation because SOEs in Singapore well managed before privatisation.
Frydman Gray, Hessel, and Rapczynski (2000)	2000	The Czech Republic, Hungary and Poland	Found the imposition of hard budget constraints is alone enough to improve corporate performance. The sample study consisted of 216 Czech, Hungarian, and Polish firms; 67 SOEs, 93 privatised firms, and 56 private firms.	The privatisation process led to increase of 10percentage points to the revenue growth of the firm which sold to outside owners. Also, presented important result about the threat of hard budget constraints for poorly performing SOEs, since governments are unwilling to allow these firms to fail and thus channel additional credit to the SOEs from state controlled banks.
Frydman, Gray, Hessel, and Rapczynski (1999)	1999	Czech Republic, Hungary and Poland	Investigated the performance of privatised and state owned firms in the big three transition economies of central Europe by comparing the performance of 90 state-owned with 128 privatised Czech, Hungarian, and Polish firms. Used panel data regression method to separate ownership effects.	The privatisation process adds more than 18percentage points to the annual growth rate of the firm sold to a domestic financial firm, and 12% when sold to a foreign buyer. Furthermore, privatisation works when the firm is controlled by outside owners, it means controlled by other than managers or employees.

Study	Study period	Country	Sample and Methodology	Summary of Results
Gal, Jones, and Vogelsang (1994)		Britain, Malaysia, and Mexico	Examined the performance of 12 large firms, mostly airlines and regulated utilities. Compared the actual post-privatisation performance of them with predicted performance of these firms had they remained SOEs. Used counter-factual approach.	The net welfare gains in 11 of 12 cases considered that average 26% of the firm's pre-privatisation sales. Also, no case where workers are made significantly worse off; and three where workers are made significantly better off.
Gregorian (2000)	1995-1997	Soviet Republics.	Investigated the impact of ownership structure on the performance of 5300 small, medium, and large Lithuanian firms. Using regression analysis to examine 618 firms that were still state owned in 1995; more than half of these firms were partially privatised.	Privatisation program has brought significant performance improvements, but there was negative bias in selecting firms that candidate to privatisation.
Harper (2001)	1992-1994	Czech Republic	Examined the impact of privatisation on the financial and operating performance of 174 firms privatised in first wave and 380 firms privatised in the second wave. Compared the results for privatised firms with those which remained SOEs. Used MNR 1994 methodology to measure changes in the performance of privatised firms and SOEs.	The first wave of privatisation yielded poor results; all real sales, profitability, efficiency, and employment declined significantly. In the second wave, there were significant increases in both profitability and efficiency; but there were decline in employment (still significant change); 17% in second wave versus 41% in first wave).
Jones and Mygind (2002)	1993 -1997	Estonia	Investigated relationship between ownership and productive efficiency. Used fixed-effects production function models. Using a random sample of 660 Estonian firms and collected data set from to study the relationship between ownership and productive efficiency for SOEs, privatised firms and private firms.	All styles of private ownership are more productive, though concentrated managerial ownership had the largest effects; privatisation in Estonian created a widely varied ownership structure; and the productivity of foreign-owned firms were higher than the productivity of domestically owned firms.
Jones, Jammal, Cokgur (1998)	1998	Cote d'Ivoire	Investigated the performance of 81 privatised firms covering the electricity sector and other firms operating in competitive market in agriculture and service sectors.	The performance of privatised firms is better after privatisation than they would have under continued state ownership. Also, privatisation program contributes positively to economic welfare with annual welfare benefits equal 25% of pre-privatisation.

Study	Study period	Country	Sample and Methodology	Summary of Results
Kocenda and Svejnar (2003)	2003	Czech Republic	Examined the impact of six categories of ownership types on firm's performance after privatisation. Using a data set from 2529 to 2949 observations on an unbalanced panel of 1371- 1540 medium and large Czech firms.	Foreign ownership improves the performance of privatised firms relative to state firms. But, domestic private ownership does not improve its performance. Thus, ownership concentration is generally related to improving performance.
Kwoka (2002)	1989	U.S	Investigated the impact of ownership structure on the firm's performance. Compared the performance of 147 investor-owned electric utilities with 396 utilities owned by municipalities operating.	Public and private owned utilities were largely specialized in different activities, with owned electric utilities dominating electricity generation where they had cost advantages related to economies of scale. Also, municipality owned utilities were more competitive in electricity distribution. Thus, the study stressed no difference in the performance firm based on ownership.
La Porta, López-de-Silanes (1999)	1992	Different countries	Tested the performance of 218 state on enterprises privatised after privatisation and compared its performance with industry-matched firms.	There is positive effect on the output of privatised firms which increased around 54.3%. Increase in the operating profitability of privatised firms around 24% compared with the operating profitability for SOEs. In addition, the privatised firms reduced the need for subsidies equal to 12.7% of GDP.
Laurin and Bozec (2001)	1981-1997	Canada	Analyzed productivity and profitability of two large Canadian rail carriers (one SOE and one private sector), pre and post-privatisation. Used accounting ratios from 17 years for financial statements and divided it to three periods: from 1981 to 1991 (the state owned period); from 1992 to 1995 (the pre-privatisation period); and from 1992 to 1997 (the post-privatisation period).	There is significant increase in productivity for privatised firm after privatisation. Total productivity of Canadian SOEs is lower than private owned during 1981-91 but become just efficient during 1992-95, then exceeded it after 1995. In addition, the employment for Canadian SOEs declined by more 34% versus 18% for private firm.

Study	Study period	Country	Sample and Methodology	Summary of Results
Li and Xu (2004)	1981-1998	Different Countries	Evaluated the method of privatisation, specially, IPO method versus asset sale method. Also, examined the impact of privatisation and competition on output growth, tendency to shed labour, total factor productivity, net work expansion, and improvements in labour productivity. Used a panel data set of privatisations from 166 countries between 1981- 98 and collected data about competition from 43 countries through 1990-98.	Privatisation has significantly positive impact on output growth, network expansion, total factor productivity, and labour productivity. Competition leads to higher employment, higher output, and faster network expansion. Competition and privatisation are complements, in that competition increases the gains from privatisation, and vice versa.
Martin and Parker (1995)	1981-1988	UK	Examined the performance of 11 British firms privatised after privatisation. Used return on invested capital found improved profitability and annual growth in value added per employee-hour to measure efficiency.	Less than half the firms performed better after being privatised. Also, the study found evidence of a "shake-out" effect upon privatisation announcement, where several firms improve performance prior to being privatised but not after privatised.
Megginson and Butchkova (2000)	2000	Different countries	Compared the number of stockholders in the privatised firms to the number of shareholders in private sector firms. Selected the matching private firm, according to the nearest total market value in the Business Week list. Used a sample from firms that have ownership structure included at least 250,000 shareholders. The final sample contained a 86 privatised and private firms couples. Used the Wilcoxon signed rank test to explain the mean number of shareholders of privatised firms was significantly higher than that of the private matching firms.	The privatised firms had a much larger number of shareholders, this fact due to governments usually retain sizable stakes in these firms, which led to reduced effectiveness of privatised firms, since these stakes remained unsold to private investors. In addition, the number of shareholders of the privatised firms was significantly higher than the number of shareholders in the matching private sample firms.
Mubari and Oriani (2002)	1980-1997	European countries	Examined the impact of privatisation on research and development (R&D) before and after privatisation. Compared pre and post privatisation R&D efforts of 35 companies that were fully or partially privatised in nine European countries. Used the citation intensity to measure the quantity and quality of patents.	There is persuasive evidence that privatisation processes lead to a significant increase in the quantity and quality of patents.

Study	Study period	Country	Sample and Methodology	Summary of Results
Megginson, Nash, and V. Randenborgh (1994)	1961-1989	Different countries	Examined the performance of 61 privatised firms from 18 countries and 32 different industries. Compared 3 year average post-privatisation financial and operating performance ratios to the 3-year pre-privatisation. Tested significance of median changes in post-versus-pre-privatisation. Also, employ binomial tests for percentage of firms changing as predicted.	There are significant increases in real sales, operating efficiency, profitability, capital investment spending, and dividend payments, as well as the significant decreases in leverage. Furthermore, there is no evidence of employment declines after privatisation.
Mubari and O'tani (2002)	1982-1997	Western European	Examined the impact of privatisation on the research and development (R&D) investments, the valuation, and the performance. Used Tobin's Q and a hedonic model to measure the change of ownership related to performance. Tested data set of 20 western European firms privatised through public share offering during 1982-1997 and matched control set of 20 private firms. Calculated the R&D coefficient for those firms, which equal 7.5 for private firms versus 1.3 for the privatised firms.	After privatisation, the R&D investment initially declined (related to assets), while Tobin's Q increases, thus, the market valuation of newly privatised firms doesn't respond negatively to decline. Newly privatised firms have lower mean values of the R&D related to assets, the R&D capital related to assets, and Tobin's Q. Also, the mean debt levels of privatised firms have higher than private firms. In addition, the stock market values of the R&D investments of privatised firms at less than half the level of private firms.
Omaran (2007)	1996 -19 99	Egypt	Investigated the impact of privatisation and ownership structures on 12 Egyptian joint-venture banks that were fully or partially. Evaluated the performance changes in privatised banks on matched adjusted basis-private-owned banks, state-owned banks, and mix-ownership banks with majority private ownership or majority state-ownership banks. Employed several fixed-effect regressions over the entire study period to capture the impact of ownership structure on bank performance, also used majority state-ownership banks and state-owned banks as benchmarks.	It provides strong evidence that banks with higher private ownership involvement are associated with a better performance. The relative performance changes of privatised banks are better than majority state-ownership banks and worse than state-ownership banks. In addition to that, some profitability and liquidity ratios declined significantly, whereas other performance measures asset quality, capital risk indicators, operating efficiency, and asset growth show insignificant changes.

Study	Study period	Country	Sample and Methodology	Summary of Results
Newbery and Pollitt (1997)	1990	U.K	Examined the specific aspects of Britain's privatisation program. Comparing the actual performance of the UK's Central Electricity Generating Board (CEGB) to a counter-factual assuming CEGB had remained state owned.	There are significant post-privatisation improvements and permanent cost reduction of 5 % per year. Producers and shareholders captured all this benefit and more, but consumers and the government lose.
Oman (2001a)	1994-1998	Egypt	Investigated the performance changes for 69 Egyptian firms privatised during 1994-1998. Used the same methodology of MNR 1994. The sample included 33 Egyptian firms were majority sales, 18 Egyptian firms were partial, 12 Egyptian firms were sold to Employee Shareholding Associations (ESA), and 6 Egyptian firms were sold to anchor investors.	After privatisation, there are significant increase on the profitability, operating efficiency, capital spending, dividends, and liquidity, in the same time, significant decline on leverage, employment, and financial risk. Also, full privatisation works better than partial and that sale to ESA works better than others.
Oman (2004)	1994-1998	Egypt	Examined the performance of 54 newly privatised Egyptian firms against a matching numbers of firms that remain state-owned enterprises (SOE). Used the same approach which used in his study 2001.	SOEs' performance improves significantly during post-privatisation period, and privatised firms did not perform any better than SOEs. This study did not specify whether the performance improvement for privatised firms was due to the improvement in the economic performance of enterprises as a result of the privatisation program in Egypt or due to the benefit of the privatised firms and SOEs from a general opening up of the Egyptian economy during the study period.
O'tchere (2002)		Developed and developing countries	Examined stock price reaction of 314 industry counterparts to the privatisation announcement for 121 firms are to be privatised via IPO to conclude the expected impact of privatisation on the performance of firms. Used a data set of 29 developed and developing countries and 28 industries.	Competitors react negatively to privatisation announcements, losing 1.72% of their value over the third day and 1.64% in the fifth day after the announcement. The reaction of competitor firms in developing countries stronger than in developed countries. The reaction of rivals to a full privatisation announcement was larger than that of a partial privatisation announcement.

Study	Study period	Country	Sample and Methodology	Summary of Results
Sun, Jia, and Tong (2002)	1997	Malaysia	Compared financial and operating performance ratios pre- versus post-privatisation for 24 Malaysian firms privatised via IPOs by the end of 1997. Use the MNR methodology to estimate the magnitudes of privatisation related performance, then used panel data regression to test the sources of performance changes.	Privatised firms increase their absolute level of profits threefold, more than double real sales, in the same time, reduce leverage. Also, stocks of privatised firms earn normal returns. Finally, institutional investors had a positive impact on privatised firm performance.
Saal and Parker (2003)	1989	UK	Examined the productivity and price performance of the privatised water and sewerage companies after privatisation and imposed a new regulatory regime in 1989. Investigated the joint impact of privatisation and new economic regulatory environment on firm's performance. Measured the firm's productivity growth by total factor productivity (TFP).	After privatisation, there is increase in output prices which outstripped increased input prices that lead to significantly higher economic profits. Also, labour productivity improved significantly after privatisation. No significant evidence that productivity growth is improved by privatisation.
Shahira Abdel Shaid (2002)	1991-2001	Egypt	Analysed the achievement of the privatisation program in Egypt since its beginning till the end of 2001. Study mentioned that the main method of privatisation adopted by the Egyptian government was IPOs via the stock market. Evaluated the performance of privatised SOEs by comparing the market prices of stocks pre- privatisation to the market prices post privatisation.	The Egyptian government used IPOs method to give a boost to its privatisation program and to increase the activities on the stock market. The majority of firms had a reduction in their valuation, mainly due to the overall negative macroeconomic circumstances that Egypt has suffered from since 1997.
Sun and Tong (2003)	1994-1998	China	Evaluated the performance of 634 Chinese SOEs and analyzed the impact of ownership structure (state and private shareholding). Used MNR methodology to evaluate the change of performance before and after privatisation, and panel data regression test to examine whether partial privatisation improves both firm's profitability, output, and its efficiency.	After privatisation, there is a significant improvement in both return on sales, real sales, employee productivity, and the level of real profit. In addition, ownership structure have effect on firm's performance; state shareholding hinder performance, but private shareholding promote to improve performance.

Study	Study period	Country	Sample and Methodology	Summary of Results
Vining and Boardman (1992)	1992	Canada	Examined the impact of ownership structures and the degree of competition on the efficiency of SOEs. Used the same approach which used in their study in 1989. Used a sample of 12 SOEs and 93 Canadian private firms to re-examine the state versus private ownership.	At low levels of competition, the differences between public and private ownership would be insignificant, as both types of firms would adopt similar rent seeking behaviour. When competition increases, private ownership offers incentives and motivation for managers to productively adopt profit-maximizing behaviour.
Verbrugge, Owens, Megginson (2000)	1981 - 1996	Developing & Developed countries	Analyzed the performance change pre-privatisation versus post-privatisation performance for 32 banks in developed countries and 5 in developing countries. Also, examined the offering terms and share ownership results for 65 banks fully or partially privatised through this period.	There are significant improvements in the privatised banks in developed countries. Also, significant increase in the ratios of profitability, net income, and capital adequacy; as well as a significant declines in leverage
Villalonga (2000)	1985-1993	Spain	Investigated the effect of ownership change on the efficiency of twenty four Spanish firms that were fully privatised during 1985-93.	There are insignificant changes in the level and growth rate of efficiency after privatisation; conversely, significant positive effect found for business cycle; and positive increases in efficiency improvement for capital intensity. Concluded that privatisation leads to decrease in efficiency in the intermediate term, conversely, in the long term, it leads to improve in efficiency.

Appendix 5-1

Explaining How Control Group is Determined.

Step 1 Calculating the average of total assets for privatised firms

	Firms	Average assets
	PHARMACETICALES SECTOR	
1	Nile Pharmaceuticals	293836
2	Memphies Pharmaceuticals	225450
3	Cairo Pharmaceuticals	307671
4	Arabia Pharmaceuticals	143257
5	Alexandria Pharmaceuticals	182064
	MINING SECTOR	
6	Egyptian Financial & Industrial / EFIC	524764
7	Portland Helwan	991517
8	Portland Torah	1227160
9	Eastern Company	2266213
	MILLS SECTOR	
10	East Delta	354455
11	Middle and Weast Delta	424419
12	Upper Egypt	360367
13	General for Silos	795248
14	Alex Mills	319440
15	South Cairo Mills	210729
	CONSTUCTION SECTOR	
16	Nasr City for Housing and Development	646788
17	Shams for Housing	195177
18	Upper Egypt for Housing	93590
19	Giza for Contracting	205840
20	Mahmoudia for Contracting	227791
21	Moukhtar Ibrahim Contracting	1307182
22	Heliopolis Housing & Development	489240
23	Nasr Utilities	108926
	Food SECTOR	
24	Bisco Misr	133236
25	Extracted Oils	349936
26	Misr Oil & Soap	298854
27	Alnasr for Dehydrating Agricultural Products	12420
28	Egyptian Starch & Glucose	92448
29	North Cairo Mills	343912
30	Middle Egypt Mills	427033
	HOUSING & TOURISM SECTOR	
31	Construction and Counsulting Engineering	57118
32	Cairo for Housing & Development	161265
33	Egypt for Free Shops	135490
34	Alahram Beverage	589426
	CONSTRUCTION & ELECTRACITY DISTRIBUATION SECTOR	
35	Misr Mechanical and Electrical Projects (Khromika)	131852
36	Elnasr for Civil Works	132771
37	ELMACO	177136
38	Industrial & Engineering Projects	679002

	Firms	Average assets
	METALLURGICAL INDUSTRIES SECTOR	
39	Amiria for Cement	752735
40	company name: Misr for Aluminum (2) Minority	3365576
	COTTON & INTERNATIONAL TRADE SECTOR	
41	Nile Cotton Ginning	277203
42	Arabia Cotton Ginning	152453
	WEAVING & TRADE SECTOR	
43	United Arab for Spinning & Weaving	649142
	CHEMICAL INDUSTRIES SECTOR	
44	Middle East for Paper (SIMO)	67601
45	Nile for Kabriet	71013
46	Kafr El-Zayat	65615
47	Pacien	472823
48	company name Alexandria Portland for Cement	445743
	INDUSTRIAL ENGINEERING SECTOR	
49	Telemisr	244825
50	company name: CABLAT (2) Majority	444475
51	IDEAL	647106
	MARITIME & INLAND TRANSPORT SECTOR	
52	Arabia & United Stevedoring	88554
	AGRICULTURE AND GENERAL SERVICES SECTOR	
53	El-Wadi for Agricultural Export	152152
54	Nobarria Agricultural Engineering	41392

Step 2 Calculating the average of total assets for private firms

	Private firms	Average assets
	PHARMACETICALES SECTOR	
1	Amriya Pharmaceutical Industries	302241
2	Aventis Pharmaceutical (Hoechst Morion Roussel)	148034
3	Egyptian Int'l Pharmaceutical Industries (Eipico)	794981
4	Pfizer Egypt	253104
5	T 3 A Pharma. Group	149315
6	Glaxo Wellcome Egypt	766474
7	Medical Union Phamaceuticals	388899
8	Nozha Int'l Hospital	20649
9	Amoun Pharmaceuticals S.A.E	395860
10	Cairo Tower Lab	56761
11	IbnSina Medical Servies	18570
12	Cairo Scan	21835
	BUILDING MATERALS & CONSTUCTING SECTOR	
13	Ezz Porcelaine / Gawhara	482041
14	Acrow Misr for Netallic Scaffolding & Formwork	44018
15	Ezz Steel Rebars	1867518
16	Delta for Construction & Rebuilding	251675
17	Arabia for Ceramica	82928
18	Suez Cement	2055721
19	Sinai Cement CO. (S.A.E)	646555
20	Aracemco Arab Ceramic	102704
21	Arabin Int'l Construction (A I C Contracting)	477078
	Textilles, Garments& Leather Sector	
22	Oriental Weaver for Carppets	1069794
23	Egypt Clothing	61551
24	10 TH of Ramdan & Plning IND. CO	71191
25	Trade & Distribution Sector	
26	Exports Development Trading (EXPOD)	361314
27	Assuit National for Trade & Devolopmement	118753
	Housing & Real Estate	
28	Sixth of October Devolopmenmt & Investement (SODIC)	627425
29	Alexandria for Real Estate Investements	716122
30	Egyptian Engineers Arab Real Estate Investment (EDIC)	233053
31	Samcrete Egypt	262569
32	Mena for Touristic & Real Estate Investements	278182
33	Orascom Construction Indusries	6683644

	Private firms	Average assets
34	Cairo for investment & Development Estate	52932
35	zahraa El Maadi Investment & Development	283113
36	Mena Contracting & Trading	55393
37	Nile Aster Int'l	64130
38	Arabia Hosing & Development	21431
	Paper, Packaging & Publishing Sector	
39	Shorouk Print House	133852
40	Suez Bag	72358
	Food & Bevereages Sector	
41	Misr Gulf Oil Processing Migop	172120
42	Savola Sime Egypt (S.A.E)	276843
43	Cairo Poultoy	608623
44	Int'll Food / Hostess	49723
45	Egyptian Macaeoni & Starch Industry	60331
	Agriculture Sector	
46	EGAS	44158
47	Egyptian Fish Development & Contracting	1604
48	Sharkeya Poultoy	12842
49	smailia Misr- Poultoy	51494
50	Tourism Sector	
51	Semiramis Hotels	232109
52	Orascom Hotel Holdings	944850
53	Orascom for project & Developmement Tourism	948043
54	Remco Tourist Villages	257778
	Engineering & Electronics Sector	
55	Int'll Electronics (Ahmed Bahget)	585052
56	Cairo precision Electric Industries	125925
57	Miraco- Carrier	284079
58	Industrial Engineering for Construction ana Development (ICON)	95010
59	Middle East for Modern Lights	174019
60	Cairo light Electric Industries (Olympic Electric)	144486
	other Sector	
61	Cairo For Educational Affairs	35132
62	Aryists Television& Cinema Union.	22541
63	Egyptian Media Production City	2180274
64	Egyptian Tranport & Commercial Service.	80373

Step 3 Calculation for the comparable private companies with the privatised ones according to the standard-size

Private firms		Privatised firms		Average total assets (privatised) / average total assets (private)											
PHARMACETICALES SECTOR		PHARMACETICALES SECTOR		D3	D4	D5	D6	D7	D9	D10	D11	D12			
Amriya Pharmaceutical Industries	302241	Nile Pharmaceuticals	293836	0.97	0.75	1.02	0.47	0.60	0.23	0.22	1.56	1.93			
Aventis Pharmaceutical (Hoechst Morion Rousel)	148034	Memphies Pharmaceuticals	225450	1.98	1.52	2.08	0.97	1.23	0.48	0.44	3.19	3.95			
Egyptian Int'l Pharmaceutical Industries (Eipico)	794981	Cairo Pharmaceuticals	307671	0.37	0.28	0.39	0.18	0.23	0.09	0.08	0.59	0.74			
Pfizer Egypt	253104	Arabia Pharmaceuticals	143257	1.16	0.89	1.22	0.57	0.72	0.28	0.26	1.87	2.31			
T 3 A Pharmaceuticals Group	149315	Alexandria Pharmaceuticals	182064	1.97	1.51	2.06	0.96	1.22	0.48	0.44	3.17	3.92			
Glaxo Wellcome Egypt	766474	CHEMICAL INDUSTRIES SECTOR		0.38	0.29	0.40	0.19	0.24	0.09	0.09	0.62	0.76			
Medical Union Pharmaceuticals	388899	Nile for Kabriet	71013	0.76	0.58	0.79	0.37	0.47	0.18	0.17	1.22	1.50			
Nozha Int'l Hospital	20649	Kafr El-Zayat	65615	14.23	10.92	14.90	6.94	8.82	3.44	3.18	22.90	28.32			
Amoun Pharmaceuticals S.A.E	395860	Pacien	472823	0.74	0.57	0.78	0.36	0.46	0.18	0.17	1.19	1.48			
Cairo Tower Lab	56761	Misr for Chemical Industries	584712	5.18	3.97	5.42	2.52	3.21	1.25	1.16	8.33	10.30			
Ibn Sina Medical Services	18570			15.82	12.14	16.57	7.71	9.80	3.82	3.53	25.46	31.49			
Cairo Scan	21835			13.46	21834.80	13.46	6.56	8.34	3.25	3.01	21.65	26.78			

Private firms		Privatised firms		Average total assets (privatised) / average total assets (private)															
Housing & Real Estate		HOUSING & TOURISM SECTOR		D18	D19	D20	D21	D22	D23	D24	D25	D26	D27	D28	D29				
Sixth of October Development & Investment (SODIC)	627425	Construction and Consulting Engineering	57118	0.09	0.26	0.22	0.94	1.03	0.31	0.15	0.33	0.36	2.08	0.78	0.17				
Alexandria for Real Estate Investments	716122	Cairo for Housing & Development	161265	0.08	0.23	0.19	0.82	0.90	0.27	0.13	0.29	0.32	1.83	0.68	0.15				
Egyptian Engineers Arab Real Estate Investment (EDIC)	233053	Egypt for Free Shops	135490	0.25	0.69	0.58	2.53	2.78	0.84	0.40	0.88	0.98	5.61	2.10	0.47				
Samcrete Egypt	262569	Alahram Beverage	589426	0.22	0.61	0.52	2.24	2.46	0.74	0.36	0.78	0.87	4.98	1.86	0.41				
Mena for Touristic & Real Estate Investments	278182	Nasr City for Housing and Development	646788	0.21	0.58	0.49	2.12	2.33	0.70	0.34	0.74	0.82	4.70	1.76	0.39				
Orascom Construction Industries	6683644	Shams for Housing	195177	0.01	0.02	0.02	0.09	0.10	0.03	0.01	0.03	0.03	0.20	0.07	0.02				
Cairo for investment & Development Estate	52932	Upper Egypt for Housing	93590	1.08	3.05	2.56	11.14	12.22	3.69	1.77	3.89	4.30	24.70	9.24	2.06				
zahraa El Maadi Investment & Development	283113	Giza for Contracting	205840	0.20	0.57	0.48	2.08	2.28	0.69	0.33	0.73	0.80	4.62	1.73	0.38				
Mena Contracting & Trading	55393	Mahmoudia for Contracting	227791	1.03	2.91	2.45	10.64	11.68	3.52	1.69	3.72	4.11	23.60	8.83	1.97				
Nile Aster Int'l	64130	Moukhtar Ibrahim Contracting	1307182	0.89	2.51	2.11	9.19	10.09	3.04	1.46	3.21	3.55	20.38	7.63	1.70				
Arabia Hosing & Development	21431	Heliopolis Housing & Development	489240	2.67	7.52	6.32	27.50	30.18	9.11	4.37	9.60	10.63	60.99	22.83	5.08				
Tourism Sector		Nasr Utilities	108926																
Semiramis Hotels	232109			0.25	0.69	0.58	2.54	2.79	0.84	0.40	0.89	0.98	5.63	2.11	0.47				
Orascom Hotel Holdings	944850			0.06	0.17	0.14	0.62	0.68	0.21	0.10	0.22	0.24	1.38	0.52	0.12				
Orascom for project & Development Tourism	948043			0.06	0.17	0.14	0.62	0.68	0.21	0.10	0.22	0.24	1.38	0.52	0.11				
Remco Tourist Villages	257778			0.22	0.63	0.53	2.29	2.51	0.76	0.36	0.80	0.88	5.07	1.90	0.42				

Private firms	Privatised firms	Average total assets (privatised) / average total assets (private)																		
BUILDING MATERIALS & CONSTRUCTING SECTOR	BUILDING MATERIALS & CONSTRUCTING SECTOR	D38	D39	D40	D41	D42	D43	D44	D45	D47	D49	D50	D52	D53	D54	D55	D57	D58	D59	D60
Ezz Porcelaine / Gawhara	Nasr City for Housing and Development	1.34	0.40	0.19	0.43	0.47	2.71	1.01	0.23	1.56	0.92	0.27	0.25	0.28	0.37	1.41	1.09	2.06	2.55	4.70
Acrow Misr for Metallic Scaffolding & Formwork	Shams for Housing	14.7	4.43	2.13	4.68	5.17	29.7	11.1	2.47	17.1	10.1	2.96	2.77	3.02	4.02	15.4	11.9	22.5	27.9	51.5
Ezz Steel Rebars	Upper Egypt for Housing	0.35	0.10	0.05	0.11	0.12	0.70	0.26	0.06	0.40	0.24	0.07	0.07	0.07	0.09	0.36	0.28	0.53	0.66	1.21
Delta for Construction & Rebuilding	Giza for Contracting	2.57	0.78	0.37	0.82	0.91	5.19	1.94	0.43	2.99	1.77	0.52	0.48	0.53	0.70	2.70	2.09	3.94	4.88	9.00
Arabia for Ceramica	Mahmoudia for Contracting	7.80	2.35	1.13	2.48	2.75	15.7	5.90	1.30	9.08	5.38	1.57	1.47	1.60	2.14	8.19	6.33	12.0	14.8	27.3
Suez Cement	Moukhtar Ibrahim Contracting	0.31	0.09	0.05	0.10	0.11	0.64	0.24	0.05	0.37	0.22	0.06	0.06	0.06	0.09	0.33	0.26	0.48	0.60	1.10
Sinai Cement CO. (S.A.E)	Heliopolis Housing & Development	1.00	0.30	0.14	0.32	0.35	2.02	0.76	0.17	1.16	0.69	0.20	0.19	0.21	0.27	1.05	0.81	1.53	1.90	3.51
Aracemco Arab Ceramic	Nasr Utilities	6.30	1.90	0.91	2.00	2.22	12.7	4.76	1.06	7.33	4.34	1.27	1.19	1.29	1.72	6.61	5.11	9.65	11.9	22.1
Arabin Int'l Construction (A I C Contracting)	Amiria for Cement	1.36	0.41	0.20	0.43	0.48	2.74	1.03	0.23	1.58	0.93	0.27	0.26	0.28	0.37	1.42	1.10	2.08	2.57	4.75
Industrial Engineering for Construction and Development (ICON)	Alexandria Portland Cement	6.81	2.05	0.99	2.17	2.40	13.7	5.15	1.15	7.92	4.69	1.37	1.28	1.40	1.86	7.15	5.52	10.4	12.9	23.9
	Egypt for Free Shops																			
	Misr Mechanical and Electrical Projects																			
	Elnasr for Civil Works																			
	ELMACO																			
	Industrial Engineering & Egyptian Financial & Industrial / EFIC																			
	Portland Helwan																			
	Portland Torah																			
	Eastern Company																			

Private firms	Privatised firms	Average total assets (privatised) / average total assets (private)									
Textiles, Garments & Leather Sector	Textiles, Garments & Leather & TRADE SECTOR	D64	D65	D66							
Oriental Weaver for Carpets	Nile Cotton Ginning	277203	0.14	0.70							
Egypt Clothing	Arabia Cotton Ginning	152453	2.48	12.17							
10 TH of Ramdan & Pinning IND. CO	United Arab for Spinning & Weaving	749142	3.89	10.52							
Trade & Distribution Sector											
Exports Development Trading		0.77	0.42	2.07							
Assuit National for Trade		2.33	1.28	6.31							

Private firms	Privatised firms	Average total assets (privatised) / average total assets (private)															
Food & Beverages Sector	Food SECTOR	D74	D75	D76	D77	D78	D79	D80	D82	D83	D84	D85	D86	D87	D88	D89	
Misr Gulf Oil	Bisco Misr	133236	0.77	2.03	1.74	0.07	0.48	2.00	2.48	2.06	2.47	2.09	1.86	1.22	0.88	0.24	
Savola Sime Egypt (S.A.E)	Extracted Oils	349936	0.48	1.26	1.08	0.04	0.30	1.24	1.54	1.28	1.53	1.30	1.15	0.76	0.55	0.15	
Cairo Poultoy	Misr Oil & Soap	298854	0.22	0.57	0.49	0.02	0.14	0.57	0.70	0.58	0.70	0.59	0.52	0.35	0.25	0.07	
Int'll Food / Hostess	Alnasr for Dehydrating Agricultural Products	12420	2.68	7.04	6.01	0.25	1.66	6.92	8.59	7.13	8.54	7.25	6.42	4.24	3.06	0.83	
Egyptian Macaeoni & Starch Industry	Egyptian Starch & Glucose	82448	2.21	5.80	4.95	0.21	1.30	7.08	7.08	5.88	7.03	5.97	5.29	3.49	2.52	0.69	
Agriculture Sector	North Cairo Mills	343912															
EGAS	Middle Egypt Mills	427033	3.02	7.92	6.77	0.28	1.87	7.79	9.67	8.03	9.61	8.16	7.23	4.77	3.45	0.94	
Egyptian Fish Development	East Delta	354455	10.37	27.25	23.27	0.97	6.42	26.78	33.25	27.60	33.05	28.06	24.87	16.41	11.85	3.22	
Sharkeya Poultoy	Middle and West Delta Upper Egypt	424419	2.59	6.80	5.80	0.24	1.60	6.68	8.29	6.88	8.24	7.00	6.20	4.09	2.95	0.80	
	General for Silos	360367															
	Alex Mills	795248															
	South Cairo Mills	319440															
	El-Wadi for Agricultural Export	210729															
	Nobaria Agricultural Engineering	152152															
		41392															

Private firms	Privatised firms	Average total assets (privatised) / average total assets (private)
Engineering & Electronics Sector	INDUSTRIAL ENGINEERING SECTOR	D95
Int'll Electronics (Ahmed Bahget)	585052 Telemisr	0.42
Cairo precision Electric Industries (Olymic Electric)	125925 CABLAT	1.94
Miraco- Carrier	284079 IDEAL	0.86
Industrial Engineering for Construction ana Development (ICON)	95010	2.58
Middle East for Modern Lights	174019	1.34
Cairo light Electric Industries (Olymic Electric)	144486	1.69
		244825
		0.76
		3.53
		1.56
		4.68
		2.55
		3.08
		1.11
		5.14
		2.28
		6.81
		3.72
		4.48

Private firms	Privatised firms	Average total assets (privatised) / average total assets (private)
MARITIME & INLAND TRANSPORT SECTOR	MARITIME & INLAND TRANSPORT SECTOR	D 102
Egyption Tranport & Commercial Service.	80373 Arabia & United Stevedoring	1.10
		88554

Private firms	Privatised firms	Average total assets (privatised) / average total assets (private)
Paper, Packaging & Publishing Sector	Paper, Packaging & Publishing Sector	D113
Shorouk Print House	133852 Middle East for Paper (SIMO)	0.51
Suez Bag	72358	0.93
other Sector		
Cairo For Educational Affairs	35132	
Aryists Television& Cinema Union.	22541	
Egyption Media Production City	2180274	

Step 4 Determining all acceptable private firms for comparison privatised firms

Private firms		Privatised firms
Pharmaceutical sector		
✓ Amriya Pharmaceutical Industries	0.9722	Nile Pharmaceuticals
• Amoun Pharmaceuticals S.A.E	0.7422	
✓ Amriya Pharmaceutical Industries	0.746	Memphies Pharmaceuticals
• Pfizer Egypt	0.89	
• Amriya Pharmaceutical Industries	1.022	Cairo Pharmaceuticals
• Pfizer Egypt	1.21	
✓ Medical Union Phamaceuticals	0.791	
• Amoun Pharmaceuticals S.A.E	0.7777	
• Aventis Pharmaceutical (Hoechst Morion Roussel)	0.967	Arabia Pharmaceuticals
✓ T 3 A Pharma. Group	0.962	
✓ Aventis Pharmaceutical (Hoechst Morion Roussel)	1.22	Alexandria Pharmaceuticals
• Pfizer Egypt	0.719	
✓ Cairo Tower Lab	1.25	Nile for Kabriet
✓ Cairo Tower Lab	1.15	Kafr El-Zayat
✓ Amoun Pharmaceuticals S.A.E	1.19	Pacien
• Glaxo Wellcome Egypt	0.77	Misr for Chemical Industries
✓ Egyptian Int'l Pharmaceutical Industries (Eipico)	0.73	
Housing & Real Estate sector		
✓ Cairo for investment & Devolopment Estate	1.079	Construction and Counsulting Engineering
• Mena Contracting & Trading	1.031	
• Nile Aster Int'l	0.891	
✓ Egyptian Engineers Arab Real Estate Investment (EDIC)	0.70	Cairo for Housing & Development
• Samcrete Egypt	0.89	
✓ Aracemco Arab Ceramic	1.27	Egypt for Free Shops
• Sixth of October Devolopmenmt & Investement (SODIC)	0.9394	Alahram Beverage
✓ Alexandria for Real Estate Investements	0.82	

Private firms		Privatised firms
Building Materials & Constucting sector		
• Ezz Porcelaine / Gawhara	1.34	Nasr City for Housing and Development
• Sinai Cement CO. (S.A.E)	1.0003	
• Arabin Int'l Construction (A I C Contracting)	1.3557	
• Sixth of October Developmenmt & Investement (SODIC)	1.23	
✓ Alexandria for Real Estate Investements	0.9	
✓ Delta for Construction & Rebuilding	0.7755	Shams for Housing
• Egyptian Engineers Arab Real Estate Investment (EDIC)	0.83	
• Samcrete Egypt	0.74	
• Mena for Touristic & Real Estate Investements	0.7	
✓ Aracemco Arab Ceramic	0.997	Upper Egypt for Housing
• Industrial EngineeringforConstruction ana Development (ICON)	0.98	
• Delta for Construction & Rebuilding	0.817	Giza for Contracting
✓ Egyptian Engineers Arab Real Estate Investment (EDIC)	0.88	
• Samcrete Egypt	0.78	
• Mena for Touristic & Real Estate Investments	0.73	
• zahraa El Maadi Investment & Development	0.72	
• Semiramis Hotels	0.88	
•Delta for Construction & Rebuilding	0.905	Mahmoudia for Contracting
•Egyptian Engineers Arab Real Estate Investment (EDIC)	0.97	
•Samcrete Egypt	0.86	
✓ Mena for Touristic & Real Estate Investments	0.8	
• zahraa El Maadi Investment & Development	0.8	
• Semiramis Hotels	0.98	
✓ Ezz Steel Rebars	0.7	Moukhtar Ibrahim Contracting
• Orascom Hotel Holdings	1.30	
✓ Sinai Cement CO. (S.A.E)	0.7566	Heliopolis Housing & Development
• Sixth of October Development & Investment (SODIC)	0.78	
• Arabia for Ceramica	1.31	Nasr Utilities
✓ Industrial Engineering for Construction and Development (ICON)	1.14	
✓ Sinai Cement CO. (S.A.E)	1.164	Amiria for Cement
• Ezz Porcelaine / Gawhara	0.92	Alexandria Portland for Cement
✓ Sinai Cement CO. (S.A.E)	070	

Private firms		Privatised firms
• Aracemco Arab Ceramic	1.18	Misr Mechanical and Electrical Projects (Khromika)
✓ Industrial Engineering for Construction and Development (ICON)	1.28	
✓ Aracemco Arab Ceramic	1.29	Elnasr for Civil Works
✓ Delta for Construction & Rebuilding	0.71	ELMACO
✓ Sinai Cement CO. (S.A.E)	1.05	Industrial & Engineering Projects
Mining sector		
✓ Ezz Porcelaine / Gawhara	1.09	Egyptian Financial & Industrial / EFIC
•Arabin Int'l Construction (A I C Contracting)	1.1	
✓ Sinai Cement CO. (S.A.E)	1.23	Portland Helwan
✓ Ezz Steel Rebars	0.70	Portland Torah
✓ Suez Cement	1.1	Eastern Company
Textiles, Garments & Leather Sector		
Trade & Distribution Sector		
✓ Exports Development Trading (EXPOD)	0.7672	Nile Cotton Ginning
✓ Assuit National for Trade & Development	1.28	Arabia Cotton Ginning
✓ Oriental Weaver for Carpets	0.7003	United Arab for Spinning & Weaving
Food & Beverages Sector		
✓ Misr Gulf Oil Processing Migop	0.77	Bisco Misr
✓ Savola Sime Egypt (S.A.E)	1.26	Extracted Oils
✓ Savola Sime Egypt (S.A.E)	1.078	Misr Oil & Soap
✓ Sharkeya Poultry	0.96	Alnasr for Dehydrating Agricultural Products
✓ Egyptian Macaeni & Starch Industry	1.30	Egyptian Starch & Glucose
✓ Savola Sime Egypt (S.A.E)	1.242	North Cairo Mills
✓ Cairo Poultry	0.71	Middle Egypt Mills
✓ Savola Sime Egypt (S.A.E)	1.28	East Delta
✓ Cairo Poultry	0.72	Middle and West Delta

Private firms		Privatised firms
✓ Savola Sime Egypt (S.A.E)	1.3	Upper Egypt
✓ Cairo Poultoy	1.3	General for Silos
✓ Savola Sime Egypt (S.A.E)	1.15	Alex Mills
✓ Misr Gulf Oil Processing Migop	1.22	South Cairo Mills
Agriculture Sector		
✓ Misr Gulf Oil	0.89	EI-Wadi for Agricultural Export
✓ EGAS	0.9373	Nobaria Agricultural Engineering
• smailia Misr- Poultoy	0.8038	
✓ Sharkeya Poultoy	0.97	Alnasr for Dehydrating Agricultural Products
Maritime & Inland Transport Sector		
✓ Egyption Tranport & Commercial Service.	1.1018	Arabia & United Stevedoring
✓ Suez Bag	0.934	Middle East for Paper (SIMO)
Engineering & Electronics Sector		
✓ Miraco- Carrier	0.86	Telemisr
• Middle East for Modern Lights	1.34	
✓ Int'll Electronics (Ahmed Bahget)	0.76	company name: CABLAT (2) Majority
✓ International Industry (Ahmed Bahget)	1.1	IDEAL

Step 5 Selecting the control group for privatised firms according to the high percentage between private and privatised firm

	Privatized Firms		Private Firms (control group)
1	Nile Pharmaceuticals.	0.97	Amriya Pharmaceutical Industries.
2	Memphies Pharmaceuticals.	0.74	Amriya Pharmaceutical Industries.
3	Cairo Pharmaceuticals.	0.79	Medical Union Pharmaceuticals.
4	Arabia Pharmaceuticals.	0.96	T 3 A Pharmaceuticals Group.
5	Alexandria Pharmaceuticals.	1.22	Aventis Pharmaceutical.
6	Nile for Kabriet.	1.25	Cairo Tower Lab.
7	Kafr El-Zayat.	1.15	Cairo Tower Lab.
8	Pacien.	1.19	Amoun Pharmaceuticals S.A.E.
9	Misr for Chemical Industries.	0.73	Egyptian Int'l Pharmaceutical Industries (Eipico).
10	Construction and Consulting Engineering.	1.07	Cairo for investment & Development Estate.
11	Cairo for Housing & Development.	0.70	Egyptian Engineers Arab Real Estate Investment (EDIC).
12	Egypt for Free Shops.	1.27	Aracemco Arab Ceramic.
13	Alahram Beverage.	0.82	Alexandria for Real Estate Investments.
14	Nasr City for Housing and Development.	0.9	Alexandria for Real Estate Investments.
15	Shams for Housing.	0.77	Delta for Construction & Rebuilding.
16	Upper Egypt for Housing.	0.99	Aracemco Arab Ceramic.
17	Giza for Contracting.	0.88	Egyptian Engineers Arab Real Estate Investment (EDIC).
18	Mahmoudia for Contracting.	0.8	Mena for Touristic & Real Estate Investments.
19	Moukhtar Ibrahim Contracting.	0.7	Ezz Steel Rebars.
20	Heliopolis Housing & Development.	0.75	Sinai Cement CO. (S.A.E).
21	Nasr Utilities.	1.14	Industrial Engineering for Construction and Development (ICON).
22	Amiria for Cement.	1.16	Sinai Cement CO. (S.A.E).
23	Misr Mechanical and Electrical Projects (Khromika).	1.28	Industrial Engineering for Construction and Development (ICON).
24	Elnasr for Civil Works.	1.29	Aracemco Arab Ceramic.
25	ELMACO.	0.71	Delta for Construction & Rebuilding.
26	Industrial & Engineering Projects.	1.05	Sinai Cement CO. (S.A.E).
27	Egyptian Financial & Industrial / EFIC.	1.09	Ezz Porcelaine / Gawhara.
28	Portland Helwan.	1.23	Sinai Cement CO. (S.A.E).
29	Alexandria Portland for Cement.	0.70	Sinai Cement CO. (S.A.E).
30	Portland Torah.	0.70	Ezz Steel Rebars.
31	Eastern Company.	1.1	Suez Cement.
32	Nile Cotton Ginning.	0.76	Exports Development Trading (EXPOD).
33	Arabia Cotton Ginning.	1.28	Assuit National for Trade & Development..
34	United Arab for Spinning & Weaving	0.7	Oriental Weaver for Carppets.

	Privatized Firms		Private Firms (control group)
35	Bisco Misr.	0.77	Misr Gulf Oil Processing Migop.
36	Extracted Oils.	1.26	Savola Sime Egypt (S.A.E).
37	Misr Oil & Soap.	1.07	Savola Sime Egypt (S.A.E).
38	Alnasr for Dehydrating Agricultural Products.	0.96	Sharkeya Poultoy.
39	Egyptian Starch & Glucose.	1.30	Egyptian Macaeoni & Starch Industry.
40	North Cairo Mills.	1.24	Savola Sime Egypt (S.A.E).
41	Middle Egypt Mills.	0.71	Cairo Poultoy.
42	East Delta.	1.28	Savola Sime Egypt (S.A.E).
43	Middle and West Delta.	0.72	Cairo Poultoy.
44	Upper Egypt.	1.30	Savola Sime Egypt (S.A.E).
45	General for Silos.	1.30	Cairo Poultoy.
46	Alex Mills.	1.15	Savola Sime Egypt (S.A.E).
47	South Cairo Mills.	1.22	Misr Gulf Oil Processing Migop.
48	El-Wadi for Agricultural Export.	0.89	Misr Gulf Oil Processing Migop.
49	Nobaria Agricultural Engineering.	0.93	EGAS .
50	Arabia & United Stevedoring.	1.10	Egyptian Transport & Commercial Service.
51	Middle East for Paper (SIMO) .	0.93	Suez Bag.
52	Telemisr.	0.86	Miraco- Carrier.
53	CABLAT.	0.76	Int'll Electronics (Ahmed Bahget).
54	IDEAL.	1.1	International Industry (Ahmed Bahget).

Appendix 6-1

Financial Ratios Data

Pre- and Post-Privatisation

For

54 Egyptian Privatised Firms during 1991-2004

	ROS aft.	ROS bef.	ROA aft.	ROA. bef.	ROE aft.	ROE bef.	ADJ E.B.I.T aft.	ADJ E.B.I.T bef.	ADJ SAL aft.	ADJ SAL bef.
1	0.12	0.06	0.08	0.04	0.35	0.24	0.99	0.56	0.88	1.08
2	0.19	0.06	0.09	0.04	0.27	0.18	1.01	0.46	0.89	1.23
3	0.18	0.10	0.08	0.06	0.16	0.21	1.09	0.69	0.96	1.09
4	0.10	0.06	0.08	0.04	0.22	0.25	1.42	0.85	1.00	0.96
5	0.19	0.14	0.15	0.10	0.40	0.54	1.15	0.87	1.01	0.99
6	0.09	0.12	0.08	0.13	0.15	0.36	0.59	1.81	0.47	1.30
7	0.13	0.04	0.13	0.05	0.51	0.31	1.23	0.49	0.78	1.29
8	0.38	0.19	0.15	0.16	0.24	0.47	0.59	0.53	0.55	1.01
9	0.14	0.24	0.02	0.09	0.09	0.27	0.58	2.13	0.96	1.40
10	0.23	0.07	0.08	0.06	0.22	0.24	0.89	0.62	1.00	0.97
11	0.23	0.34	0.03	0.03	0.18	0.22	1.01	0.66	2.81	1.74
12	0.11	0.07	0.14	0.04	0.22	0.16	0.89	0.56	0.98	1.00
13	0.47	0.28	0.11	0.14	0.24	0.33	1.30	0.93	0.92	1.06
14	0.84	0.18	0.09	0.04	0.55	0.34	1.20	0.37	0.76	0.86
15	0.59	0.74	0.05	0.04	0.21	0.21	0.69	0.59	0.94	0.74
16	0.02	0.01	0.02	0.01	0.16	0.17	0.73	0.51	0.60	1.04
17	0.01	-0.01	0.01	0.00	0.16	-0.02	0.80	-0.19	0.97	0.69
18	-1.28	0.01	-0.26	0.01	-3.11	0.07	-9.80	0.25	0.43	0.58
19	0.05	-0.02	0.03	0.00	0.31	0.17	0.51	-0.02	0.83	0.91
20	0.45	0.23	0.11	0.05	0.78	0.26	0.80	0.31	0.75	0.62
21	0.09	0.02	0.07	0.02	0.27	0.11	1.29	0.35	0.61	0.56
22	0.27	0.08	0.14	0.03	0.39	0.19	0.57	0.21	0.88	1.06
23	0.07	0.03	0.06	0.03	0.25	0.30	0.76	0.46	0.85	1.09
24	0.14	-0.04	0.09	0.01	0.37	0.01	0.93	-0.03	0.75	0.65
25	0.09	0.04	0.09	0.03	0.21	0.19	1.29	0.54	1.10	1.00
26	0.03	0.02	0.02	0.06	0.28	0.27	0.58	0.71	0.97	0.98
27	0.22	0.07	0.06	0.04	0.21	0.25	3.56	0.95	1.33	1.21
28	0.22	0.07	0.12	0.03	0.27	0.14	1.05	0.34	0.86	0.94
29	0.17	0.19	0.06	0.09	0.16	0.22	0.47	0.43	1.03	0.81
30	0.29	0.06	0.14	0.02	0.34	0.14	1.24	0.25	1.08	0.91
31	0.10	0.09	0.08	0.11	0.28	0.30	1.17	1.14	1.07	1.19
32	0.03	0.13	0.02	0.07	0.08	0.21	0.31	0.80	0.63	0.89
33	0.09	0.18	0.04	0.07	0.14	0.21	0.73	0.97	0.55	0.36
34	0.10	0.09	0.03	0.05	0.08	0.18	0.57	1.09	0.77	1.50
35	0.23	0.04	0.15	0.04	0.33	0.09	0.82	0.25	0.80	1.30
36	0.05	0.07	0.04	0.09	0.22	0.54	0.63	2.01	0.62	1.27
37	0.04	0.07	0.06	0.11	0.26	0.52	0.55	1.49	0.69	1.10
38	0.02	0.13	0.03	0.10	0.08	0.45	0.21	0.94	0.42	1.35
39	0.15	0.13	0.18	0.17	0.30	0.33	0.60	0.82	0.63	1.00
40	0.07	0.05	0.12	0.08	0.53	0.32	0.71	0.47	0.74	0.88
41	0.05	0.04	0.06	0.05	0.24	0.20	0.55	0.54	0.82	1.00
42	0.06	0.04	0.08	0.04	0.29	0.19	0.90	0.61	1.02	1.26
43	0.06	0.04	0.09	0.06	0.34	0.27	0.83	0.68	1.39	1.77
44	0.07	0.03	0.10	0.05	0.32	0.19	0.85	0.54	1.05	1.48
45	0.09	0.01	0.05	0.03	0.21	0.22	0.65	0.79	0.46	1.52
46	0.02	0.02	0.02	0.03	0.16	0.15	0.26	0.29	0.79	1.28
47	0.04	0.04	0.05	0.07	0.22	0.30	0.51	0.72	0.86	1.42
48	0.06	0.10	0.10	0.09	0.19	0.33	0.80	1.73	1.88	2.25
49	0.05	0.08	0.04	0.05	0.11	0.14	0.48	0.77	0.86	1.08
50	0.37	0.19	0.13	0.10	0.32	0.37	0.51	1.11	0.31	1.19
51	-0.08	0.05	-0.03	0.03	-0.06	0.05	-0.34	0.53	0.59	1.24
52	0.04	0.03	0.02	0.03	0.19	0.22	0.47	0.54	0.41	1.12
53	0.11	0.09	0.08	0.11	0.20	0.31	0.76	0.89	0.59	1.01
54	0.28	0.03	0.13	0.03	0.31	0.20	2.23	0.49	0.79	1.23

	Adj SALEF F aft.	Adj SALEF F bef.	ADJ NIEFF aft.	ADJ NIEFF bef.	LEV aft.	LEV bef.	LEV2 aft.	LEV2 bef.	EMPI. Aft	EMPI. Bef.	log. Empl. Aftr	LOG .EMPI. Bef.
1	0.93	0.96	1.06	0.50	0.10	0.20	0.29	1.20	2638	3119	7.87	8.05
2	1.10	1.14	1.26	0.42	0.03	0.22	0.10	1.18	1513	1973	7.31	7.59
3	1.08	1.13	1.24	0.71	0.05	0.21	0.05	0.42	2576	2805	7.85	7.94
4	1.01	0.97	1.64	0.86	0.61	0.17	0.77	0.23	1418	1570	7.25	7.36
5	1.09	1.37	1.24	1.19	0.00	0.04	0.01	0.23	1476	1157	7.30	7.05
6	0.60	1.15	0.71	1.59	0.19	0.10	0.02	0.19	1779	2608	7.48	7.87
7	0.88	1.24	1.39	0.48	0.34	0.54	0.20	0.06	611	719	6.41	6.58
8	0.57	0.95	0.61	0.51	0.12	0.00	0.00	0.00	1028	1132	6.94	7.03
9	1.05	1.33	1.51	2.03	0.21	0.16	0.49	0.46	2091	4023	7.50	8.30
10	0.96	1.05	0.85	0.88	0.00	0.20	0.00	0.48	871	3349	6.77	7.71
11	3.78	1.67	1.37	0.63	0.19	0.41	0.34	2.13	155	224	5.04	5.41
12	1.13	0.83	1.05	0.46	0.00	0.03	0.00	0.00	868	1216	6.76	7.10
13	0.73	1.13	1.03	0.99	0.20	0.02	0.20	0.00	3795	2831	8.24	7.95
14	0.89	0.86	1.39	0.37	0.01	0.03	0.05	0.21	537	649	6.28	6.48
15	1.02	0.72	0.99	0.57	0.22	0.29	0.49	1.25	225	349	5.41	5.85
16	1.50	0.97	1.42	0.48	0.60	0.42	3.58	2.04	697	1930	6.48	7.56
17	1.60	0.56	1.17	-0.14	0.31	0.40	0.00	0.17	1255	2447	7.10	7.80
18	0.52	0.65	-14.63	0.27	1.26	0.52	0.85	0.37	1204	1452	7.07	7.28
19	0.94	1.05	0.55	-0.07	0.14	0.37	0.46	0.28	10274	9767	9.23	9.18
20	0.74	0.55	0.80	0.33	0.26	0.17	1.18	0.82	1163	4915	7.06	8.06
21	0.97	0.55	2.08	0.35	0.06	0.02	0.00	0.01	687	1121	6.51	7.02
22	0.74	0.90	16.19	5.77	0.16	0.66	0.35	4.27	1827	1828	7.51	7.51
23	1.12	0.74	1.02	0.31	0.16	0.00	0.00	0.00	2645	5163	7.87	8.55
24	0.80	0.43	1.00	0.07	0.01	0.20	0.00	0.10	731	1280	6.59	7.13
25	1.30	1.02	1.46	0.55	0.09	0.17	0.08	0.68	1364	1572	7.21	7.36
26	1.40	1.05	0.82	0.65	0.38	0.20	0.01	0.42	4170	3854	8.33	7.99
27	1.36	1.29	3.65	1.01	0.33	0.28	0.05	1.15	2945	2846	7.99	7.95
28	0.95	0.94	1.15	0.34	0.33	0.96	0.49	4.13	4013	4476	8.30	8.40
29	1.16	0.80	0.49	0.42	0.23	0.07	0.48	0.18	1391	1553	7.23	7.35
30	1.29	0.99	1.47	0.25	0.25	0.45	0.54	3.67	3550	3807	8.16	8.24
31	1.14	1.23	1.26	1.17	0.04	0.01	0.07	0.03	13133	13621	9.48	9.52
32	0.72	0.83	0.35	0.76	0.43	0.22	0.17	0.61	1429	1863	7.26	7.53
33	0.86	0.34	1.10	0.94	0.26	0.24	0.16	0.72	759	1130	6.61	7.03
34	0.88	1.55	0.63	1.13	0.24	0.12	0.06	0.07	6644	7311	8.80	8.90
35	0.89	0.97	0.91	0.19	0.00	0.06	0.01	0.10	2885	4262	7.97	8.36
36	0.71	1.59	0.73	2.50	0.35	0.24	0.56	0.79	3250	3028	8.09	8.01
37	0.71	1.13	0.56	1.54	0.28	0.12	0.11	0.07	3731	3717	8.22	8.22
38	0.45	1.15	0.22	0.81	0.35	0.02	0.00	0.00	1594	1960	7.37	7.58
39	0.72	1.03	0.68	0.84	0.02	0.03	0.00	0.06	1638	1821	7.40	7.51
40	0.83	0.88	0.78	0.47	0.05	0.26	0.17	1.08	5024	5743	8.52	8.66
41	0.93	0.98	0.61	0.53	0.12	0.15	0.38	0.51	4839	5543	8.48	8.62
42	1.08	1.28	0.95	0.60	0.08	0.16	0.25	0.67	4865	5129	8.49	8.54
43	1.43	1.85	0.85	0.70	0.05	0.12	0.06	0.42	6027	5948	8.70	8.69
44	1.16	1.43	0.92	0.52	0.01	0.04	0.00	0.15	6176	7061	8.73	8.86
45	0.49	1.45	0.73	0.76	0.16	0.19	0.73	1.70	3961	4785	8.28	8.47
46	0.95	1.28	0.29	0.29	0.14	0.31	0.80	1.58	3593	4316	8.18	8.37
47	0.90	1.49	0.52	0.74	0.16	0.18	0.72	0.78	3767	3788	8.23	8.24
48	3.72	1.02	1.47	0.78	0.01	0.00	0.00	0.00	356	1318	5.83	7.15
49	1.10	0.93	0.60	0.66	0.05	0.08	0.02	0.09	298	476	5.69	6.15
50	0.43	1.04	0.68	0.98	0.12	0.20	0.02	0.62	3377	5462	8.11	8.60
51	0.63	0.98	-0.38	0.43	0.12	0.49	0.01	1.88	881	1189	6.77	7.08
52	0.62	1.04	0.56	0.51	0.82	0.37	0.02	0.27	1464	2894	7.14	7.97
53	0.73	0.96	0.87	0.84	0.32	0.24	0.14	0.15	2338	3091	7.75	8.04
54	1.47	1.14	3.94	0.46	0.20	0.25	0.11	0.97	4329	7481	8.29	8.92

Appendix 6-2

Financial Ratios Data

Pre- and Post-Privatisation

For

38 Egyptian Fully Privatised Firms during 1991-2004

	ROS aft.	ROS bef.	ROA aft.	ROA. bef.	ROE aft.	ROE bef.	ADJ E.B.I.T aft.	ADJ E.B.I.T bef.	ADJ SAL aft.	ADJ SAL bef.
1	0.27	0.08	0.14	0.03	0.39	0.19	0.57	0.20	0.88	1.06
2	0.47	0.28	0.11	0.14	0.24	0.33	1.30	0.93	0.92	1.06
3	0.23	0.07	0.08	0.05	0.22	0.24	0.89	0.62	1.00	0.97
4	0.02	0.01	0.02	0.01	0.16	0.17	0.73	0.51	0.60	1.04
5	0.09	0.02	0.07	0.02	0.27	0.11	1.29	0.35	0.61	0.56
6	0.17	0.19	0.06	0.09	0.16	0.22	0.47	0.43	1.03	0.81
7	0.22	0.07	0.12	0.03	0.27	0.14	1.05	0.34	0.86	0.94
8	0.04	0.03	0.02	0.03	0.19	0.22	0.47	0.54	0.41	1.12
9	0.28	0.03	0.13	0.03	0.31	0.20	2.23	0.49	0.79	1.23
10	0.05	0.08	0.04	0.05	0.11	0.14	0.48	0.77	0.86	1.08
11	0.11	0.09	0.08	0.11	0.20	0.31	0.76	0.89	0.59	1.01
12	0.02	0.13	0.03	0.10	0.08	0.45	0.21	0.94	0.42	1.35
13	0.23	0.34	0.03	0.03	0.18	0.22	1.01	0.66	2.81	1.74
14	0.03	0.13	0.02	0.07	0.08	0.21	0.31	0.80	0.63	0.89
15	0.06	0.10	0.10	0.09	0.19	0.33	0.80	1.73	1.88	2.25
16	0.09	0.18	0.04	0.07	0.14	0.21	0.73	0.97	0.55	0.36
17	0.84	0.18	0.09	0.04	0.55	0.34	1.20	0.37	0.76	0.86
18	0.09	0.12	0.08	0.13	0.15	0.36	0.59	1.81	0.47	1.30
19	0.06	0.04	0.09	0.06	0.34	0.27	0.83	0.68	1.39	1.77
20	0.06	0.04	0.08	0.04	0.29	0.19	0.90	0.61	1.02	1.26
21	0.29	0.06	0.14	0.02	0.34	0.14	1.24	0.25	1.08	0.91
22	0.23	0.04	0.15	0.04	0.33	0.09	0.82	0.25	0.80	1.30
23	0.10	0.09	0.03	0.05	0.08	0.18	0.57	1.09	0.77	1.50
24	0.14	-0.04	0.09	0.01	0.37	0.01	0.93	-0.03	0.75	0.65
25	-0.08	0.05	-0.03	0.03	-0.06	0.05	-0.34	0.53	0.59	1.24
26	-1.28	0.01	-0.26	0.01	-3.11	0.07	-9.80	0.25	0.43	0.58
27	0.15	0.13	0.18	0.17	0.30	0.33	0.60	0.82	0.63	1.00
28	0.13	0.04	0.13	0.05	0.51	0.31	1.23	0.49	0.78	1.29
29	0.09	0.04	0.09	0.03	0.21	0.19	1.29	0.54	1.10	1.00
30	0.07	0.03	0.10	0.05	0.32	0.19	0.85	0.53	1.05	1.48
31	0.38	0.19	0.15	0.16	0.24	0.47	0.59	0.53	0.55	1.01
32	0.07	0.24	0.05	0.09	0.24	0.27	0.62	2.13	0.96	1.40
33	0.11	0.07	0.14	0.04	0.22	0.16	0.89	0.55	0.98	1.00
34	0.01	-0.01	0.01	0.00	0.16	-0.02	0.80	-0.19	0.97	0.69
35	0.04	0.07	0.06	0.11	0.26	0.52	0.55	1.49	0.69	1.10
36	0.03	0.01	0.02	0.06	0.28	0.27	0.58	0.70	0.97	0.98
37	0.03	0.74	0.05	0.04	0.23	0.21	0.58	0.59	0.94	0.74
38	0.07	0.03	0.06	0.03	0.25	0.30	0.76	0.46	0.85	1.09

	Adj SALEFF aft.	Adj SALEFF bef.	ADJ NIEFF aft.	ADJ NIEFF bef.	LEV aft.	LEV bef.	LEV2 aft.	LEV2 bef.	EMPI. Aft	EMPI. Bef.	log. Empl. Aftr	LOG. EMPI. Bef.
1	0.74	0.90	16.19	5.77	0.16	0.66	0.35	4.27	1827	1828	7.51	7.51
2	0.73	1.13	1.03	0.99	0.20	0.02	0.20	0.00	3795	2831	8.24	7.95
3	0.96	1.05	0.85	0.88	0.00	0.20	0.00	0.48	871	3349	6.77	7.71
4	1.50	0.97	1.42	0.48	0.60	0.42	3.58	2.04	697	1930	6.48	7.56
5	0.97	0.55	2.08	0.35	0.06	0.02	0.00	0.01	687	1121	6.51	7.02
6	1.16	0.80	0.49	0.42	0.23	0.07	0.48	0.18	1391	1553	7.23	7.35
7	0.95	0.94	1.15	0.34	0.33	0.96	0.49	4.13	4013	4476	8.30	8.40
8	0.62	1.04	0.56	0.51	0.82	0.37	0.02	0.27	1464	2894	7.14	7.97
9	1.47	1.14	3.94	0.46	0.20	0.25	0.11	0.97	4329	7481	8.29	8.92
10	1.10	0.93	0.60	0.66	0.05	0.08	0.02	0.09	298	476	5.69	6.15
11	0.73	0.96	0.87	0.84	0.32	0.24	0.14	0.15	2338	3091	7.75	8.04
12	0.45	1.15	0.22	0.81	0.35	0.02	0.00	0.00	1594	1960	7.37	7.58
13	3.78	1.67	1.37	0.63	0.19	0.41	0.34	2.13	155	224	5.04	5.41
14	0.72	0.83	0.35	0.76	0.43	0.22	0.17	0.61	1429	1863	7.26	7.53
15	3.72	1.02	1.47	0.78	0.01	0.00	0.00	0.00	356	1318	5.83	7.15
16	0.86	0.34	1.10	0.94	0.26	0.24	0.16	0.72	759	1130	6.61	7.03
17	0.89	0.86	1.39	0.37	0.01	0.03	0.05	0.21	537	649	6.28	6.48
18	0.60	1.15	0.71	1.59	0.19	0.10	0.02	0.19	1779	2608	7.48	7.87
19	1.43	1.85	0.85	0.70	0.05	0.12	0.06	0.42	6027	5948	8.70	8.69
20	1.08	1.28	0.95	0.60	0.08	0.16	0.25	0.67	4865	5129	8.49	8.54
21	1.29	0.99	1.47	0.25	0.25	0.45	0.54	3.67	3550	3807	8.16	8.24
22	0.89	0.97	0.91	0.19	0.00	0.06	0.01	0.10	2885	4262	7.97	8.36
23	0.88	1.55	0.63	1.13	0.24	0.12	0.06	0.07	6644	7311	8.80	8.90
24	0.80	0.43	1.00	0.07	0.01	0.20	0.00	0.10	731	1280	6.59	7.13
25	0.63	0.98	-0.38	0.43	0.12	0.49	0.01	1.88	881	1189	6.77	7.08
26	0.52	0.65	-14.63	0.27	1.26	0.52	0.85	0.37	1204	1452	7.07	7.28
27	0.72	1.03	0.68	0.84	0.02	0.03	0.00	0.06	1638	1821	7.40	7.51
28	0.88	1.24	1.39	0.48	0.34	0.54	0.20	0.06	611	719	6.41	6.58
29	1.30	1.02	1.46	0.55	0.09	0.17	0.08	0.68	1364	1572	7.21	7.36
30	1.16	1.43	0.92	0.52	0.01	0.04	0.00	0.15	6176	7061	8.73	8.86
31	0.57	0.95	0.61	0.51	0.12	0.00	0.00	0.00	1028	1132	6.94	7.03
32	1.05	1.33	0.89	2.03	0.21	0.16	0.49	0.46	3317	4023	7.70	8.30
33	1.13	0.83	1.05	0.46	0.00	0.03	0.00	0.00	868	1216	6.76	7.10
34	1.60	0.56	1.17	-0.14	0.31	0.40	0.00	0.17	1255	2447	7.10	7.80
35	0.71	1.13	0.56	1.54	0.28	0.12	0.11	0.07	3731	3717	8.22	8.22
36	1.40	1.05	0.82	0.65	0.38	0.20	0.01	0.42	4170	3854	8.33	7.99
37	1.02	0.72	0.88	0.57	0.22	0.29	0.49	1.25	225	349	5.41	5.85
38	1.12	0.74	1.02	0.31	0.16	0.00	0.00	0.00	2645	5163	7.87	8.55

Appendix 6-3

Financial Ratios Data

Pre- and Post-Privatisation

For

16 Egyptian Partially Privatised Firms during 1991-2004

	ROS aft.	ROS bef.	ROA aft.	ROA bef.	ROE aft.	ROE bef.	ADJ E.B.IT aft.	ADJ E.B.IT bef.	ADJ SAL aft.	ADJ SAL bef.
1	0.12	0.06	0.08	0.04	0.35	0.24	0.99	0.56	0.88	1.08
2	0.19	0.06	0.09	0.04	0.27	0.18	1.01	0.45	0.89	1.23
3	0.18	0.10	0.08	0.06	0.16	0.21	1.09	0.69	0.96	1.09
4	0.13	0.06	0.07	0.04	0.26	0.25	0.68	0.85	0.92	0.96
5	0.19	0.14	0.15	0.10	0.40	0.54	1.14	0.87	1.01	0.99
6	0.05	-0.02	0.03	0.00	0.31	0.17	0.51	-0.02	0.83	0.91
7	0.45	0.23	0.11	0.05	0.78	0.26	0.80	0.31	0.75	0.62
8	0.22	0.07	0.06	0.04	0.21	0.25	3.56	0.95	1.33	1.21
9	0.10	0.09	0.08	0.11	0.28	0.30	1.17	1.14	1.07	1.19
10	0.05	0.07	0.04	0.09	0.22	0.54	0.63	2.01	0.62	1.27
11	0.07	0.05	0.12	0.08	0.53	0.32	0.71	0.47	0.74	0.88
12	0.05	0.04	0.06	0.05	0.24	0.20	0.55	0.54	0.82	1.00
13	0.09	0.01	0.05	0.03	0.21	0.22	0.65	0.79	0.46	1.52
14	0.02	0.02	0.02	0.03	0.16	0.15	0.26	0.29	0.79	1.28
15	0.04	0.04	0.05	0.07	0.22	0.30	0.51	0.72	0.86	1.42
16	0.37	0.19	0.13	0.10	0.32	0.37	0.51	1.11	0.31	1.19

	Adj SALEFF aft.	Adj SALEFF bef.	ADJ NIEFF aft.	ADJ NIEFF bef.	LEV aft.	LEV bef.	LEV2 aft.	LEV2 bef.	EMPI . Aft	EMPI . Bef.	log. Empl . Aftr	LOG. EMPI . Bef.
1	0.93	0.96	1.06	0.50	0.10	0.20	0.29	1.20	2638	3119	7.87	8.05
2	1.10	1.14	1.26	0.42	0.03	0.22	0.10	1.18	1513	1973	7.31	7.59
3	1.08	1.13	1.24	0.71	0.05	0.21	0.05	0.42	2576	2805	7.85	7.94
4	1.01	0.97	1.09	0.86	0.21	0.17	0.47	0.23	2977	1570	7.56	7.36
5	1.09	1.37	1.24	1.19	0.00	0.04	0.01	0.23	1476	1157	7.30	7.05
6	0.94	1.05	0.55	-0.07	0.14	0.37	0.46	0.28	10274	9767	9.23	9.18
7	0.74	0.55	0.80	0.33	0.26	0.17	1.18	0.82	1163	4915	7.06	8.06
8	1.36	1.29	3.65	1.01	0.33	0.28	0.05	1.15	2945	2846	7.99	7.95
9	1.14	1.23	1.26	1.17	0.04	0.01	0.07	0.03	13133	13621	9.48	9.52
10	0.71	1.59	0.73	2.50	0.35	0.24	0.56	0.79	3250	3028	8.09	8.01
11	0.83	0.88	0.78	0.47	0.05	0.26	0.17	1.08	5024	5743	8.52	8.66
12	0.93	0.98	0.61	0.53	0.12	0.15	0.38	0.51	4839	5543	8.48	8.62
13	0.49	1.45	0.73	0.76	0.16	0.19	0.73	1.70	3961	4785	8.28	8.47
14	0.95	1.28	0.29	0.29	0.14	0.31	0.80	1.58	3593	4316	8.18	8.37
15	0.90	1.49	0.52	0.74	0.16	0.18	0.72	0.78	3767	3788	8.23	8.24
16	0.43	1.04	0.68	0.98	0.12	0.20	0.02	0.62	3377	5462	8.11	8.60

Appendix 6-4
Financial Ratios Data
For
54 Egyptian Private Firms (Control Group)

	ROS	ROA	ROE	ADJ EBIT	ADJ SAL	Adj SALEFF	ADJ NIEFF	LEV 1	LEV 2	EMPL.	LOG. EMPL
1	0.32	0.20	0.34	1.09	1.01	0.83	0.90	0.37	0.06	1244	7.12
2	0.32	0.20	0.32	1.19	1.14	0.92	0.96	0.37	0.06	1273	7.14
3	0.13	0.10	0.13	1.47	3.10	1.56	0.85	0.25	0.00	754	6.59
4	0.20	0.10	0.27	8.14	2.27	1.71	5.97	0.62	0.12	322	5.77
5	0.05	0.06	0.54	2.91	0.92	0.90	2.83	0.84	0.83	733	6.60
6	0.31	0.28	0.40	4.75	3.58	2.10	2.83	0.32	0.00	486	6.14
7	0.31	0.28	0.40	4.75	3.58	2.10	2.83	0.32	0.00	486	6.14
8	0.08	0.06	0.13	1.46	1.31	0.81	0.85	0.60	0.33	2000	7.57
9	0.23	0.13	0.24	1.26	1.29	0.80	0.78	0.40	0.00	2197	7.69
10	0.02	0.02	0.07	0.83	0.90	0.66	0.59	0.76	1.07	1411	7.24
11	0.08	0.02	0.09	0.66	0.90	0.39	0.31	0.81	2.01	198	5.06
12	0.07	0.04	0.07	3.34	1.49	1.24	2.72	0.49	0.02	1669	7.42
13	0.38	0.04	0.10	3.08	1.88	1.84	3.04	0.54	0.36	490	6.19
14	0.38	0.04	0.10	3.08	1.88	1.84	3.04	0.54	0.36	490	6.19
15	0.34	0.01	0.02	2.45	0.19	0.16	2.02	0.52	0.42	174	5.14
16	0.07	0.04	0.07	3.34	1.49	1.24	2.72	0.49	0.02	1669	7.42
17	0.08	0.01	0.07	0.35	0.49	0.37	0.28	0.81	2.16	153	4.95
18	0.08	0.02	0.08	0.33	0.69	0.80	0.36	0.69	0.60	116	4.75
19	0.03	0.03	0.08	2.73	2.40	2.40	2.73	0.79	2.72	1279	7.15
20	0.13	0.05	0.09	1.25	1.89	1.83	1.21	0.42	0.52	257	5.55
21	0.03	0.01	0.04	0.48	0.37	0.57	0.77	0.65	0.00	356	5.86
22	0.13	0.05	0.09	1.25	1.89	1.83	1.21	0.42	0.52	257	5.55
23	0.03	0.01	0.04	0.48	0.37	0.57	0.77	0.65	0.00	356	5.86
24	0.07	0.04	0.08	3.29	1.60	1.37	2.77	0.48	0.01	1705	7.44
25	0.30	0.01	0.02	5.37	1.99	1.72	4.34	0.51	0.37	169	5.10
26	0.13	0.05	0.09	1.25	1.89	1.83	1.21	0.42	0.52	257	5.55
27	0.03	0.01	0.02	3.42	14.30	8.69	3.31	0.70	1.10	998	6.86
28	0.13	0.05	0.09	1.25	1.89	1.83	1.21	0.42	0.52	257	5.55
29	0.13	0.05	0.09	1.25	1.89	1.83	1.21	0.42	0.52	257	5.55
30	0.03	0.03	0.08	3.71	3.43	3.43	3.71	0.80	2.72	1279	7.15
31	0.35	0.12	0.30	0.55	0.94	1.84	1.24	0.53	0.75	1534	7.16
32	0.09	0.00	0.04	0.31	0.16	0.16	0.31	0.91	0.00	40	3.69
33	0.37	0.01	0.03	0.53	0.25	0.25	0.53	0.51	0.96	28	3.33
34	0.19	0.13	0.24	1.76	2.13	1.62	1.37	0.46	0.16	1462	7.28
35	-0.01	-0.01	-0.03	0.31	0.94	0.94	0.31	0.72	0.01	720	6.58
36	0.09	0.13	0.30	0.69	1.34	1.15	0.60	0.49	0.09	864	6.75
37	0.09	0.13	0.30	0.69	1.34	1.15	0.60	0.49	0.09	864	6.75
38	0.04	0.13	0.17	1.13	0.99	0.88	1.00	0.21	0.00	360	5.88
39	0.21	0.15	0.28	2.34	1.22	1.22	2.34	0.46	0.33	180	5.19
40	0.09	0.14	0.35	0.72	1.38	1.20	0.64	0.51	0.08	846	6.73
41	0.11	0.08	0.17	1.48	0.95	0.75	1.25	0.54	0.22	2887	7.86
42	0.09	0.13	0.30	0.69	1.34	1.15	0.60	0.49	0.09	864	6.75
43	0.11	0.08	0.17	1.48	0.95	0.75	1.25	0.54	0.22	2887	7.86
44	0.09	0.13	0.30	0.69	1.34	1.15	0.60	0.49	0.09	864	6.75
45	0.11	0.08	0.17	1.48	0.95	0.75	1.25	0.54	0.22	2887	7.86
46	0.07	0.11	0.20	0.50	1.16	0.97	0.41	0.46	0.00	885	6.78
47	0.00	0.01	0.00	0.47	0.77	0.77	0.47	0.69	0.01	720	6.58
48	-0.01	-0.01	-0.04	-0.11	1.03	1.03	-0.11	0.71	0.01	720	6.58
49	0.14	0.09	0.10	0.81	0.90	0.74	0.67	0.09	0.00	149	5.00
50	0.03	0.05	0.14	1.57	1.19	1.19	1.57	0.63	0.19	600	6.40
51	0.20	0.19	0.39	0.66	0.81	0.84	0.69	0.50	0.04	134	4.90
52	0.11	0.12	0.23	1.18	1.44	1.37	1.13	0.47	0.00	1261	7.14
53	0.12	0.07	0.44	1.11	1.19	1.48	1.16	0.81	0.91	1728	7.43
54	0.12	0.06	0.35	0.66	1.16	1.16	0.66	0.80	1.02	2000	7.60

Appendix 7-1
Absolutes Ratios Data
For
54 Egyptian Privatised Firms and their Counterparts from
Private firms

	ROS. Pr	ROS Pb	ROA. Pr	ROA Pb	ROE. Pr	ROE Pb	ADJ EBIT.Pr	ADJ EBIT Pb	ADJ SAL.Pr	ADJ SAL Pb
1	0.02	0.01	-0.01	0.01	-0.15	-0.06	0.09	-0.01	0.01	-0.12
2	0.01	0.02	-0.03	0.00	-0.19	-0.10	0.19	0.01	0.14	-0.11
3	-0.01	0.02	-0.03	-0.02	-0.09	-0.08	0.47	0.09	2.10	-0.04
4	0.14	0.03	0.05	0.02	0.14	-0.06	7.14	0.42	1.27	-0.08
5	0.03	0.02	0.04	0.01	0.44	-0.12	1.91	0.14	-0.08	0.01
6	0.08	-0.07	0.07	-0.01	0.13	-0.09	3.75	-0.41	2.58	-0.53
7	0.08	0.05	0.07	0.01	0.13	-0.12	3.75	0.23	2.58	-0.22
8	0.00	0.03	-0.01	-0.09	-0.05	-0.19	0.46	-0.41	0.31	-0.45
9	-0.01	-0.01	-0.06	0.00	-0.15	-0.03	0.26	-0.42	0.29	-0.04
10	0.00	-0.02	-0.02	-0.02	-0.07	-0.17	-0.17	-0.11	-0.10	0.00
11	-0.03	-0.35	-0.03	0.00	-0.04	-0.15	-0.34	0.01	-0.10	1.81
12	0.04	-0.01	0.03	0.00	0.05	-0.03	2.34	-0.11	0.49	-0.02
13	0.16	0.15	0.02	-0.06	-0.03	-0.18	2.08	0.30	0.88	-0.08
14	0.16	0.40	0.02	0.01	-0.03	-0.30	2.08	0.20	0.88	-0.24
15	0.32	-0.16	-0.01	-0.01	-0.01	-0.24	1.45	-0.31	-0.81	-0.06
16	0.04	-0.01	0.03	-0.01	0.05	-0.18	2.34	-0.27	0.49	-0.40
17	-0.03	0.00	-0.02	0.00	-0.13	-0.05	-0.65	-0.20	-0.51	-0.03
18	-0.11	-1.31	-0.05	-0.29	-0.17	-3.40	-0.67	-10.80	-0.31	-0.57
19	-0.01	-0.03	0.01	-0.02	-0.03	-0.40	1.73	-0.49	1.40	-0.17
20	-0.07	0.03	0.01	-0.02	-0.01	-0.44	0.25	-0.20	0.89	-0.25
21	0.01	0.05	0.00	0.02	-0.03	-0.02	-0.52	0.29	-0.63	-0.39
22	-0.07	-0.11	0.01	-0.07	-0.01	-0.55	0.25	-0.43	0.89	-0.29
23	0.01	-0.01	0.00	-0.01	-0.03	-0.74	-0.52	-0.24	-0.63	-0.15
24	0.04	0.03	0.03	-0.01	0.05	-0.05	2.29	-0.07	0.60	-0.25
25	0.26	0.01	0.00	0.00	0.00	-0.04	4.37	0.29	0.99	0.10
26	-0.07	-0.03	0.01	-0.02	-0.01	-0.12	0.25	-0.42	0.89	-0.03
27	-0.07	0.14	0.00	-0.02	-0.01	-0.08	2.42	2.56	13.30	0.33
28	-0.07	0.03	0.01	0.02	-0.01	-0.07	0.25	0.05	0.89	-0.14
29	-0.07	-0.20	0.01	-0.12	-0.01	-0.26	0.25	-0.53	0.89	0.03
30	-0.01	0.04	0.01	0.05	0.00	-0.07	2.71	0.24	2.43	0.08
31	-0.25	0.01	-0.15	0.00	-0.12	0.03	-0.45	0.17	-0.06	0.07
32	0.05	-0.09	-0.01	-0.12	-0.09	-0.21	-0.69	-0.69	-0.84	-0.37
33	0.23	0.03	-0.01	-0.05	-0.03	-0.09	-0.47	-0.27	-0.75	-0.45
34	-0.03	-0.03	-0.02	-0.02	-0.03	-0.11	0.76	-0.43	1.13	-0.23
35	0.00	0.00	0.01	-0.03	0.02	-0.10	-0.69	-0.18	-0.06	-0.20
36	-0.08	0.00	-0.12	-0.01	-0.50	-0.10	-0.31	-0.37	0.34	-0.38
37	-0.08	-0.01	-0.12	-0.01	-0.50	-0.16	-0.31	-0.45	0.34	-0.31
38	0.00	-0.14	-0.02	-0.11	-0.03	-0.50	0.13	-0.79	-0.01	-0.58
39	0.10	-0.01	0.08	-0.06	0.15	-0.15	1.34	-0.40	0.22	-0.37
40	-0.09	-0.01	-0.09	-0.01	-0.40	-0.12	-0.28	-0.29	0.38	-0.26
41	0.04	-0.02	-0.01	-0.04	-0.02	-0.15	0.48	-0.45	-0.05	-0.18
42	-0.08	-0.01	-0.12	-0.01	-0.50	-0.01	-0.31	-0.10	0.34	0.02
43	0.04	-0.04	-0.01	-0.02	-0.02	-0.05	0.48	-0.17	-0.05	0.385
44	-0.08	-0.02	-0.12	-0.01	-0.5	-0.05	-0.31	-0.15	0.34	0.050
45	0.04	0.07	-0.01	0	-0.02	-0.11	0.48	-0.35	-0.05	-0.538
46	-0.1	-0.06	-0.18	-0.07	-0.79	-0.32	-0.5	-0.74	0.16	-0.209
47	0	-0.03	0	-0.07	-0.03	-0.2	-0.53	-0.49	-0.23	-0.141
48	-0.06	-0.07	-0.09	0.01	-0.23	-0.03	-1.11	-0.2	0.03	0.881
49	-0.01	-0.06	-0.01	-0.04	-0.02	-0.11	-0.19	-0.53	-0.1	-0.143
50	0.01	0.17	0.01	0	0.05	0.02	0.57	-0.49	0.19	-0.690
51	-0.04	-0.2	-0.09	-0.09	-0.05	-0.17	-0.34	-1.34	-0.19	-0.413
52	-0.02	-0.03	-0.02	-0.03	-0.04	-0.17	0.18	-0.53	0.44	-0.588
53	0.01	0.01	-0.04	-0.02	-0.08	-0.08	0.11	-0.24	0.19	-0.406
54	-0.06	0.19	-0.05	0.06	-0.67	-0.04	-0.34	1.23	0.16	-0.213

	Adj SALEFF. Pr	Adj SALEFF Pb	AD JNIEFF. Pr	ADJ NIEFF Pb	LEV. Pr	LEV Pb	LEV2. Pr	LEV2 Pb	EMPL Pr.	EMPI. Pb	LOG. EMPL. Pr	log. Empl. Pb
1	-0.17	-0.07	-0.10	0.06	-0.02	-0.07	-0.04	-0.63	224	-139	0.19	-0.06
2	-0.08	0.10	-0.04	0.26	-0.02	-0.03	-0.05	-0.16	253	-315	0.22	-0.20
3	0.56	0.08	-0.15	0.24	-0.16	0.00	-0.05	-0.09	334	-330	0.55	-0.12
4	0.71	0.01	4.97	0.64	-0.02	0.06	0.12	0.05	72	-204	0.24	-0.09
5	-0.10	0.09	1.83	0.24	0.03	-0.02	-0.31	-0.06	17	-117	0.02	-0.08
6	1.10	-0.40	1.83	-0.29	0.08	0.14	0.00	-0.12	186	-1127	0.44	-0.49
7	1.10	-0.12	1.83	0.39	0.08	0.17	0.00	-0.35	186	-80	0.44	-0.12
8	-0.19	-0.43	-0.15	-0.39	-0.03	0.12	0.30	0.00	800	-37	0.48	-0.04
9	-0.20	0.05	-0.22	0.51	-0.11	0.06	0.00	0.11	847	-223	0.48	-0.09
10	-0.34	-0.04	-0.41	-0.15	0.00	0.00	0.23	0.00	406	27	0.33	0.03
11	-0.61	2.78	-0.69	0.37	0.14	-0.08	1.12	-1.15	153	-59	1.25	-0.33
12	0.24	0.13	1.72	0.05	-0.12	0.00	-0.02	0.00	275	-132	0.18	-0.15
13	0.84	-0.27	2.04	0.03	-0.32	0.19	-1.33	0.20	10	817	0.02	0.24
14	0.84	-0.11	2.04	0.39	-0.32	0.00	-1.33	-0.08	10	-112	0.02	-0.20
15	-0.84	0.02	1.02	-0.01	0.04	0.06	0.42	0.13	45	-241	0.28	-0.09
16	0.24	0.50	1.72	0.42	-0.12	0.10	-0.02	1.38	275	-1099	0.18	-1.01
17	-0.63	0.60	-0.72	0.17	-0.02	-0.04	0.83	-0.02	77	-737	0.62	-0.49
18	-0.20	-0.48	-0.64	-15.6	-0.01	0.61	-0.89	0.38	-19	-417	-0.15	-0.32
19	1.40	-0.06	1.73	-0.45	-0.04	-0.07	-0.05	-0.98	0	-1209	0.00	-0.12
20	0.83	-0.26	0.21	-0.20	-0.17	0.24	-0.55	0.98	7	22	0.03	0.02
21	-0.43	-0.03	-0.23	1.08	-0.07	-0.03	0.00	0.00	-208	-430	-0.47	-0.51
22	0.83	-0.19	0.21	-11.5	-0.17	-0.09	-0.55	-0.85	7	-114	0.03	-0.06
23	-0.43	0.12	-0.23	0.02	-0.07	0.09	0.00	0.00	-208	-855	-0.47	-0.29
24	0.37	-0.20	1.77	0.00	-0.11	0.01	-0.03	0.00	247	-60	0.15	-0.08
25	0.72	0.30	3.34	0.46	-0.05	0.00	0.37	-0.18	44	-239	0.27	-0.17
26	0.83	0.40	0.21	-0.18	-0.17	0.21	-0.55	0.01	7	-1873	0.03	-0.37
27	7.69	0.36	2.31	2.65	-0.14	0.20	-1.06	-0.41	398	-80	0.46	-0.03
28	0.83	-0.05	0.21	0.15	-0.17	-0.17	-0.55	-1.19	7	-475	0.03	-0.11
29	0.83	0.16	0.21	-0.51	-0.17	0.23	-0.55	0.48	7	-146	0.03	-0.10
30	2.43	0.29	2.71	0.47	0.01	0.10	0.38	-0.12	0	-566	0.00	-0.16
31	0.84	0.14	0.24	0.26	0.18	0.04	0.52	0.07	-95	-867	-0.23	-0.06
32	-0.84	-0.28	-0.69	-0.65	0.03	0.42	0.00	0.16	0	-327	0.00	-0.21
33	-0.75	-0.14	-0.47	0.10	-0.11	0.23	-0.17	0.11	0	-308	0.00	-0.36
34	0.62	-0.12	0.37	-0.37	0.00	-0.20	0.14	0.02	315	-909	0.23	-0.13
35	-0.06	-0.11	-0.69	-0.09	0.07	0.00	0.01	0.01	0	-315	0.00	-0.10
36	0.15	-0.29	-0.40	-0.27	-0.20	0.04	0.05	0.19	154	-517	0.19	-0.15
37	0.15	-0.29	-0.40	-0.44	-0.20	-0.09	0.05	0.11	154	-113	0.19	-0.03
38	-0.12	-0.55	0.00	-0.78	-0.02	0.35	0.00	0.00	40	-86	0.11	-0.05
39	0.22	-0.28	1.34	-0.32	-0.01	0.02	0.06	0.00	0	-230	0.00	-0.13
40	0.20	-0.17	-0.36	-0.22	-0.18	-0.08	0.04	-0.45	136	-673	0.17	-0.13
41	-0.25	-0.07	0.25	-0.39	-0.01	0.06	0.04	0.16	997	-618	0.31	-0.12
42	0.15	0.08	-0.40	-0.05	-0.20	-0.01	0.05	-0.09	154	-279	0.19	-0.06
43	-0.25	0.43	0.25	-0.15	-0.01	0.05	0.04	0.06	997	-186	0.31	-0.03
44	0.15	0.16	-0.40	-0.08	-0.20	0.01	0.05	0.00	154	-627	0.19	-0.10
45	-0.25	-0.51	0.25	-0.27	-0.01	0.00	0.04	-0.37	997	-606	0.31	-0.15
46	-0.03	-0.05	-0.59	-0.71	-0.25	-0.03	-0.68	-0.05	175	-743	0.21	-0.20
47	-0.23	-0.10	-0.53	-0.48	0.06	0.08	-0.04	0.42	0	-165	0.00	-0.05
48	0.03	2.72	-1.11	0.47	0.13	0.01	0.00	0.00	0	-244	0.00	-0.57
49	-0.26	0.10	-0.33	-0.40	-0.07	0.00	-0.13	-0.04	26	-93	0.19	-0.28
50	0.19	-0.57	0.57	-0.32	0.04	0.02	-0.01	-0.20	0	-1358	0.00	-0.35
51	-0.16	-0.37	-0.31	-1.38	-0.15	0.04	0.03	-0.11	-5	-62	-0.04	-0.07
52	0.37	-0.38	0.13	-0.44	0.00	0.36	0.00	-0.08	61	-1236	0.05	-0.76
53	0.48	-0.27	0.16	-0.13	0.02	0.10	0.85	0.00	-272	-591	-0.17	-0.23
54	0.16	0.47	-0.34	2.94	-0.09	0.12	-0.38	-0.31	0	-2604	0.00	-0.55

Appendix 7-2
Absolutes Ratios Data
For
38 Egyptian Fully Privatised Firms and their Counterparts from
Private firms

	ROS. Pr	ROS Pb	ROA. Pr	ROA Pb	ROE. Pr	ROE Pb	ADJ EBIT .Pr	ADJ E.B.I T Pb	ADJ SAL. Pr	ADJ SAL Pb	Adj SALEFF Pr	Adj SALEFF Pb
1	0.08	-0.07	0.07	-0.01	0.13	-0.09	3.75	-0.41	2.58	-0.53	1.10	-0.40
2	0.08	0.05	0.07	0.01	0.13	-0.12	3.75	0.23	2.58	-0.22	1.10	-0.12
3	0.00	0.03	-0.01	-0.09	-0.05	-0.19	0.46	-0.41	0.31	-0.45	-0.19	-0.43
4	-0.01	-0.01	-0.06	0.00	-0.15	-0.03	0.26	-0.42	0.29	-0.04	-0.20	0.05
5	0.00	-0.02	-0.02	-0.02	-0.07	-0.17	-0.17	-0.11	-0.10	0.00	-0.34	-0.04
6	-0.03	-0.35	-0.03	0.00	-0.04	-0.15	-0.34	0.01	-0.10	1.81	-0.61	2.78
7	0.04	-0.01	0.03	0.00	0.05	-0.03	2.34	-0.11	0.49	-0.02	0.24	0.13
8	0.16	0.15	0.02	-0.06	-0.03	-0.18	2.08	0.30	0.88	-0.08	0.84	-0.27
9	0.16	0.40	0.02	0.01	-0.03	-0.30	2.08	0.20	0.88	-0.24	0.84	-0.11
10	0.32	-0.16	-0.01	-0.01	-0.01	-0.24	1.45	-0.31	-0.81	-0.06	-0.84	0.02
11	0.04	-0.01	0.03	-0.01	0.05	-0.18	2.34	-0.27	0.49	-0.40	0.24	0.50
12	-0.03	0.00	-0.02	0.00	-0.13	-0.05	-0.65	-0.20	-0.51	-0.03	-0.63	0.60
13	-0.11	-1.31	-0.05	-0.29	-0.17	-3.40	-0.67	-10.80	-0.31	-0.57	-0.20	-0.48
14	0.01	0.05	0.00	0.02	-0.03	-0.02	-0.52	0.29	-0.63	-0.39	-0.43	-0.03
15	-0.07	-0.11	0.01	-0.07	-0.01	-0.55	0.25	-0.43	0.89	-0.29	0.83	-0.19
16	0.01	-0.01	0.00	-0.01	-0.03	-0.74	-0.52	-0.24	-0.63	-0.15	-0.43	0.12
17	0.04	0.03	0.03	-0.01	0.05	-0.05	2.29	-0.07	0.60	-0.25	0.37	-0.20
18	0.26	0.01	0.00	0.00	0.00	-0.04	4.37	0.29	0.99	0.10	0.72	0.30
19	-0.07	-0.03	0.01	-0.02	-0.01	-0.12	0.25	-0.42	0.89	-0.03	0.83	0.40
20	-0.07	0.03	0.01	0.02	-0.01	-0.07	0.25	0.05	0.89	-0.14	0.83	-0.05
21	-0.07	-0.20	0.01	-0.12	-0.01	-0.26	0.25	-0.53	0.89	0.03	0.83	0.16
22	-0.01	0.04	0.01	0.05	0.00	-0.07	2.71	0.24	2.43	0.08	2.43	0.29
23	0.05	-0.09	-0.01	-0.12	-0.09	-0.21	-0.69	-0.69	-0.84	-0.37	-0.84	-0.28
24	0.23	0.03	-0.01	-0.05	-0.03	-0.09	-0.47	-0.27	-0.75	-0.45	-0.75	-0.14
25	-0.03	-0.03	-0.02	-0.02	-0.03	-0.11	0.76	-0.43	1.13	-0.23	0.62	-0.12
26	0.00	0.00	0.01	-0.03	0.02	-0.10	-0.69	-0.18	-0.06	-0.20	-0.06	-0.11
27	-0.08	-0.01	-0.12	-0.01	-0.50	-0.16	-0.31	-0.45	0.34	-0.31	0.15	-0.29
28	0.00	-0.14	-0.02	-0.11	-0.03	-0.50	0.13	-0.79	-0.01	-0.58	-0.12	-0.55
29	0.10	-0.01	0.08	-0.06	0.15	-0.15	1.34	-0.40	0.22	-0.37	0.22	-0.28
30	-0.08	-0.01	-0.12	-0.01	-0.50	-0.01	-0.31	-0.10	0.34	0.02	0.15	0.08
31	0.04	-0.04	-0.01	-0.02	-0.02	-0.05	0.48	-0.17	-0.05	0.39	-0.25	0.43
32	-0.08	-0.02	-0.12	-0.01	-0.50	-0.05	-0.31	-0.15	0.34	0.05	0.15	0.16
33	-0.06	-0.07	-0.09	0.01	-0.23	-0.03	-1.11	-0.20	0.03	0.88	0.03	2.72
34	-0.01	-0.06	-0.01	-0.04	-0.02	-0.11	-0.19	-0.53	-0.10	-0.14	-0.26	0.10
35	-0.04	-0.20	-0.09	-0.09	-0.05	-0.17	-0.34	-1.34	-0.19	-0.41	-0.16	-0.37
36	-0.02	-0.03	-0.02	-0.03	-0.04	-0.17	0.18	-0.53	0.44	-0.59	0.37	-0.38
37	0.01	0.01	-0.04	-0.02	-0.08	-0.08	0.11	-0.24	0.19	-0.41	0.48	-0.27
38	-0.06	0.19	-0.05	0.06	-0.67	-0.04	-0.34	1.23	0.16	-0.21	0.16	0.47

	ADJ NIEFF. Pr	ADJ NIEFF Pb	LEV. Pr	LEV Pb	LEV2. Pr	LEV2 Pb	EMPL. Pr.	EMPI. Pb	LOG. EMPL .Pr	log. Empl. Pb
1	1.83	-0.29	0.08	0.14	0.00	-0.12	186	-1127	0.44	-0.49
2	1.83	0.39	0.08	0.17	0.00	-0.35	186	-80	0.44	-0.12
3	-0.15	-0.39	-0.03	0.12	0.30	0.00	800	-37	0.48	-0.04
4	-0.22	0.51	-0.11	0.06	0.00	0.11	847	-223	0.48	-0.09
5	-0.41	-0.15	0.00	0.00	0.23	0.00	406	27	0.33	0.03
6	-0.69	0.37	0.14	-0.08	1.12	-1.15	153	-59	1.25	-0.33
7	1.72	0.05	-0.12	0.00	-0.02	0.00	275	-132	0.18	-0.15
8	2.04	0.03	-0.32	0.19	-1.33	0.20	10	817	0.02	0.24
9	2.04	0.39	-0.32	0.00	-1.33	-0.08	10	-112	0.02	-0.20
10	1.02	-0.01	0.04	0.06	0.42	0.13	45	-241	0.28	-0.09
11	1.72	0.42	-0.12	0.10	-0.02	1.38	275	-1099	0.18	-1.01
12	-0.72	0.17	-0.02	-0.04	0.83	-0.02	77	-737	0.62	-0.49
13	-0.64	-15.63	-0.01	0.61	-0.89	0.38	-19	-417	-0.15	-0.32
14	-0.23	1.08	-0.07	-0.03	0.00	0.00	-208	-430	-0.47	-0.51
15	0.21	-11.59	-0.17	-0.09	-0.55	-0.85	7	-114	0.03	-0.06
16	-0.23	0.02	-0.07	0.09	0.00	0.00	-208	-855	-0.47	-0.29
17	1.77	0.00	-0.11	0.01	-0.03	0.00	247	-60	0.15	-0.08
18	3.34	0.46	-0.05	0.00	0.37	-0.18	44	-239	0.27	-0.17
19	0.21	-0.18	-0.17	0.21	-0.55	0.01	7	-1873	0.03	-0.37
20	0.21	0.15	-0.17	-0.17	-0.55	-1.19	7	-475	0.03	-0.11
21	0.21	-0.51	-0.17	0.23	-0.55	0.48	7	-146	0.03	-0.10
22	2.71	0.47	0.01	0.10	0.38	-0.12	0	-566	0.00	-0.16
23	-0.69	-0.65	0.03	0.42	0.00	0.16	0	-327	0.00	-0.21
24	-0.47	0.10	-0.11	0.23	-0.17	0.11	0	-308	0.00	-0.36
25	0.37	-0.37	0.00	-0.20	0.14	0.02	315	-909	0.23	-0.13
26	-0.69	-0.09	0.07	0.00	0.01	0.01	0	-315	0.00	-0.10
27	-0.40	-0.44	-0.20	-0.09	0.05	0.11	154	-113	0.19	-0.03
28	0.00	-0.78	-0.02	0.35	0.00	0.00	40	-86	0.11	-0.05
29	1.34	-0.32	-0.01	0.02	0.06	0.00	0	-230	0.00	-0.13
30	-0.40	-0.05	-0.20	-0.01	0.05	-0.09	154	-279	0.19	-0.06
31	0.25	-0.15	-0.01	0.05	0.04	0.06	997	-186	0.31	-0.03
32	-0.40	-0.08	-0.20	0.01	0.05	0.00	154	-627	0.19	-0.10
33	-1.11	0.47	0.13	0.01	0.00	0.00	0	-244	0.00	-0.57
34	-0.33	-0.40	-0.07	0.00	-0.13	-0.04	26	-93	0.19	-0.28
35	-0.31	-1.38	-0.15	0.04	0.03	-0.11	-5	-62	-0.04	-0.07
36	0.13	-0.44	0.00	0.36	0.00	-0.08	61	-1236	0.05	-0.76
37	0.16	-0.13	0.02	0.10	0.85	0.00	-272	-591	-0.17	-0.23
38	-0.34	2.94	-0.09	0.12	-0.38	-0.31	0	-2604	0.00	-0.55

Appendix 7-3
Absolutes Ratios Data
For
16 Egyptian partially Privatised Firms and their Counterparts
from Private firms

	ROS. Pr	ROS Pb	ROA. Pr	ROA Pb	ROE. Pr	ROE Pb	ADJ EBIT. Pr	ADJ E.B.I T Pb	ADJ SAL. Pr	ADJ SAL Pb	Adj SALEFF .Pr	Adj SALEFF Pb
1	0.02	0.01	-0.01	0.01	-0.15	-0.06	0.09	-0.01	0.01	-0.12	-0.17	-0.07
2	0.01	0.02	-0.03	0.00	-0.19	-0.10	0.19	0.01	0.14	-0.11	-0.08	0.10
3	-0.01	0.02	-0.03	-0.02	-0.09	-0.08	0.47	0.09	2.10	-0.04	0.56	0.08
4	0.14	0.03	0.05	0.02	0.14	-0.06	7.14	0.42	1.27	-0.08	0.71	0.01
5	0.03	0.02	0.04	0.01	0.44	-0.12	1.91	0.14	-0.08	0.01	-0.10	0.09
6	-0.01	-0.03	0.01	-0.02	-0.03	-0.40	1.73	-0.49	1.40	-0.17	1.40	-0.06
7	-0.07	0.03	0.01	-0.02	-0.01	-0.44	0.25	-0.20	0.89	-0.25	0.83	-0.26
8	-0.07	0.14	0.00	-0.02	-0.01	-0.08	2.42	2.56	13.30	0.33	7.69	0.36
9	-0.25	0.01	-0.15	0.00	-0.12	0.03	-0.45	0.17	-0.06	0.07	0.84	0.14
10	-0.08	0.00	-0.12	-0.01	-0.50	-0.10	-0.31	-0.37	0.34	-0.38	0.15	-0.29
11	-0.09	-0.01	-0.09	-0.01	-0.40	-0.12	-0.28	-0.29	0.38	-0.26	0.20	-0.17
12	0.04	-0.02	-0.01	-0.04	-0.02	-0.15	0.48	-0.45	-0.05	-0.18	-0.25	-0.07
13	0.04	0.07	-0.01	0.00	-0.02	-0.11	0.48	-0.35	-0.05	-0.54	-0.25	-0.51
14	-0.10	-0.06	-0.18	-0.07	-0.79	-0.32	-0.50	-0.74	0.16	-0.21	-0.03	-0.05
15	0.00	-0.03	0.00	-0.07	-0.03	-0.20	-0.53	-0.49	-0.23	-0.14	-0.23	-0.10
16	0.01	0.17	0.01	0.00	0.05	0.02	0.57	-0.49	0.19	-0.69	0.19	-0.57

	AD JNIEFF .Pr	ADJ NIEFF Pb	LEV. Pr	LEV Pb	LEV2 .Pr	LEV2 Pb	EMPL Pr.	EMPI. Pb	LOG. EMPL. Pr	log. Empl. Pb
1	-0.10	0.06	-0.02	-0.07	-0.04	-0.63	224	-139	0.19	-0.06
2	-0.04	0.26	-0.02	-0.03	-0.05	-0.16	253	-315	0.22	-0.20
3	-0.15	0.24	-0.16	0.00	-0.05	-0.09	334	-330	0.55	-0.12
4	4.97	0.64	-0.02	0.06	0.12	0.05	72	-204	0.24	-0.09
5	1.83	0.24	0.03	-0.02	-0.31	-0.06	17	-117	0.02	-0.08
6	1.73	-0.45	-0.04	-0.07	-0.05	-0.98	0	-1209	0.00	-0.12
7	0.21	-0.20	-0.17	0.24	-0.55	0.98	7	22	0.03	0.02
8	2.31	2.65	-0.14	0.20	-1.06	-0.41	398	-80	0.46	-0.03
9	0.24	0.26	0.18	0.04	0.52	0.07	-95	-867	-0.23	-0.06
10	-0.40	-0.27	-0.20	0.04	0.05	0.19	154	-517	0.19	-0.15
11	-0.36	-0.22	-0.18	-0.08	0.04	-0.45	136	-673	0.17	-0.13
12	0.25	-0.39	-0.01	0.06	0.04	0.16	997	-618	0.31	-0.12
13	0.25	-0.27	-0.01	0.00	0.04	-0.37	997	-606	0.31	-0.15
14	-0.59	-0.71	-0.25	-0.03	-0.68	-0.05	175	-743	0.21	-0.20
15	-0.53	-0.48	0.06	0.08	-0.04	0.42	0	-165	0.00	-0.05
16	0.57	-0.32	0.04	0.02	-0.01	-0.20	0	-1358	0.00	-0.35

Appendix 7-4
Relatives Ratios Data
For
54 Egyptian Privatised Firms and their Counterparts from
Private firms

	ROS Pr	ROS Pb	ROA. Pr	ROA Pb	ROE Pr	ROE Pb	ADJ EBIT . Pr	ADJ E.B.I T Pb	ADJ SAL. Pr	ADJ SAL Pb
1	0.08	0.13	-0.06	0.14	-0.31	-0.16	0.09	-0.01	0.01	-0.12
2	0.05	0.13	-0.12	-0.04	-0.38	-0.26	0.19	0.01	0.14	-0.11
3	-0.09	0.14	-0.25	-0.18	-0.40	-0.34	0.47	0.09	2.10	-0.04
4	2.23	0.42	1.22	0.39	1.18	-0.21	7.14	0.42	1.27	-0.08
5	2.13	0.13	1.81	0.08	4.06	-0.23	1.91	0.14	-0.08	0.01
6	0.36	-0.01	0.36	-0.09	0.50	-0.32	3.75	-0.41	2.58	-0.53
7	0.36	0.58	0.36	0.04	0.50	-0.19	3.75	0.23	2.58	-0.22
8	-0.05	0.09	-0.11	-0.39	-0.27	-0.45	0.46	-0.41	0.31	-0.45
9	-0.02	-0.09	-0.31	-0.14	-0.38	-0.26	0.26	-0.42	0.29	-0.04
10	-0.07	-0.07	-0.49	-0.20	-0.52	-0.43	-0.17	-0.11	-0.10	0.00
11	-0.31	-0.60	-0.61	-0.05	-0.32	-0.46	-0.34	0.01	-0.10	1.81
12	1.26	-0.05	2.62	0.03	1.95	-0.13	2.34	-0.11	0.49	-0.02
13	0.77	0.46	1.38	-0.34	-0.22	-0.43	2.08	0.30	0.88	-0.08
14	0.77	0.89	1.38	0.14	-0.22	-0.35	2.08	0.20	0.88	-0.24
15	26.99	-0.21	-0.34	-0.20	-0.36	-0.53	1.45	-0.31	-0.81	-0.06
16	1.26	-0.31	2.62	-0.27	1.95	-0.53	2.34	-0.27	0.49	-0.40
17	-0.27	-0.23	-0.56	-0.19	-0.63	-0.24	-0.65	-0.20	-0.51	-0.03
18	-0.57	-40.65	-0.69	-13.11	-0.68	-11.71	-0.67	-10.80	-0.31	-0.57
19	-0.31	-0.40	0.65	-0.48	-0.31	-0.56	1.73	-0.49	1.40	-0.17
20	-0.36	0.08	0.37	-0.14	-0.07	-0.36	0.25	-0.20	0.89	-0.25
21	0.28	1.17	-0.25	0.39	-0.41	-0.08	-0.52	0.29	-0.63	-0.39
22	-0.36	-0.29	0.37	-0.32	-0.07	-0.59	0.25	-0.43	0.89	-0.29
23	0.28	-0.10	-0.25	-0.11	-0.41	-0.75	-0.52	-0.24	-0.63	-0.15
24	1.14	0.23	2.56	-0.10	1.80	-0.12	2.29	-0.07	0.60	-0.25
25	7.62	0.12	0.11	0.03	-0.10	-0.17	4.37	0.29	0.99	0.10
26	-0.36	-0.50	0.37	-0.51	-0.07	-0.30	0.25	-0.42	0.89	-0.03
27	-0.73	1.73	0.05	-0.20	-0.35	-0.29	2.42	2.56	13.30	0.33
28	-0.36	0.13	0.37	0.17	-0.07	-0.21	0.25	0.05	0.89	-0.14
29	-0.36	-0.55	0.37	-0.66	-0.07	-0.61	0.25	-0.53	0.89	0.03
30	-0.30	0.15	0.72	0.56	-0.01	-0.17	2.71	0.24	2.43	0.08
31	-0.42	0.09	-0.56	-0.04	-0.29	0.10	-0.45	0.17	-0.06	0.07
32	1.28	-0.72	-0.70	-0.88	-0.67	-0.72	-0.69	-0.69	-0.84	-0.37
33	1.63	0.50	-0.40	-0.53	-0.52	-0.39	-0.47	-0.27	-0.75	-0.45
34	-0.13	-0.24	-0.11	-0.38	-0.10	-0.58	0.76	-0.43	1.13	-0.23
35	-0.38	0.02	-0.68	-0.17	-0.42	-0.24	-0.69	-0.18	-0.06	-0.20
36	-0.50	0.08	-0.48	-0.13	-0.62	-0.31	-0.31	-0.37	0.34	-0.38
37	-0.50	-0.22	-0.48	-0.12	-0.62	-0.37	-0.31	-0.45	0.34	-0.31
38	0.14	-0.88	-0.13	-0.80	-0.15	-0.87	0.13	-0.79	-0.01	-0.58
39	0.90	-0.05	1.22	-0.25	1.16	-0.33	1.34	-0.40	0.22	-0.37
40	-0.47	-0.10	-0.38	-0.10	-0.53	-0.19	-0.28	-0.29	0.38	-0.26
41	0.58	-0.34	-0.14	-0.41	-0.11	-0.40	0.48	-0.45	-0.05	-0.18
42	-0.50	-0.12	-0.48	-0.10	-0.62	-0.03	-0.31	-0.10	0.34	0.02
43	0.58	-0.39	-0.14	-0.18	-0.11	-0.13	0.48	-0.17	-0.05	0.39
44	-0.50	-0.20	-0.48	-0.05	-0.62	-0.12	-0.31	-0.15	0.34	0.05
45	0.58	3.26	-0.14	-0.04	-0.11	-0.34	0.48	-0.35	-0.05	-0.54
46	-0.59	-0.71	-0.63	-0.75	-0.80	-0.67	-0.50	-0.74	0.16	-0.21
47	-0.72	-0.42	-0.40	-0.58	-0.88	-0.47	-0.53	-0.49	-0.23	-0.14
48	-1.16	-0.52	-1.10	0.06	-1.18	-0.14	-1.11	-0.20	0.03	0.88
49	-0.08	-0.53	-0.13	-0.49	-0.20	-0.49	-0.19	-0.53	-0.10	-0.14
50	0.32	0.82	0.37	-0.03	0.51	0.08	0.57	-0.49	0.19	-0.69
51	-0.16	-1.67	-0.32	-1.42	-0.11	-1.52	-0.34	-1.34	-0.19	-0.41
52	-0.16	-0.42	-0.16	-0.61	-0.14	-0.48	0.18	-0.53	0.44	-0.59
53	0.07	0.06	-0.36	-0.20	-0.16	-0.28	0.11	-0.24	0.19	-0.41
54	-0.33	2.25	-0.47	0.91	-0.66	-0.12	-0.34	1.23	0.16	-0.21

	Adj SALEFF .Pr	Adj SALEFF Pb	ADJ NIEFF. Pr	ADJ NIEFF Pb	LEV .Pr	LEV Pb	LEV2 .Pr	LEV2 Pb	EMPL. Pr.	EMPI. Pb	LOG .EMPL. Pr	log. Empl. Pb
1	-0.17	-0.07	-0.10	0.06	-0.05	-0.07	-0.38	-0.07	0.22	-0.05	0.03	-0.01
2	-0.08	0.10	-0.04	0.26	-0.05	-0.03	-0.45	-0.03	0.25	-0.17	0.03	-0.03
3	0.56	0.08	-0.15	0.24	-0.40	0.00	-0.97	0.00	0.80	-0.11	0.09	-0.02
4	0.71	0.01	4.97	0.64	-0.03	0.06	0.00	0.06	0.29	-0.05	0.04	-0.01
5	-0.10	0.09	1.83	0.24	0.04	-0.02	-0.27	-0.02	0.02	-0.07	0.00	-0.01
6	1.10	-0.40	1.83	-0.29	0.34	0.14	0.00	0.14	0.62	-0.23	0.08	-0.03
7	1.10	-0.12	1.83	0.39	0.34	0.17	0.00	0.17	0.62	-0.12	0.08	-0.02
8	-0.19	-0.43	-0.15	-0.39	-0.04	0.12	10.03	0.12	0.67	-0.03	0.07	-0.01
9	-0.20	0.05	-0.22	0.51	-0.22	0.06	0.00	0.06	0.63	-0.05	0.07	-0.01
10	-0.34	-0.04	-0.41	-0.15	-0.01	0.00	0.27	0.00	0.40	0.03	0.05	0.00
11	-0.61	2.78	-0.69	0.37	0.20	-0.08	1.28	-0.08	3.40	-0.28	0.33	-0.06
12	0.24	0.13	1.72	0.05	-0.19	0.00	-0.59	0.00	0.20	-0.13	0.02	-0.02
13	0.84	-0.27	2.04	0.03	-0.37	0.19	-0.79	0.19	0.02	0.27	0.00	0.03
14	0.84	-0.11	2.04	0.39	-0.37	0.00	-0.79	0.00	0.02	-0.17	0.00	-0.03
15	-0.84	0.02	1.02	-0.01	0.08	0.06	0.00	0.06	0.35	-0.04	0.06	-0.01
16	0.24	0.50	1.72	0.42	-0.19	0.10	-0.59	0.10	0.20	-0.61	0.02	-0.13
17	-0.63	0.60	-0.72	0.17	-0.03	-0.04	0.62	-0.04	1.02	-0.37	0.14	-0.06
18	-0.20	-0.48	-0.64	-15.6	-0.01	0.61	-0.60	0.61	-0.14	-0.26	-0.03	-0.04
19	1.40	-0.06	1.73	-0.45	-0.05	-0.07	-0.02	-0.07	0.00	-0.11	0.00	-0.01
20	0.83	-0.26	0.21	-0.20	-0.29	0.24	-0.52	0.24	0.03	0.02	0.00	0.00
21	-0.43	-0.03	-0.23	1.08	-0.09	-0.03	0.00	-0.03	-0.37	-0.38	-0.07	-0.07
22	0.83	-0.19	0.21	-0.42	-0.29	-0.09	-0.52	-0.09	0.03	-0.06	0.00	-0.01
23	-0.43	0.12	-0.23	0.02	-0.09	0.09	0.00	0.09	-0.37	-0.24	-0.07	-0.04
24	0.37	-0.20	1.77	0.00	-0.18	0.01	-0.68	0.01	0.17	-0.08	0.02	-0.01
25	0.72	0.30	3.34	0.46	-0.09	0.00	0.00	0.00	0.35	-0.15	0.06	-0.02
26	0.83	0.40	0.21	-0.18	-0.29	0.21	-0.52	0.21	0.03	-0.31	0.00	-0.04
27	7.69	0.36	2.31	2.65	-0.17	0.20	-0.49	0.20	0.66	-0.03	0.07	0.00
28	0.83	-0.05	0.21	0.15	-0.29	-0.17	-0.52	-0.17	0.03	-0.11	0.00	-0.01
29	0.83	0.16	0.21	-0.51	-0.29	0.23	-0.52	0.23	0.03	-0.09	0.00	-0.01
30	2.43	0.29	2.71	0.47	0.01	0.10	0.16	0.10	0.00	-0.14	0.00	-0.02
31	0.84	0.14	0.24	0.26	0.51	0.04	2.29	0.04	-0.06	-0.06	-0.03	-0.01
32	-0.84	-0.28	-0.69	-0.65	0.03	0.42	0.00	0.42	0.00	-0.19	0.00	-0.03
33	-0.75	-0.14	-0.47	0.10	-0.17	0.23	-0.15	0.23	0.00	-0.29	0.00	-0.05
34	0.62	-0.12	0.37	-0.37	-0.01	-0.20	5.66	-0.20	0.27	-0.12	0.03	-0.01
35	-0.06	-0.11	-0.69	-0.09	0.10	0.00	0.72	0.00	0.00	-0.10	0.00	-0.01
36	0.15	-0.29	-0.40	-0.27	-0.28	0.04	1.57	0.04	0.22	-0.14	0.03	-0.02
37	0.15	-0.29	-0.40	-0.44	-0.28	-0.09	1.57	-0.09	0.22	-0.03	0.03	0.00
38	-0.12	-0.55	0.00	-0.78	-0.07	0.35	0.00	0.35	0.13	-0.05	0.02	-0.01
39	0.22	-0.28	1.34	-0.32	-0.03	0.02	0.20	0.02	0.00	-0.12	0.00	-0.02
40	0.20	-0.17	-0.36	-0.22	-0.26	-0.08	1.18	-0.08	0.19	-0.12	0.03	-0.01
41	-0.25	-0.07	0.25	-0.39	-0.02	0.06	0.23	0.06	0.53	-0.11	0.04	-0.01
42	0.15	0.08	-0.40	-0.05	-0.28	-0.01	1.57	-0.01	0.22	-0.05	0.03	-0.01
43	-0.25	0.43	0.25	-0.15	-0.02	0.05	0.23	0.05	0.53	-0.03	0.04	0.00
44	0.15	0.16	-0.40	-0.08	-0.28	0.01	1.57	0.01	0.22	-0.09	0.03	-0.01
45	-0.25	-0.51	0.25	-0.27	-0.02	0.00	0.23	0.00	0.53	-0.13	0.04	-0.02
46	-0.03	-0.05	-0.59	-0.71	-0.35	-0.03	-1.00	-0.03	0.25	-0.17	0.03	-0.02
47	-0.23	-0.10	-0.53	-0.48	0.10	0.08	-0.73	0.08	0.00	-0.04	0.00	-0.01
48	0.03	2.72	-1.11	0.47	0.22	0.01	-0.02	0.01	0.00	-0.41	0.00	-0.09
49	-0.26	0.10	-0.33	-0.40	-0.45	0.00	-1.00	0.00	0.21	-0.24	0.04	-0.05
50	0.19	-0.57	0.57	-0.32	0.07	0.02	-0.03	0.02	0.00	-0.29	0.00	-0.04
51	-0.16	-0.37	-0.31	-1.38	-0.23	0.04	3.71	0.04	-0.04	-0.07	-0.01	-0.01
52	0.37	-0.38	0.13	-0.44	0.00	0.36	0.00	0.36	0.05	-0.46	0.01	-0.10
53	0.48	-0.27	0.16	-0.13	0.03	0.10	15.52	0.10	-0.14	-0.20	-0.02	-0.03
54	0.16	0.47	-0.34	2.94	-0.10	0.12	-0.27	0.12	0.00	-0.38	0.00	-0.06

Appendix 7-5
Relatives Ratios Data
For
38 Egyptian Fully Privatised Firms and their Counterparts from
Private firms

	ROS. Pr	ROS Pb	ROA. Pr	ROA Pb	ROE .Pr	ROE Pb	ADJ EBIT. Pr	ADJ E.B.I T Pb	ADJ SAL. Pr	ADJ SAL Pb
1	0.36	-0.01	0.36	-0.09	0.50	-0.32	3.75	-0.41	2.58	-0.53
2	0.36	0.05	0.36	0.01	0.50	-0.19	3.75	0.23	2.58	-0.22
3	-0.05	0.03	-0.11	-0.09	-0.27	-0.45	0.46	-0.41	0.31	-0.45
4	-0.02	-0.09	-0.31	-0.04	-0.38	-0.42	0.26	-0.38	0.29	-0.04
5	-0.07	-0.02	-0.49	-0.02	-0.52	-0.43	-0.17	-0.11	-0.10	0.00
6	-0.31	-0.35	-0.61	0.00	-0.32	-0.46	-0.34	0.01	-0.10	1.81
7	1.26	-0.01	2.62	0.00	1.95	-0.13	2.34	-0.11	0.49	-0.02
8	0.77	0.15	1.38	-0.06	-0.22	-0.43	2.08	0.30	0.88	-0.08
9	0.77	0.40	1.38	0.01	-0.22	-0.35	2.08	0.20	0.88	-0.24
10	26.99	-0.10	-0.34	-0.04	-0.36	-0.44	1.45	-0.42	-0.81	-0.06
11	1.26	-0.01	2.62	-0.01	1.95	-0.53	2.34	-0.27	0.49	-0.40
12	-0.27	0.00	-0.56	0.00	-0.63	-0.24	-0.65	-0.20	-0.51	-0.03
13	-0.57	-40.65	-0.69	-13.11	-0.68	-11.71	-0.67	-10.80	-0.31	-0.57
14	0.28	0.05	-0.25	0.02	-0.41	-0.08	-0.52	0.29	-0.63	-0.39
15	-0.36	-0.11	0.37	-0.07	-0.07	-0.59	0.25	-0.43	0.89	-0.29
16	0.28	-0.01	-0.25	-0.01	-0.41	-0.75	-0.52	-0.24	-0.63	-0.15
17	1.14	0.03	2.56	-0.01	1.80	-0.12	2.29	-0.07	0.60	-0.25
18	7.62	0.01	0.11	0.00	-0.10	-0.17	4.37	0.29	0.99	0.10
19	-0.36	-0.03	0.37	-0.02	-0.07	-0.30	0.25	-0.42	0.89	-0.03
20	-0.36	0.03	0.37	0.02	-0.07	-0.21	0.25	0.05	0.89	-0.14
21	-0.36	-0.20	0.37	-0.12	-0.07	-0.61	0.25	-0.53	0.89	0.03
22	-0.30	0.04	0.72	0.05	-0.01	-0.17	2.71	0.24	2.43	0.08
23	1.28	-0.72	-0.70	-0.88	-0.67	-0.72	-0.69	-0.69	-0.84	-0.37
24	1.63	0.03	-0.40	-0.05	-0.52	-0.39	-0.47	-0.27	-0.75	-0.45
25	-0.13	-0.03	-0.11	-0.02	-0.10	-0.58	0.76	-0.43	1.13	-0.23
26	-0.38	0.00	-0.68	-0.03	-0.42	-0.24	-0.69	-0.18	-0.06	-0.20
27	-0.50	-0.01	-0.48	-0.01	-0.62	-0.37	-0.31	-0.45	0.34	-0.31
28	0.14	-0.88	-0.13	-0.80	-0.15	-0.87	0.13	-0.79	-0.01	-0.58
29	0.90	-0.01	1.22	-0.06	1.16	-0.33	1.34	-0.40	0.22	-0.37
30	-0.50	-0.01	-0.48	-0.01	-0.62	-0.03	-0.31	-0.10	0.34	0.02
31	0.58	-0.04	-0.14	-0.02	-0.11	-0.13	0.48	-0.17	-0.05	0.39
32	-0.50	-0.02	-0.48	-0.01	-0.62	-0.12	-0.31	-0.15	0.34	0.05
33	-1.16	-0.07	-1.10	0.01	-1.18	-0.14	-1.11	-0.20	0.03	0.88
34	-0.08	-0.53	-0.13	-0.49	-0.20	-0.49	-0.19	-0.53	-0.10	-0.14
35	-0.16	-0.20	-0.32	-0.09	-0.11	-1.52	-0.34	-1.34	-0.19	-0.41
36	-0.16	-0.42	-0.16	-0.61	-0.14	-0.48	0.18	-0.53	0.44	-0.59
37	0.07	0.06	-0.36	-0.20	-0.16	-0.28	0.11	-0.24	0.19	-0.41
38	-0.33	0.19	-0.47	0.06	-0.66	-0.12	-0.34	1.23	0.16	-0.21

	Adj SALEFF . Pr	Adj SALEFF Pb	ADJ NIEFF. Pr	ADJ NIEFF Pb	LEV. Pr	LEV Pb	LEV2 .Pr	LEV2 Pb	EMPL .Pr.	EMPI. Pb	LOG. EMPL .Pr	log. Empl. Pb
1	1.10	-0.40	1.83	-0.29	0.34	0.14	0.00	0.14	0.62	-0.23	0.08	-0.03
2	1.10	-0.12	1.83	0.39	0.34	0.17	0.00	0.17	0.62	-0.12	0.08	-0.02
3	-0.19	-0.43	-0.15	-0.39	-0.04	0.12	10.03	0.12	0.67	-0.03	0.07	-0.01
4	-0.20	0.05	-0.22	-0.70	-0.22	0.06	0.00	0.06	0.63	-0.05	0.07	-0.01
5	-0.34	-0.04	-0.41	-0.15	-0.01	0.00	0.27	0.00	0.40	0.03	0.05	0.00
6	-0.61	2.78	-0.69	0.37	0.20	-0.08	1.28	-0.08	3.40	-0.28	0.33	-0.06
7	0.24	0.13	1.72	0.05	-0.19	0.00	-0.59	0.00	0.20	-0.13	0.02	-0.02
8	0.84	-0.27	2.04	0.03	-0.37	0.19	-0.79	0.19	0.02	0.27	0.00	0.03
9	0.84	-0.11	2.04	0.39	-0.37	0.00	-0.79	0.00	0.02	-0.17	0.00	-0.03
10	-0.84	0.02	1.02	-0.80	0.08	0.06	0.00	0.06	0.35	-0.04	0.06	-0.01
11	0.24	0.50	1.72	0.42	-0.19	0.10	-0.59	0.10	0.20	-0.61	0.02	-0.13
12	-0.63	0.60	-0.72	0.17	-0.03	-0.04	0.62	-0.04	1.02	-0.37	0.14	-0.06
13	-0.20	-0.48	-0.64	-15.63	-0.01	0.61	-0.60	0.61	-0.14	-0.26	-0.03	-0.04
14	-0.43	-0.03	-0.23	1.08	-0.09	-0.03	0.00	-0.03	-0.37	-0.38	-0.07	-0.07
15	0.83	-0.19	0.21	-11.59	-0.29	-0.09	-0.52	-0.09	0.03	-0.06	0.00	-0.01
16	-0.43	0.12	-0.23	0.02	-0.09	0.09	0.00	0.09	-0.37	-0.24	-0.07	-0.04
17	0.37	-0.20	1.77	0.00	-0.18	0.01	-0.68	0.01	0.17	-0.08	0.02	-0.01
18	0.72	0.30	3.34	0.46	-0.09	0.00	0.00	0.00	0.35	-0.15	0.06	-0.02
19	0.83	0.40	0.21	-0.18	-0.29	0.21	-0.52	0.21	0.03	-0.31	0.00	-0.04
20	0.83	-0.05	0.21	0.15	-0.29	-0.17	-0.52	-0.17	0.03	-0.11	0.00	-0.01
21	0.83	0.16	0.21	-0.51	-0.29	0.23	-0.52	0.23	0.03	-0.09	0.00	-0.01
22	2.43	0.29	2.71	0.47	0.01	0.10	0.16	0.10	0.00	-0.14	0.00	-0.02
23	-0.84	-0.28	-0.69	-0.65	0.03	0.42	0.00	0.42	0.00	-0.19	0.00	-0.03
24	-0.75	-0.14	-0.47	0.10	-0.17	0.23	-0.15	0.23	0.00	-0.29	0.00	-0.05
25	0.62	-0.12	0.37	-0.37	-0.01	-0.20	5.66	-0.20	0.27	-0.12	0.03	-0.01
26	-0.06	-0.11	-0.69	-0.09	0.10	0.00	0.72	0.00	0.00	-0.10	0.00	-0.01
27	0.15	-0.29	-0.40	-0.44	-0.28	-0.09	1.57	-0.09	0.22	-0.03	0.03	0.00
28	-0.12	-0.55	0.00	-0.78	-0.07	0.35	0.00	0.35	0.13	-0.05	0.02	-0.01
29	0.22	-0.28	1.34	-0.32	-0.03	0.02	0.20	0.02	0.00	-0.12	0.00	-0.02
30	0.15	0.08	-0.40	-0.05	-0.28	-0.01	1.57	-0.01	0.22	-0.05	0.03	-0.01
31	-0.25	0.43	0.25	-0.15	-0.02	0.05	0.23	0.05	0.53	-0.03	0.04	0.00
32	0.15	0.16	-0.40	-0.08	-0.28	0.01	1.57	0.01	0.22	-0.09	0.03	-0.01
33	0.03	2.72	-1.11	0.47	0.22	0.01	-0.02	0.01	0.00	-0.41	0.00	-0.09
34	-0.26	0.10	-0.33	-0.40	-0.45	0.00	-1.00	0.00	0.21	-0.24	0.04	-0.05
35	-0.16	-0.37	-0.31	-1.38	-0.23	0.04	3.71	0.04	-0.04	-0.07	-0.01	-0.01
36	0.37	-0.38	0.13	-0.44	0.00	0.36	0.00	0.36	0.05	-0.46	0.01	-0.10
37	0.48	-0.27	0.16	-0.13	0.03	0.10	15.52	0.10	-0.14	-0.20	-0.02	-0.03
38	0.16	0.47	-0.34	2.94	-0.10	0.12	-0.27	0.12	0.00	-0.38	0.00	-0.06

Appendix 7-6
Relatives Ratios Data
For
16 Egyptian Partially Privatised Firms and their Counterparts
from Private firms

	ROS. Pr	ROS Pb	ROA .Pr	ROA Pb	ROE .Pr	ROE Pb	ADJ EBIT. Pr	ADJ E.B.I.T Pb	ADJ SAL. Pr	ADJ SAL Pb
1	0.08	0.01	-0.06	0.01	-0.31	-0.16	0.09	-0.01	0.01	-0.12
2	0.05	0.02	-0.12	0.00	-0.38	-0.26	0.19	0.01	0.14	-0.11
3	-0.09	0.02	-0.25	-0.02	-0.40	-0.34	0.47	0.09	2.10	-0.04
4	2.23	0.42	1.22	0.39	1.18	-0.21	7.14	0.42	1.27	-0.08
5	2.13	0.02	1.81	0.01	4.06	-0.23	1.91	0.14	-0.08	0.01
6	-0.31	-0.03	0.65	-0.02	-0.31	-0.56	1.73	-0.49	1.40	-0.17
7	-0.36	0.03	0.37	-0.02	-0.07	-0.36	0.25	-0.20	0.89	-0.25
8	-0.73	0.14	0.05	-0.02	-0.35	-0.29	2.42	2.56	13.30	0.33
9	-0.42	0.01	-0.56	0.00	-0.29	0.10	-0.45	0.17	-0.06	0.07
10	-0.50	0.00	-0.48	-0.01	-0.62	-0.31	-0.31	-0.37	0.34	-0.38
11	-0.47	-0.01	-0.38	-0.01	-0.53	-0.19	-0.28	-0.29	0.38	-0.26
12	0.58	-0.02	-0.14	-0.04	-0.11	-0.40	0.48	-0.45	-0.05	-0.18
13	0.58	0.07	-0.14	0.00	-0.11	-0.34	0.48	-0.35	-0.05	-0.54
14	-0.59	-0.06	-0.63	-0.07	-0.80	-0.67	-0.50	-0.74	0.16	-0.21
15	-0.72	-0.03	-0.40	-0.07	-0.88	-0.47	-0.53	-0.49	-0.23	-0.14
16	0.32	0.82	0.37	-0.03	0.51	0.08	0.57	-0.49	0.19	-0.69

	Adj SALEFF .Pr	Adj SALEFF Pb	ADJ NIEFF .Pr	ADJ NIEFF Pb	LEV. Pr	LEV Pb	LEV2. Pr	LEV2 Pb	EMPL .Pr.	EMPI. Pb	LOG. EMPL .Pr	log. Empl. Pb
1	-0.17	-0.07	-0.10	0.06	-0.05	-0.07	-0.38	-0.07	0.22	-0.05	0.03	-0.01
2	-0.08	0.10	-0.04	0.26	-0.05	-0.03	-0.45	-0.03	0.25	-0.17	0.03	-0.03
3	0.56	0.08	-0.15	0.24	-0.40	0.00	-0.97	0.00	0.80	-0.11	0.09	-0.02
4	0.71	0.01	4.97	0.64	-0.03	0.06	0.00	0.06	0.29	-0.05	0.04	-0.01
5	-0.10	0.09	1.83	0.24	0.04	-0.02	-0.27	-0.02	0.02	-0.07	0.00	-0.01
6	1.40	-0.06	1.73	-0.45	-0.05	-0.07	-0.02	-0.07	0.00	-0.11	0.00	-0.01
7	0.83	-0.26	0.21	-0.20	-0.29	0.24	-0.52	0.24	0.03	0.02	0.00	0.00
8	7.69	0.36	2.31	2.65	-0.17	0.20	-0.49	0.20	0.66	-0.03	0.07	0.00
9	0.84	0.14	0.24	0.26	0.51	0.04	2.29	0.04	-0.06	-0.06	-0.03	-0.01
10	0.15	-0.29	-0.40	-0.27	-0.28	0.04	1.57	0.04	0.22	-0.14	0.03	-0.02
11	0.20	-0.17	-0.36	-0.22	-0.26	-0.08	1.18	-0.08	0.19	-0.12	0.03	-0.01
12	-0.25	-0.07	0.25	-0.39	-0.02	0.06	0.23	0.06	0.53	-0.11	0.04	-0.01
13	-0.25	-0.51	0.25	-0.27	-0.02	0.00	0.23	0.00	0.53	-0.13	0.04	-0.02
14	-0.03	-0.05	-0.59	-0.71	-0.35	-0.03	-1.00	-0.03	0.25	-0.17	0.03	-0.02
15	-0.23	-0.10	-0.53	-0.48	0.10	0.08	-0.73	0.08	0.00	-0.04	0.00	-0.01
16	0.19	-0.57	0.57	-0.32	0.07	0.02	-0.03	0.02	0.00	-0.29	0.00	-0.04

APPENDIX 8.1

**The Results of the Regression Models Showing the
Environmental Impacts on the Performance Measures
for
Three Years Pre- and Post-Privatisation**

Multiple Regression Analysis

Dependent variable: **Return on Assets**

Parameter	Estimate	Standard Error	T Statistic	P-Value
CONSTANT	0.0021524	0.0621386	0.0346387	0.9724
LOG SIZE	0.00459325	0.00495256	0.927451	0.3551
AOSPF	-0.013335	0.0185478	-0.740519	0.4601
ROA pre-	0.68919	0.108833	6.33257	0.0000
ROA private	-0.0551133	0.0442074	-1.26253	0.2086

Analysis of Variance

Source	Sum of Squares	Df	Mean Square	F-Ratio	P-Value
Model	0.118625	4	0.0296563	10.18	0.0000
Residual	0.457222	157	0.00291224		

Total (Corr.) 0.575848 161

R-squared = 20.6001 percent

R-squared (adjusted for d.f.) = 18.5772 percent

Standard Error of Est. = 0.0539652

Mean absolute error = 0.0421371

Correlation matrix for coefficient estimates

	LOG SIZE	AOSPF	ROA pre-	ROA private
LOG SIZE	1			
AOSPF	-0.4016	1		
ROA pre-	0.2547	-0.1234	1	
ROA private	0.0792	-0.1897	-0.1536	1

Correlations between the dependent variable (ROA) and independent variables.

	ROA post	LOG SIZE	AOSPF	ROA before	ROA pr
ROA post	1.0000	-0.0525	-0.0209	0.4364	-0.0182

Multiple Regression Analysis

Dependent variable: Return on Sales

Parameter	Estimate	Standard Error	T Statistic	P-Value
CONSTANT	-0.399452	0.130949	-3.05045	0.0027
LOG SIZE	0.0379774	0.0109069	3.48196	0.0006
AOSPF	-0.061187	0.0404456	-1.51282	0.1323
ROS pre-	0.965919	0.0855213	11.2945	0.0000
ROS private	0.0226971	0.0747764	0.303533	0.7619

Analysis of Variance

Source	Sum of Squares	Df	Mean Square	F-Ratio	P-Value
Model	2.08339	4	0.520849	36.50	0.0000
Residual	2.24032	157	0.0142696		

Total (Corr.) 4.32372 161
 R-squared = 48.1853 percent
 R-squared (adjusted for d.f.) = 46.8651 percent
 Standard Error of Est. = 0.119455
 Mean absolute error = 0.0779386

Correlation matrix for coefficient estimates

	LOG SIZE	AOSPF	ROS pre-	ROS private
LOG SIZE	1.0000			
AOSPF	-0.3972	1.0000		
ROS pre-	0.1897	-0.1525	1.0000	
ROS private	-0.2303	0.1289	-0.2857	1.0000

Correlations between the dependent variable (ROS) and independent variables. -

	ROS post	LOG SIZE	AOSPF	ROS before	ROS pr
ROS post	1.0000	0.1266	0.0405	0.6614	0.2295

Multiple Regression Analysis

Dependent variable: Return on Equity

Parameter	Estimate	Standard Error	T Statistic	P-Value
CONSTANT	-0.326333	0.243093	-1.34242	0.1814
LOG SIZE	0.0457948	0.019872	2.30448	0.0225
AOSPF	-0.0260177	0.0787069	-0.330564	0.7414
ROE pre-	0.43702	0.12066	3.6219	0.0004
ROE private	-0.0598768	0.0764582	-0.783132	0.4347

Analysis of Variance

Source	Sum of Squares	Df	Mean Square	F-Ratio	P-Value
Model	0.979767	4	0.244942	4.84	0.0010
Residual	7.94229	157	0.0505878		

Total (Corr.) 8.92205 161

R-squared = 10.9814 percent

R-squared (adjusted for d.f.) = 8.71342 percent

Standard Error of Est. = 0.224917

Mean absolute error = 0.152823

Correlation matrix for coefficient estimates

	LOG SIZE	AOSPF	ROE pre-	ROE private
LOG SIZE	1.0000			
AOSPF	-0.3639	1.0000		
ROE before	0.0726	-0.2510	1.0000	
ROE private	-0.0407	-0.1556	-0.0691	1.0000

Correlations between the dependent variable (ROE) and independent variables.

	ROE post	LOG SIZE	AOSPF	ROE before	ROE pr
ROE post	1.0000	0.1798	0.1023	0.2756	-0.129

Multiple Regression Analysis

Dependent variable: Earnings before Interest and Taxes

Parameter	Estimate	Standard Error	T Statistic	P-Value
CONSTANT	-3.14794	1.34088	-2.34766	0.0201
LOG_EBIT_pre-	0.804133	0.109738	7.32777	0.0000
LOG_EBIT private	-0.0496328	0.0882333	-0.562518	0.5746
LOG SIZE	0.487691	0.136324	3.57745	0.0005
AOSPF	-0.270418	0.398195	-0.679109	0.4981

Analysis of Variance

Source	Sum of Squares	Df	Mean Square	F-Ratio	P-Value
Model	204.165	4	51.0414	37.29	0.0000
Residual	214.908	157	1.36884		

Total (Corr.) 419.074 161

R-squared = 48.7183 percent

R-squared (adjusted for d.f.) = 47.4118 percent

Standard Error of Est. = 1.16997

Mean absolute error = 0.721536

Correlation matrix for coefficient estimates

	LOG_EBIT pre-	LOG_EBIT private	LOG SIZE	AOSPF
LOG_EBIT pre-	1.0000			
LOG_EBIT private	-0.3946	1.0000		
LOG SIZE	-0.1621	-0.4790	1.0000	
AOSPF	-0.1549	-0.0593	-0.1660	1.0000

Correlations between the dependent variable (EBIT) and independent variables.

	EBIT post	LOG SIZE	AOSPF	EBIT before	EBIT pr
EBIT post	1.0000	0.5373	0.2419	0.6617	0.4784

Multiple Regression Analysis

Dependent variable: LOG ADJ SAL (Real Sales)

Parameter	Estimate	Standard Error	T Statistic	P-Value
CONSTANT	-0.628184	0.164466	-3.81953	0.0002
LOG SIZE	0.0515146	0.0136262	3.78056	0.0002
AOSPF	-0.125058	0.0506026	-2.47137	0.0145
Log ADJ Real SAL pre-	0.343495	0.0921983	3.72561	0.0003
Log ADJ Real SAL private	-0.0327244	0.037853	-0.864513	0.3886

Analysis of Variance

Source	Sum of Squares	Df	Mean Square	F-Ratio	P-Value
Model	0.640877	4	0.160219	7.01	0.0000
Residual	3.59015	157	0.0228672		

Total (Corr.) 4.23103 161

R-squared = 15.1471 percent

R-squared (adjusted for d.f.) = 12.9852 percent

Standard Error of Est. = 0.151219

Mean absolute error = 0.107264

Correlation matrix for coefficient estimates

	LOG SIZE	AOSPF	log ADJ Sal pre-	log ADJ Sal private
LOG SIZE	1.0000			
AOSPF	-0.3618	1.0000		
Log ADJ SAL pre-	0.0378	-0.0897	1.0000	
Log ADJ SAL private	-0.2116	-0.0003	-0.1248	1.0000

Correlations between the dependent variable (SAL) and independent variables.

	LOG SAL post	LOG SIZE	AOSPF	LOG SAL pre-	LOG SAL pr
LOG SAL post	1.0000	0.2249	-0.0635	0.2579	0.0207

Multiple Regression Analysis

Dependent variable: Adj SALEFF (Sale efficiency)

Parameter	Estimate	Standard Error	T Statistic	P-Value
CONSTANT	0.15019	0.649078	0.23139	0.8173
LOG SIZE	0.0297734	0.0547283	0.544023	0.5872
APOSPF	-0.716256	0.200717	-3.56849	0.0005
Adj SAEFF pre-	0.907458	0.155627	5.83099	0.0000
Adj SALEFF private	-0.017635	0.0271131	-0.65042	0.5164

Analysis of Variance

Source	Sum of Squares	Df	Mean Square	F-Ratio	P-Value
Model	15.3203	4	3.83007	10.78	0.0000
Residual	55.7911	157	0.355357		

Total (Corr.) 71.1114 161

R-squared = 21.5441 percent

R-squared (adjusted for d.f.) = 19.5452 percent

Standard Error of Est. = 0.596119

Mean absolute error = 0.361687

Correlation matrix for coefficient estimates

	L OG SIZE	APOSPF	Adj SAEFF pre-	Adj SALEFF private
LOG SIZE	1.0000			
APOSPF	-0.3647	1.0000		
SAEFF pre-	-0.1263	-0.1008	1.0000	
Adj SALEFF private	-0.2532	0.1007	0.0025	1.0000

Correlations between the dependent variable (SALEFF) and independent variables.

	SALEFF post	LOG SIZE	APOSPF	SALEFF before	SALEFF pr
SALEFF post	1.0000	0.0052	-0.1913	0.3838	-0.0237

Multiple Regression Analysis

Dependent variable: ADJNIEFF (Net Income Efficiency)

Parameter	Estimate	Standard Error	T Statistic	P-Value
CONSTANT	-4.18933	1.97176	-2.12467	0.0352
LOG SIZE	0.317904	0.164909	1.92775	0.0557
AOSPF	-1.30521	0.619647	-2.10638	0.0368
NIEFF pre-	2.47063	0.146442	16.871	0.0000
DJNIEFF private	0.0568522	0.0475857	1.19473	0.2340

Analysis of Variance

Source	Sum of Squares	Df	Mean Square	F-Ratio	P-Value
Model	1022.28	4	255.571	74.64	0.0000
Residual	537.55	157	3.42389		
Total (Corr.)	1559.83	161			

R-squared = 65.5379 percent

R-squared (adjusted for d.f.) = 64.6599 percent

Standard Error of Est. = 1.85038

Mean absolute error = 1.18546

Correlation matrix for coefficient estimates

	LOG SIZE	AOSPF	ADJ NIEFF pre-	ADJNIEFF private
LOG SIZE	1.0000			
AOSPF	-0.3784	1.0000		
NIEFF pre-	-0.0858	0.0176	1.0000	
ADJNIEFF private	-0.1310	0.0972	0.0417	1.0000

Correlations between the dependent variable (NIEFF) and independent variables.

	NIEFF post	LOG SIZE	AOSPF	NIEFF before	NIEFF pr
NIEFF post	1.0000	0.1294	-0.5920	0.7982	0.0468

Multiple Regression Analysis

Dependent variable: TDTA (Total Debt to Total Assets)

Parameter	Estimate	Standard Error	T Statistic	P-Value
CONSTANT	-0.116321	0.192547	-0.60412	0.5466
LOG SIZE	0.0138443	0.0170136	0.813721	0.4170
AOSPF	-0.103255	0.0591996	-1.74418	0.0831
TDTA pre	0.61857	0.0853528	7.24722	0.0000
TDTA private	0.0885586	0.0789048	1.12235	0.2634

Analysis of Variance

Source	Sum of Squares	Df	Mean Square	F-Ratio	P-Value
Model	2.01929	4	0.504822	16.35	0.0000
Residual	4.84716	157	0.0308737		

Total (Corr.) 6.86645 161

R-squared = 29.408 percent

R-squared (adjusted for d.f.) = 27.6095 percent

Standard Error of Est. = 0.175709

Mean absolute error = 0.12518

Correlation matrix for coefficient estimates

	LOG SIZE	AOSPF	TDTA pre-	TDTA private
LOG SIZE	1.0000			
AOSPF %	-0.3774	1.0000		
TDTA pre-	-0.3075	0.0094	1.0000	
TDTA private	-0.3058	0.1469	0.0878	1.0000

Correlations between the dependent variable (TDTA) and independent variables.

	TDTA post	LOG SIZE	AOSPF	TDTA before	TDTA pr
TDTA post	1.0000	0.2014	-0.0440	0.5198	0.1017

Multiple Regression Analysis

Dependent variable: TDTE (Total Debts to Total Equity)

Parameter	Estimate	Standard Error	T Statistic	P-Value
CONSTANT	0.275697	0.515317	0.535005	0.5934
TDTE pre-	0.273329	0.0413145	6.61581	0.0000
TDTE private	-0.069986	0.059595	-1.17436	0.2420
LOG SIZE	-0.029994	0.0434509	-0.690296	0.4910
AOSPF	0.592005	0.157441	3.76018	0.0002

Analysis of Variance

Source	Sum of Squares	Df	Mean Square	F-Ratio	P-Value
Model	15.6355	4	3.90887	18.15	0.0000
Residual	33.8092	157	0.215345		

Total (Corr.) 49.4446 161

R-squared = 31.6222 percent

R-squared (adjusted for d.f.) = 29.8801 percent

Standard Error of Est. = 0.464053

Mean absolute error = 0.260622

Correlation matrix for coefficient estimates

	TDTE pre-	TDTE private	LOG SIZE	AOSPF
TDTE before	1.0000			
TDTE pr	-0.1675	1.0000		
LOG SIZE	-0.1553	-0.2719	1.0000	
AOSPF	-0.1510	0.1348	-0.3526	1.0000

Correlations between the dependent variable (TDTE) and independent variables.

	TDTE post	LOG SIZE	AOSPF	TDTE before	TDTE pr
TDTE post	1.0000	0.1517	0.3537	0.4917	0.0048

Multiple Regression Analysis

Dependent variable: LOG _ EMPL (Number of Employees)

Parameter	Estimate	Standard Error	T Statistic	P-Value
CONSTANT	-0.730732	0.274664	-2.66046	0.0086
LOG SIZE	0.0433724	0.0243719	1.7769	0.0858
AOSPF	0.0673096	0.0874714	0.769504	0.4428
LOG_EMPL_pre-	1.02244	0.0289971	35.2602	0.0000
LOG_EMPL private	-0.0275614	0.0226458	-1.21706	0.2254

Analysis of Variance

Source	Sum of Squares	Df	Mean Square	F-Ratio	P-Value
Model	127.841	4	31.9603	523.25	0.0000
Residual	9.58969	157	0.0610808		

Total (Corr.) 137.431 161

R-squared = 93.0222 percent

R-squared (adjusted for d.f.) = 92.8444 percent

Standard Error of Est. = 0.247145

Mean absolute error = 0.168347

Correlation matrix for coefficient estimates

	LOG SIZE	AOSPF	LOG_EMPL_pre-	LOG_EMPL private
LOG SIZE	1.0000			
AOSPF	-0.2193	1.0000		
LOG_EMPL_pre- _	-0.4131	-0.0826	1.0000	
LOG_EMPL private	-0.0238	-0.2773	-0.3478	1.0000

Correlations between the dependent variable (EMPL) and independent variables.

	EMPL post	LOG SIZE	AOSPF	EMPL before	EMPL pr
EMPL post	1.0000	0.5362	0.3553	0.9633	0.4449

APPENDIX 8-2
Actual Data
through
Three Years Post-Privatisation

	LOG SIZE	AOSPF	ROS post	ROS pre	ROS pr	ROA post	ROA pre	ROA pr	ROE post
1	12.58	0.75	0.10	0.06	0.31	0.06	0.05	0.23	0.30
	12.61	0.75	0.10	0.06	0.35	0.06	0.05	0.27	0.30
	12.61	0.75	0.12	0.06	0.42	0.08	0.05	0.28	0.35
2	12.34	0.60	0.16	0.09	0.31	0.09	0.06	0.23	0.27
	12.39	0.60	0.19	0.09	0.35	0.09	0.06	0.27	0.27
	12.41	0.60	0.21	0.09	0.42	0.11	0.06	0.28	0.31
3	12.63	0.69	0.14	0.14	0.17	0.08	0.09	0.16	0.14
	12.72	0.69	0.17	0.14	0.14	0.08	0.09	0.06	0.15
	12.79	0.69	0.18	0.14	0.14	0.09	0.09	0.07	0.16
4	11.89	0.63	0.09	0.09	0.06	0.07	0.05	0.04	0.19
	11.86	0.62	0.08	0.09	0.17	0.06	0.05	0.12	0.18
	11.88	0.62	0.09	0.09	0.21	0.08	0.05	0.10	0.21
5	12.02	0.60	0.18	0.16	0.02	0.15	0.12	0.03	0.52
	12.05	0.60	0.19	0.16	0.03	0.16	0.12	0.03	0.48
	12.09	0.60	0.20	0.16	0.08	0.18	0.12	0.08	0.49
6	11.20	0.48	0.09	0.14	0.25	0.10	0.14	0.28	0.19
	11.17	0.48	0.09	0.14	0.43	0.08	0.14	0.48	0.14
	11.13	0.48	0.12	0.14	0.34	0.10	0.14	0.35	0.20
7	11.36	0.26	0.11	0.05	0.25	0.12	0.07	0.28	0.78
	11.28	0.26	0.14	0.05	0.43	0.15	0.07	0.48	0.79
	11.28	0.11	0.16	0.05	0.34	0.16	0.07	0.35	0.70
8	13.09	0.65	0.36	0.22	0.06	0.21	0.17	0.05	0.38
	13.11	0.47	0.37	0.22	0.08	0.21	0.17	0.06	0.35
	13.40	0.43	0.37	0.22	0.09	0.17	0.17	0.06	0.33
9	13.57	0.70	0.09	0.26	0.25	0.01	0.08	0.19	0.06
	13.63	0.71	0.13	0.26	0.24	0.02	0.08	0.20	0.07
	13.72	0.71	0.13	0.26	0.25	0.01	0.08	0.19	0.05
10	10.95	0.45	0.24	0.22	0.02	0.09	0.09	0.03	0.30
	11.06	0.45	0.24	0.22	0.02	0.09	0.09	0.02	0.29
	11.18	0.45	0.22	0.22	0.01	0.09	0.09	0.01	0.27
11	12.08	0.05	0.26	0.27	0.11	0.05	0.03	0.03	0.43
	12.31	0.05	0.25	0.27	0.08	0.06	0.03	0.04	0.54
	12.24	0.05	0.21	0.27	0.09	0.03	0.03	0.01	0.15
12	11.66	0.13	0.12	0.09	0.03	0.17	0.05	0.01	0.26
	11.70	0.14	0.00	0.09	0.04	0.00	0.05	0.02	0.01
	11.52	0.00	0.13	0.09	0.06	0.16	0.05	0.04	0.23
13	12.55	0.04	0.36	0.30	0.43	0.19	0.15	0.04	0.40
	12.64	0.04	0.40	0.30	0.42	0.22	0.15	0.07	0.33
	13.41	0.00	0.64	0.30	0.38	0.13	0.15	0.06	0.32
14	13.61	0.27	0.94	0.20	0.45	0.14	0.05	0.05	1.26
	13.71	0.27	0.55	0.20	0.42	0.12	0.05	0.07	0.95
	13.73	0.27	0.63	0.20	0.31	0.12	0.05	0.07	0.83
15	12.31	0.80	0.71	0.65	0.09	0.07	0.06	0.00	0.31
	12.33	0.80	0.66	0.65	0.67	0.11	0.06	0.04	0.58
	12.33	0.80	0.57	0.65	0.52	0.05	0.06	0.01	0.16
16	11.63	0.80	0.05	0.02	0.03	0.05	0.01	0.01	0.50
	11.59	0.80	0.05	0.02	0.04	0.04	0.01	0.02	0.42
	11.58	0.80	0.05	0.02	0.06	0.03	0.01	0.04	0.24
17	12.50	0.30	0.03	0.01	0.08	0.03	0.01	0.04	0.30
	12.51	0.30	0.03	0.01	0.09	0.03	0.01	0.01	0.29
	12.34	0.31	0.02	0.01	0.09	0.02	0.01	0.01	0.17
18	12.97	0.36	0.04	0.01	0.24	0.02	0.01	0.10	0.27
	12.75	0.36	0.06	0.01	0.19	0.03	0.01	0.01	0.37
	12.59	0.36	0.01	0.01	0.05	0.00	0.01	0.01	0.06
19	14.32	0.87	0.08	0.05	0.12	0.04	0.04	0.05	0.63
	14.33	0.87	0.05	0.05	0.16	0.02	0.04	0.07	0.33
	14.39	0.87	0.04	0.05	0.01	0.02	0.04	0.01	0.23

	LOG SIZE	APOSPF	ROS post	ROS pre	ROS pr	ROA post	ROA pre	ROA pr	ROE post
20	13.02	0.73	0.46	0.48	0.09	0.19	0.09	0.03	1.32
	13.13	0.73	0.55	0.48	0.15	0.19	0.09	0.05	1.40
	13.25	0.73	0.43	0.48	0.15	0.12	0.09	0.08	0.98
21	11.74	0.00	0.08	0.02	0.03	0.08	0.02	0.02	0.37
	11.70	0.00	0.08	0.02	0.02	0.10	0.02	0.01	0.39
	11.73	0.00	0.09	0.02	0.02	0.09	0.02	0.01	0.34
22	13.44	0.50	0.42	0.10	0.09	0.23	0.04	0.03	0.99
	13.32	0.50	0.41	0.10	0.15	0.27	0.04	0.05	0.71
	13.54	0.02	0.37	0.10	0.15	0.10	0.04	0.08	0.26
23	11.90	0.39	0.06	0.04	0.03	0.06	0.04	0.02	0.47
	11.98	0.39	0.06	0.04	0.03	0.06	0.04	0.02	0.28
	11.94	0.39	0.06	0.04	0.04	0.06	0.04	0.02	0.21
24	12.26	0.43	0.12	0.09	0.04	0.10	0.09	0.02	0.46
	12.28	0.42	0.13	0.09	0.06	0.10	0.09	0.04	0.44
	12.27	0.42	0.15	0.09	0.07	0.09	0.09	0.05	0.37
25	11.82	0.10	0.12	0.05	0.12	0.15	0.04	0.17	0.45
	12.02	0.10	0.13	0.05	0.31	0.15	0.04	0.01	0.35
	12.16	0.10	0.16	0.05	0.67	0.16	0.04	0.04	0.35
26	13.67	0.27	0.06	0.02	0.09	0.05	0.02	0.03	0.62
	13.89	0.27	0.06	0.02	0.15	0.05	0.02	0.05	0.63
	13.83	0.27	0.03	0.02	0.15	0.02	0.02	0.08	0.21
27	13.52	0.30	0.23	0.07	0.12	0.06	0.04	0.01	0.53
	13.23	0.29	0.24	0.07	0.10	0.09	0.04	0.02	0.52
	13.67	0.29	0.28	0.07	0.11	0.06	0.04	0.05	0.11
28	13.83	0.56	0.21	0.07	0.09	0.12	0.04	0.03	0.40
	13.94	0.56	0.30	0.07	0.15	0.17	0.04	0.05	0.35
	14.00	0.56	0.28	0.07	0.15	0.14	0.04	0.08	0.30
29	12.78	0.79	0.34	0.20	0.09	0.16	0.10	0.03	0.39
	12.84	0.74	0.34	0.20	0.15	0.16	0.10	0.05	0.36
	13.16	0.74	0.31	0.20	0.15	0.12	0.10	0.08	0.37
30	14.11	0.68	0.34	0.08	0.04	0.16	0.03	0.02	0.39
	14.18	0.69	0.34	0.08	0.12	0.16	0.03	0.05	0.36
	14.01	0.70	0.31	0.08	0.07	0.12	0.03	0.03	0.37
31	14.42	0.67	0.09	0.08	0.49	0.08	0.10	0.24	0.25
	14.45	0.67	0.08	0.08	0.45	0.08	0.10	0.19	0.25
	14.57	0.67	0.08	0.08	0.45	0.08	0.10	0.17	0.26
32	12.52	0.00	0.09	0.19	0.05	0.07	0.08	0.01	0.32
	13.13	0.00	0.04	0.19	0.31	0.01	0.08	0.01	0.13
	12.46	0.00	0.01	0.19	0.05	0.00	0.08	0.00	0.02
33	10.95	0.00	0.15	0.24	0.14	0.06	0.10	0.02	0.12
	11.38	0.00	0.13	0.24	0.40	0.10	0.10	0.03	0.32
	11.96	0.00	0.07	0.24	0.44	0.06	0.10	0.01	0.36
34	13.66	0.52	0.16	0.10	0.24	0.05	0.05	0.17	0.20
	13.71	0.52	0.17	0.10	0.21	0.03	0.05	0.14	0.15
	13.52	0.53	0.10	0.10	0.20	0.03	0.05	0.14	0.09
35	11.89	0.58	0.25	0.04	0.02	0.16	0.05	0.02	0.39
	11.92	0.57	0.24	0.04	0.00	0.17	0.05	0.00	0.40
	11.91	0.54	0.27	0.04	0.00	0.19	0.05	0.00	0.42
36	12.87	0.68	0.04	0.07	0.18	0.04	0.09	0.29	0.26
	12.84	0.68	0.04	0.07	0.11	0.04	0.09	0.24	0.26
	12.91	0.68	0.04	0.07	0.16	0.03	0.09	0.21	0.20
37	12.65	0.62	0.05	0.07	0.18	0.07	0.11	0.29	0.33
	12.61	0.62	0.04	0.07	0.11	0.06	0.11	0.24	0.25
	12.68	0.62	0.04	0.07	0.16	0.06	0.11	0.21	0.27
38	10.26	0.13	0.24	0.17	0.03	0.15	0.11	0.13	0.45
	10.06	0.13	0.15	0.17	0.04	0.14	0.11	0.13	0.34
	9.93	0.13	0.03	0.17	0.04	0.02	0.11	0.13	0.03

	LOG SIZE	APOSPF	ROS post	ROS pre	ROS pr	ROA post	ROA pre	ROA pr	ROE post
39	11.52	0.40	0.15	0.15	0.18	0.21	0.21	0.12	0.38
	11.53	0.42	0.19	0.15	0.23	0.26	0.21	0.18	0.43
	11.51	0.41	0.18	0.15	0.23	0.21	0.21	0.19	0.35
40	12.85	0.73	0.11	0.05	0.18	0.22	0.08	0.29	0.98
	12.88	0.73	0.09	0.05	0.11	0.20	0.08	0.24	0.94
	13.01	0.73	0.07	0.05	0.16	0.11	0.08	0.21	0.56
41	13.10	0.67	0.07	0.04	0.08	0.08	0.05	0.07	0.37
	13.09	0.67	0.04	0.04	0.15	0.04	0.05	0.10	0.18
	13.07	0.67	0.05	0.04	0.15	0.05	0.05	0.10	0.22
42	12.84	0.39	0.08	0.05	0.18	0.10	0.05	0.29	0.35
	12.92	0.39	0.06	0.05	0.11	0.08	0.05	0.24	0.29
	13.02	0.39	0.07	0.05	0.16	0.08	0.05	0.21	0.31
43	13.18	0.39	0.10	0.05	0.08	0.11	0.07	0.07	0.47
	13.22	0.39	0.08	0.05	0.15	0.09	0.07	0.10	0.40
	12.93	0.39	0.07	0.05	0.15	0.12	0.07	0.10	0.38
44	12.89	0.47	0.09	0.04	0.18	0.15	0.05	0.29	0.44
	12.96	0.47	0.08	0.04	0.11	0.13	0.05	0.24	0.39
	13.03	0.47	0.07	0.04	0.16	0.10	0.05	0.21	0.32
45	13.77	0.64	0.03	0.02	0.08	0.06	0.03	0.07	0.35
	13.90	0.64	0.02	0.02	0.15	0.05	0.03	0.10	0.28
	13.63	0.64	0.02	0.02	0.15	0.05	0.03	0.10	0.23
46	12.82	0.61	0.06	0.03	0.18	0.07	0.03	0.29	0.39
	12.87	0.61	0.03	0.03	0.11	0.03	0.03	0.24	0.17
	12.82	0.61	0.03	0.03	0.16	0.04	0.03	0.21	0.22
47	12.32	0.65	0.06	0.04	0.05	0.10	0.07	0.08	0.41
	12.40	0.65	0.03	0.04	0.01	0.04	0.07	0.02	0.18
	12.45	0.64	0.04	0.04	0.02	0.05	0.07	0.02	0.23
48	11.80	0.20	0.12	0.09	0.01	0.11	0.07	0.02	0.21
	11.68	0.17	0.07	0.09	0.02	0.10	0.07	0.02	0.16
	11.63	0.17	0.06	0.09	0.04	0.10	0.07	0.04	0.15
49	10.78	0.13	0.06	0.10	0.16	0.05	0.06	0.13	0.14
	10.71	0.02	0.06	0.10	0.21	0.06	0.06	0.13	0.15
	10.77	0.02	0.08	0.10	0.08	0.06	0.06	0.05	0.15
50	11.29	0.49	0.04	0.24	0.02	0.02	0.13	0.05	0.04
	10.98	0.49	0.27	0.24	0.03	0.12	0.13	0.06	0.21
	10.95	0.49	0.81	0.24	0.02	0.25	0.13	0.05	0.71
51	11.17	0.20	0.08	0.07	0.24	0.04	0.04	0.27	0.05
	11.19	0.20	0.18	0.07	0.27	0.05	0.04	0.20	0.09
	11.18	0.20	0.09	0.07	0.21	0.03	0.04	0.17	0.05
52	12.68	0.24	0.06	0.06	0.12	0.04	0.04	0.15	0.29
	12.67	0.11	0.06	0.06	0.13	0.04	0.04	0.12	0.35
	12.60	0.11	0.02	0.06	0.11	0.01	0.04	0.13	0.06
53	12.93	0.39	0.10	0.09	0.13	0.09	0.11	0.11	0.26
	12.83	0.39	0.10	0.09	0.18	0.10	0.11	0.11	0.25
	12.91	0.38	0.10	0.09	0.22	0.09	0.11	0.09	0.21
54	13.17	0.00	0.14	0.05	0.22	0.12	0.04	0.09	0.53
	13.22	0.00	0.28	0.05	0.20	0.21	0.04	0.09	0.48
	13.32	0.00	0.36	0.05	0.21	0.17	0.04	0.09	0.40

	ROE pre	ROE pr	LOG. EBIT post	LOG.EBIT. Bef.	LOG.EBIT pr	ADJ SAL post	ADJ SAL pre	ADJ SAL pr	log SALpost	log SAL pre
1	0.27	0.51	9.82	9.17	10.63	0.92	1.07	0.90	-0.04	0.03
	0.27	0.47	9.84	9.17	10.87	0.81	1.07	0.94	-0.09	0.03
	0.27	0.43	10.08	9.17	11.11	0.84	1.07	0.95	-0.08	0.03
2	0.25	0.51	9.94	9.08	10.63	1.02	1.18	0.90	0.01	0.07
	0.25	0.47	10.01	9.08	10.87	0.91	1.18	0.94	-0.04	0.07
	0.25	0.43	10.20	9.08	11.11	0.92	1.18	0.95	-0.04	0.07
3	0.29	0.27	10.06	9.74	10.43	1.04	1.12	1.15	0.02	0.05
	0.29	0.09	10.23	9.74	10.36	0.98	1.12	1.22	-0.01	0.05
	0.29	0.08	10.34	9.74	10.35	1.01	1.12	1.23	0.00	0.05
4	0.33	0.12	9.17	8.71	7.66	1.00	0.99	1.13	0.00	0.00
	0.33	0.40	9.11	8.71	9.16	0.99	0.99	1.55	0.00	0.00
	0.33	0.27	9.31	8.71	9.60	1.04	0.99	1.91	0.02	0.00
5	0.57	0.07	10.14	9.72	8.28	0.99	1.00	0.88	0.00	0.00
	0.57	0.15	10.23	9.72	8.29	0.99	1.00	0.77	0.00	0.00
	0.57	1.02	10.38	9.72	9.36	1.02	1.00	0.73	0.01	0.00
6	0.35	0.41	8.89	9.37	8.41	0.81	1.18	1.43	-0.09	0.07
	0.35	0.63	8.58	9.37	9.08	0.56	1.18	1.56	-0.25	0.07
	0.35	0.41	8.87	9.37	9.19	0.57	1.18	2.13	-0.24	0.07
7	0.43	0.41	9.24	8.19	8.41	1.03	1.04	1.43	0.01	0.02
	0.43	0.63	9.40	8.19	9.08	0.88	1.04	1.56	-0.06	0.02
	0.43	0.41	9.43	8.19	9.19	0.78	1.04	2.13	-0.11	0.02
8	0.43	0.15	11.55	10.76	9.22	0.84	1.00	1.20	-0.08	0.00
	0.43	0.20	11.56	10.76	9.64	0.77	1.00	1.31	-0.11	0.00
	0.43	0.22	11.60	10.76	9.79	0.76	1.00	1.26	-0.12	0.00
9	0.23	0.42	9.15	10.45	11.24	0.77	1.28	1.05	-0.11	0.11
	0.23	0.43	9.71	10.45	11.34	0.85	1.28	1.13	-0.07	0.11
	0.23	0.43	9.28	10.45	11.44	0.53	1.28	1.18	-0.28	0.11
10	0.28	0.11	8.60	8.76	6.52	1.09	1.26	1.03	0.04	0.10
	0.28	0.11	8.69	8.76	6.49	1.16	1.26	1.04	0.06	0.10
	0.28	0.03	8.74	8.76	5.26	1.27	1.26	0.94	0.10	0.10
11	0.22	0.20	9.08	7.90	9.25	3.42	2.30	1.58	0.53	0.36
	0.22	0.17	9.52	7.90	9.14	5.30	2.30	1.73	0.72	0.36
	0.22	0.04	8.76	7.90	7.62	2.85	2.30	0.34	0.45	0.36
12	0.09	0.03	9.86	7.90	7.06	1.10	0.72	0.99	0.04	-0.14
	0.09	0.03	6.18	7.90	7.36	1.18	0.72	1.10	0.07	-0.14
	0.09	0.08	9.68	7.90	8.26	0.76	0.72	1.74	-0.12	-0.14
13	0.35	0.15	10.90	10.45	9.81	0.99	1.04	1.02	0.00	0.02
	0.35	0.16	11.12	10.45	10.61	1.07	1.04	2.22	0.03	0.02
	0.35	0.16	11.37	10.45	10.69	0.83	1.04	2.80	-0.08	0.02
14	0.48	0.15	11.65	9.92	9.91	0.97	1.15	1.05	-0.01	0.06
	0.48	0.17	11.58	9.92	11.01	1.49	1.15	2.52	0.17	0.06
	0.48	0.17	11.60	9.92	11.09	1.25	1.15	2.85	0.10	0.06
15	0.31	0.01	9.65	9.13	5.96	1.05	1.07	0.04	0.02	0.03
	0.31	0.08	10.11	9.13	9.50	1.72	1.07	0.18	0.24	0.03
	0.31	0.02	9.23	9.13	7.98	0.80	1.07	0.05	-0.10	0.03
16	0.25	0.03	8.56	6.88	7.06	1.12	0.95	0.99	0.05	-0.02
	0.25	0.03	8.46	6.88	7.36	0.99	0.95	1.10	0.00	-0.02
	0.25	0.08	7.91	6.88	8.26	0.54	0.95	1.74	-0.27	-0.02
17	0.09	0.17	8.89	6.96	9.14	1.16	0.72	1.09	0.06	-0.14
	0.09	0.04	8.96	6.96	7.62	1.09	0.72	0.22	0.04	-0.14
	0.09	0.04	8.30	6.96	7.60	0.96	0.72	0.21	-0.02	-0.14
18	0.04	0.40	9.05	5.64	10.32	0.96	0.51	1.29	-0.02	-0.29
	0.04	0.05	0.00	5.64	8.41	0.71	0.51	0.23	-0.15	-0.29
	0.04	0.04	0.00	5.64	8.19	0.61	0.51	0.64	-0.21	-0.29

	ROE pre	ROE pr	LOG . EBIT post	LOG.EBIT. Bef.	LOG.EBIT pr	ADJ SAL post	ADJ SAL pre	ADJ SAL pr	log SAL post	log SAL pre
19	0.85	0.22	11.22	10.60	11.68	0.95	1.30	1.76	-0.02	0.11
	0.85	0.33	10.60	10.60	12.01	0.77	1.30	1.67	-0.11	0.11
	0.85	0.03	10.34	10.60	9.39	0.78	1.30	1.70	-0.11	0.11
20	0.40	0.07	11.34	9.79	9.88	1.06	0.34	1.53	0.03	-0.47
	0.40	0.08	11.45	9.79	10.48	0.93	0.34	1.66	-0.03	-0.47
	0.40	0.12	11.16	9.79	11.00	0.87	0.34	2.47	-0.06	-0.47
21	0.11	0.05	9.18	7.42	7.40	0.80	0.64	0.58	-0.10	-0.19
	0.11	0.03	9.36	7.42	7.10	0.86	0.64	0.52	-0.07	-0.19
	0.11	0.03	9.35	7.42	6.77	0.77	0.64	0.45	-0.11	-0.19
22	0.25	0.07	11.97	9.62	9.88	1.05	1.08	1.53	0.02	0.03
	0.25	0.08	12.02	9.62	10.48	1.05	1.08	1.66	0.02	0.03
	0.25	0.12	11.24	9.62	11.00	0.51	1.08	2.47	-0.29	0.03
23	0.37	0.05	9.11	8.51	7.40	1.08	1.26	0.58	0.03	0.10
	0.37	0.04	9.17	8.51	7.32	1.08	1.26	0.52	0.03	0.10
	0.37	0.05	9.12	8.51	7.54	0.94	1.26	0.45	-0.03	0.10
24	0.52	0.03	9.96	9.17	7.36	1.10	0.88	1.11	0.04	-0.06
	0.52	0.08	9.95	9.17	8.26	0.97	0.88	1.77	-0.01	-0.06
	0.52	0.10	9.84	9.17	8.49	0.74	0.88	1.92	-0.13	-0.06
25	0.21	0.32	9.90	8.38	9.40	1.23	1.01	6.76	0.09	0.00
	0.21	0.03	10.13	8.38	7.24	1.35	1.01	0.29	0.13	0.00
	0.21	0.08	10.31	8.38	9.50	1.34	1.01	1.25	0.13	0.00
26	0.32	0.07	10.65	8.61	9.88	1.24	0.73	1.53	0.09	-0.14
	0.32	0.08	10.82	8.61	10.48	1.31	0.73	1.66	0.12	-0.14
	0.32	0.12	9.99	8.61	11.00	1.22	0.73	2.47	0.09	-0.14
27	0.23	0.04	10.68	8.86	7.05	1.30	1.00	1.01	0.11	0.00
	0.23	0.11	10.78	8.86	8.76	1.29	1.00	6.54	0.11	0.00
	0.23	0.12	10.88	8.86	10.12	1.16	1.00	21.10	0.06	0.00
28	0.17	0.07	11.74	10.87	9.88	1.00	0.96	1.53	0.00	-0.02
	0.17	0.08	12.16	10.87	10.48	0.99	0.96	1.66	0.00	-0.02
	0.17	0.12	12.04	10.87	11.00	0.92	0.96	2.47	-0.04	-0.02
29	0.24	0.07	10.92	9.89	9.88	0.97	0.87	1.53	-0.01	-0.06
	0.24	0.08	11.00	9.89	10.48	0.99	0.87	1.66	0.00	-0.06
	0.24	0.12	11.07	9.89	11.00	1.13	0.87	2.47	0.05	-0.06
30	0.18	0.11	10.92	9.05	10.02	0.97	0.96	1.55	-0.01	-0.02
	0.18	0.22	11.00	9.05	11.68	0.99	0.96	2.72	0.00	-0.02
	0.18	0.13	11.07	9.05	11.10	1.13	0.96	2.58	0.05	-0.02
31	0.27	0.37	11.89	11.67	12.39	0.96	1.16	0.92	-0.02	0.06
	0.27	0.36	11.92	11.67	12.35	0.98	1.16	0.90	-0.01	0.06
	0.27	0.62	11.99	11.67	12.39	0.98	1.16	0.88	-0.01	0.06
32	0.23	0.11	9.82	9.29	8.35	1.47	0.64	0.63	0.17	-0.19
	0.23	0.11	8.91	9.29	8.40	1.16	0.64	0.11	0.06	-0.19
	0.23	0.01	6.76	9.29	6.05	0.75	0.64	0.06	-0.12	-0.19
33	0.31	0.05	8.12	8.95	7.89	0.19	0.47	0.89	-0.72	-0.33
	0.31	0.06	9.12	8.95	8.11	0.55	0.47	0.38	-0.26	-0.33
	0.31	0.03	9.20	8.95	7.40	1.07	0.47	0.16	0.03	-0.33
34	0.17	0.32	10.56	10.24	11.47	0.87	1.30	1.13	-0.06	0.11
	0.17	0.32	10.26	10.24	11.64	0.59	1.30	1.49	-0.23	0.11
	0.17	0.26	9.84	10.24	11.72	0.62	1.30	1.65	-0.21	0.11
35	0.11	0.07	10.09	7.78	8.50	0.80	1.22	1.00	-0.10	0.09
	0.11	0.01	10.13	7.78	6.21	0.83	1.22	0.79	-0.08	0.09
	0.11	0.01	10.23	7.78	5.70	0.80	1.22	0.70	-0.10	0.09
36	0.59	0.99	9.65	10.36	10.99	0.88	1.35	1.17	-0.06	0.13
	0.59	0.45	9.67	10.36	11.01	0.77	1.35	1.79	-0.11	0.13
	0.59	0.45	9.43	10.36	11.17	0.69	1.35	1.46	-0.16	0.13

	ROE pre	ROE pr	LOG. EBIT post	LOG. EBIT. Bef.	LOG.EBIT pr	ADJ SAL post	ADJ SAL pre	ADJ SAL pr	log SALpost	log SAL pre
37	0.53	0.99	9.97	10.34	10.99	0.82	1.10	1.17	-0.09	0.04
	0.53	0.45	9.72	10.34	11.01	0.82	1.10	1.79	-0.09	0.04
	0.53	0.45	9.83	10.34	11.17	0.77	1.10	1.46	-0.11	0.04
38	0.48	0.17	8.35	8.25	7.53	0.52	0.99	0.95	-0.28	0.00
	0.48	0.17	8.11	8.25	7.69	0.61	0.99	0.96	-0.21	0.00
	0.48	0.16	5.76	8.25	7.76	0.28	0.99	0.96	-0.55	0.00
39	0.38	0.23	9.96	9.82	8.93	0.85	0.96	1.07	-0.07	-0.02
	0.38	0.33	10.19	9.82	9.45	0.77	0.96	1.37	-0.11	-0.02
	0.38	0.34	9.96	9.82	9.51	0.62	0.96	1.38	-0.21	-0.02
40	0.35	0.99	11.33	9.86	10.99	1.11	0.81	1.17	0.05	-0.09
	0.35	0.45	11.27	9.86	11.01	1.12	0.81	1.79	0.05	-0.09
	0.35	0.45	10.78	9.86	11.17	0.83	0.81	1.46	-0.08	-0.09
41	0.19	0.23	10.59	9.73	10.48	0.97	0.95	0.99	-0.01	-0.02
	0.19	0.23	9.92	9.73	11.00	0.79	0.95	0.88	-0.10	-0.02
	0.19	0.22	10.10	9.73	11.06	0.77	0.95	0.87	-0.11	-0.02
42	0.21	0.99	10.54	9.61	10.99	1.19	1.06	1.17	0.08	0.03
	0.21	0.45	10.37	9.61	11.01	1.17	1.06	1.79	0.07	0.03
	0.21	0.45	10.45	9.61	11.17	1.04	1.06	1.46	0.02	0.03
43	0.27	0.23	10.96	10.05	10.48	1.33	1.65	0.99	0.12	0.22
	0.27	0.23	10.85	10.05	11.00	1.35	1.65	0.88	0.13	0.22
	0.27	0.22	10.81	10.05	11.06	1.38	1.65	0.87	0.14	0.22
44	0.19	0.99	10.97	9.75	10.99	1.19	1.29	1.17	0.08	0.11
	0.19	0.45	10.89	9.75	11.01	1.25	1.29	1.79	0.10	0.11
	0.19	0.45	10.70	9.75	11.17	1.05	1.29	1.46	0.02	0.11
45	0.25	0.23	11.00	10.41	10.48	0.99	1.20	0.99	0.00	0.08
	0.25	0.23	10.85	10.41	11.00	0.86	1.20	0.88	-0.07	0.08
	0.25	0.22	10.65	10.41	11.06	0.75	1.20	0.87	-0.12	0.08
46	0.16	0.99	10.14	8.90	10.99	1.09	0.94	1.17	0.04	-0.03
	0.16	0.45	9.30	8.90	11.01	0.93	0.94	1.79	-0.03	-0.03
	0.16	0.45	9.49	8.90	11.17	0.90	0.94	1.46	-0.05	-0.03
47	0.33	0.20	10.02	9.35	9.54	1.05	1.20	0.75	0.02	0.08
	0.33	0.05	9.23	9.35	8.18	1.08	1.20	0.81	0.03	0.08
	0.33	0.07	9.43	9.35	8.50	0.87	1.20	0.82	-0.06	0.08
48	0.21	0.05	9.55	9.32	8.18	1.00	1.42	1.08	0.00	0.15
	0.21	0.07	9.42	9.32	8.50	1.44	1.42	1.08	0.16	0.15
	0.21	0.15	9.32	9.32	9.12	1.53	1.42	0.86	0.18	0.15
49	0.18	0.14	7.80	7.94	8.47	1.30	1.15	1.05	0.11	0.06
	0.18	0.14	7.87	7.94	8.55	1.23	1.15	0.85	0.09	0.06
	0.18	0.06	7.88	7.94	7.73	0.96	1.15	0.92	-0.02	0.06
50	0.60	0.13	7.53	9.72	8.48	0.65	1.20	1.10	-0.19	0.08
	0.60	0.15	8.85	9.72	8.65	0.36	1.20	1.14	-0.44	0.08
	0.60	0.15	9.55	9.72	8.70	0.23	1.20	1.32	-0.64	0.08
51	0.03	0.64	7.84	8.64	9.93	0.75	1.14	1.00	-0.12	0.06
	0.03	0.40	8.24	8.64	9.46	0.51	1.14	0.54	-0.29	0.06
	0.03	0.38	7.56	8.64	9.47	0.52	1.14	0.69	-0.28	0.06
52	0.35	0.30	9.40	9.18	10.40	0.96	1.04	1.26	-0.02	0.02
	0.35	0.28	9.40	9.18	10.52	0.88	1.04	1.25	-0.06	0.02
	0.35	0.19	7.48	9.18	10.35	0.47	1.04	1.18	-0.33	0.02
53	0.33	0.84	10.51	10.20	10.20	0.87	0.96	0.91	-0.06	-0.02
	0.33	1.02	10.51	10.20	10.77	0.77	0.96	1.09	-0.11	-0.02
	0.33	0.37	10.46	10.20	11.10	0.75	0.96	1.17	-0.12	-0.02
54	0.29	0.37	11.07	9.93	11.10	1.07	1.22	1.08	0.03	0.09
	0.29	0.31	11.63	9.93	11.07	0.93	1.22	1.12	-0.03	0.09
	0.29	0.33	11.54	9.93	11.17	0.64	1.22	1.12	-0.19	0.09

	log SAL pr	SALEFF post	SAEFF pre	SALEFF pr	NIEFF post	NIEFF pre	NIEFF pr	TDTA post	TDTA pre
1	-0.05	0.95	0.96	0.90	0.84	0.57	0.93	0.12	0.20
	-0.03	0.72	0.96	0.89	0.69	0.57	1.05	0.19	0.20
	-0.02	0.78	0.96	0.87	0.88	0.57	1.22	0.16	0.20
2	-0.05	1.01	1.09	0.90	0.98	0.59	0.93	0.06	0.19
	-0.03	0.98	1.09	0.89	1.09	0.59	1.05	0.05	0.19
	-0.02	1.02	1.09	0.87	1.28	0.59	1.22	0.04	0.19
3	0.06	1.03	1.15	1.08	0.96	1.03	1.28	0.04	0.16
	0.09	1.00	1.15	0.85	1.14	1.03	0.86	0.04	0.16
	0.09	1.07	1.15	0.86	1.24	1.03	0.83	0.03	0.16
4	0.05	0.98	0.98	1.01	1.21	1.19	0.89	0.09	0.19
	0.19	0.84	0.98	1.36	0.95	1.19	3.73	0.07	0.19
	0.28	1.10	0.98	1.59	1.38	1.19	5.32	0.07	0.19
5	-0.06	1.00	1.34	0.87	1.10	1.30	1.30	0.01	0.04
	-0.11	1.04	1.34	0.76	1.19	1.30	1.25	0.01	0.04
	-0.14	1.11	1.34	0.73	1.37	1.30	3.50	0.01	0.04
6	0.16	0.90	1.06	1.43	0.93	1.64	1.59	0.03	0.05
	0.19	0.66	1.06	1.56	0.69	1.64	2.97	0.16	0.05
	0.33	0.71	1.06	1.68	0.93	1.64	2.50	0.22	0.05
7	0.16	1.09	1.02	1.43	1.49	0.67	1.59	0.35	0.33
	0.19	0.97	1.02	1.56	1.74	0.67	2.97	0.31	0.33
	0.33	0.86	1.02	1.68	1.72	0.67	2.50	0.36	0.33
8	0.08	0.85	0.95	1.20	0.88	0.59	0.85	0.00	0.00
	0.12	0.80	0.95	1.16	0.85	0.59	1.07	0.00	0.00
	0.10	0.79	0.95	0.89	0.84	0.59	0.94	0.20	0.00
9	0.02	1.13	1.24	0.75	0.63	2.11	0.78	0.58	0.21
	0.05	0.97	1.24	0.80	0.81	2.11	0.82	0.58	0.21
	0.07	0.62	1.24	0.80	0.52	2.11	0.83	0.61	0.21
10	0.01	1.07	1.20	0.94	1.03	1.07	0.76	0.00	0.01
	0.02	1.07	1.20	0.94	1.00	1.07	0.69	0.00	0.01
	-0.03	1.16	1.20	0.71	1.02	1.07	0.16	0.00	0.01
11	0.20	4.07	2.20	0.94	1.83	0.61	0.87	0.22	0.36
	0.24	7.08	2.20	1.02	3.04	0.61	0.74	0.25	0.36
	-0.47	3.67	2.20	0.13	1.31	0.61	0.10	0.27	0.36
12	0.00	1.08	0.58	0.94	1.12	0.43	1.08	0.00	0.00
	0.04	1.20	0.58	1.03	0.03	0.43	1.37	0.01	0.00
	0.24	0.93	0.58	1.54	1.07	0.43	3.07	0.00	0.00
13	0.01	0.95	1.07	1.02	1.08	1.01	2.06	0.04	0.03
	0.35	0.91	1.07	2.22	1.14	1.01	4.37	0.11	0.03
	0.45	0.63	1.07	2.80	1.27	1.01	4.54	0.21	0.03
14	0.02	0.96	1.15	1.12	2.03	0.53	2.34	0.01	0.02
	0.40	1.65	1.15	2.32	2.03	0.53	4.76	0.01	0.02
	0.45	1.42	1.15	2.86	2.02	0.53	4.98	0.01	0.02
15	-1.40	1.13	1.08	0.04	1.06	0.76	0.31	0.12	0.21
	-0.74	2.50	1.08	0.16	2.19	0.76	8.81	0.12	0.21
	-1.30	1.20	1.08	0.04	0.91	0.76	1.86	0.12	0.21
16	0.00	1.52	0.86	0.94	2.73	0.48	1.08	0.54	0.43
	0.04	2.09	0.86	1.03	3.71	0.48	1.37	0.56	0.43
	0.24	1.55	0.86	1.54	2.82	0.48	3.07	0.58	0.43
17	0.04	1.15	0.59	1.09	1.62	0.28	0.85	0.40	0.41
	-0.66	1.47	0.59	0.14	2.27	0.28	0.11	0.10	0.41
	-0.68	1.72	0.59	0.09	1.51	0.28	0.07	0.11	0.41
18	0.11	0.96	0.57	1.29	1.24	0.14	1.61	0.54	0.47
	-0.64	0.86	0.57	0.23	1.47	0.14	0.23	0.98	0.47
	-0.19	0.94	0.57	0.79	0.27	0.14	0.22	1.24	0.47
19	0.25	0.86	1.43	1.76	0.87	0.85	5.05	0.22	0.29
	0.22	0.85	1.43	1.67	0.55	0.85	6.73	0.18	0.29
	0.23	0.88	1.43	1.70	0.43	0.85	0.48	0.18	0.29

	log SAL pr	SALEFF post	SAEFF pre	SALEFF pr	NIEFF post	NIEFF pre	NIEFF pr	TDTA post	TDTA pre
20	0.18	1.08	0.33	1.53	1.19	0.36	0.68	0.02	0.13
	0.22	0.95	0.33	1.59	1.26	0.36	1.15	0.02	0.13
	0.39	0.86	0.33	2.37	0.88	0.36	1.79	0.04	0.13
21	-0.24	0.96	0.62	0.70	1.85	0.36	0.85	0.03	0.03
	-0.28	1.18	0.62	0.70	2.43	0.36	0.68	0.02	0.03
	-0.35	1.08	0.62	0.64	2.40	0.36	0.51	0.03	0.03
22	0.18	0.81	0.86	1.53	27.75	7.36	0.68	0.19	0.61
	0.22	0.82	0.86	1.59	27.15	7.36	1.15	0.18	0.61
	0.39	0.40	0.86	2.37	12.16	7.36	1.79	0.11	0.61
23	-0.24	1.08	0.84	0.70	0.85	0.40	0.85	0.13	0.00
	-0.28	1.31	0.84	0.70	1.05	0.40	0.84	0.18	0.00
	-0.35	1.13	0.84	0.64	0.96	0.40	1.09	0.19	0.00
24	0.05	1.10	0.65	1.09	1.15	0.49	1.27	0.00	0.09
	0.25	0.99	0.65	1.63	1.14	0.49	2.85	0.00	0.09
	0.28	0.81	0.65	1.61	1.08	0.49	3.25	0.00	0.09
25	0.83	1.32	0.98	6.55	1.99	0.55	22.94	0.07	0.12
	-0.54	1.45	0.98	0.28	2.38	0.55	2.51	0.05	0.12
	0.10	1.43	0.98	1.04	2.74	0.55	20.20	0.04	0.12
26	0.18	1.52	0.71	1.53	1.38	0.23	0.68	0.24	0.32
	0.22	2.00	0.71	1.59	1.95	0.23	1.15	0.33	0.32
	0.39	1.86	0.71	2.37	0.82	0.23	1.79	0.40	0.32
27	0.00	1.31	1.06	1.01	3.67	0.88	1.15	0.68	0.20
	0.82	1.33	1.06	6.32	3.98	0.88	5.86	0.50	0.20
	1.32	1.17	1.06	20.42	4.12	0.88	22.07	0.30	0.20
28	0.18	1.02	0.94	1.53	1.11	0.38	0.68	0.37	0.91
	0.22	1.11	0.94	1.59	1.71	0.38	1.15	0.13	0.91
	0.39	1.03	0.94	2.37	1.47	0.38	1.79	0.68	0.91
29	0.18	0.97	0.85	1.53	0.89	0.46	0.68	0.00	0.06
	0.22	1.00	0.85	1.59	0.92	0.46	1.15	0.03	0.06
	0.39	1.16	0.85	2.37	0.96	0.46	1.79	0.24	0.06
30	0.19	0.97	1.01	1.55	0.89	0.32	1.48	0.00	0.40
	0.43	1.00	1.01	2.72	0.92	0.32	7.45	0.03	0.40
	0.41	1.16	1.01	2.58	0.96	0.32	4.01	0.24	0.40
31	-0.04	0.96	1.22	0.91	0.89	1.06	0.74	0.08	0.01
	-0.05	0.99	1.22	0.87	0.86	1.06	0.64	0.08	0.01
	-0.06	0.99	1.22	8.44	0.89	1.06	6.38	0.04	0.01
32	-0.20	1.53	0.61	0.63	1.15	0.82	0.84	0.64	0.20
	-0.96	1.30	0.61	0.11	0.48	0.82	0.85	0.36	0.20
	-1.22	0.84	0.61	0.06	0.05	0.82	0.08	0.58	0.20
33	-0.05	0.20	0.46	0.89	0.48	1.40	0.93	0.02	0.17
	-0.42	0.69	0.46	0.38	1.46	1.40	1.10	0.33	0.17
	-0.80	1.47	0.46	0.16	1.67	1.40	0.53	0.25	0.17
34	0.05	0.89	1.35	1.13	1.14	1.06	1.27	0.43	0.18
	0.17	0.61	1.35	1.41	0.81	1.06	1.36	0.39	0.18
	0.22	0.69	1.35	1.41	0.57	1.06	1.30	0.33	0.18
35	0.00	0.83	0.94	1.00	0.91	0.18	-1.31	0.00	0.04
	-0.10	0.89	0.94	0.79	0.95	0.18	-0.13	0.00	0.04
	-0.15	0.87	0.94	0.70	1.05	0.18	-0.08	0.00	0.04
36	0.07	0.95	1.59	1.17	0.83	2.58	1.23	0.42	0.23
	0.25	0.84	1.59	1.63	0.83	2.58	1.10	0.34	0.23
	0.16	0.76	1.59	1.20	0.63	2.58	1.12	0.30	0.23
37	0.07	0.83	1.12	1.17	0.75	1.50	1.23	0.38	0.16
	0.25	0.83	1.12	1.63	0.57	1.50	1.10	0.25	0.16
	0.16	0.79	1.12	1.20	0.61	1.50	1.12	0.18	0.16
38	-0.02	0.54	0.84	0.95	0.80	0.84	0.93	0.02	0.01
	-0.02	0.66	0.84	0.89	0.62	0.84	0.97	0.04	0.01
	-0.02	0.28	0.84	0.89	0.05	0.84	1.00	0.29	0.01

	log SAL pr	SALEFF post	SAEFF pre	SALEFF pr	NIEFF post	NIEFF pre	NIEFF pr	TDTA post	TDTA pre
39	0.03	0.87	0.98	1.07	0.83	0.98	1.79	0.00	0.01
	0.14	0.81	0.98	1.37	1.02	0.98	2.88	0.00	0.01
	0.14	0.65	0.98	1.38	0.78	0.98	2.93	0.00	0.01
40	0.07	1.10	0.80	1.17	1.45	0.50	1.23	0.11	0.24
	0.25	1.20	0.80	1.63	1.37	0.50	1.10	0.09	0.24
	0.16	0.93	0.80	1.20	0.83	0.50	1.12	0.07	0.24
41	0.00	0.97	0.94	0.93	0.90	0.55	1.09	0.08	0.12
	-0.06	0.81	0.94	1.02	0.45	0.55	2.13	0.10	0.12
	-0.06	0.83	0.94	1.01	0.55	0.55	2.18	0.12	0.12
42	0.07	1.14	1.04	1.17	1.21	0.69	1.23	0.08	0.16
	0.25	1.22	1.04	1.63	1.07	0.69	1.10	0.09	0.16
	0.16	1.03	1.04	1.20	1.05	0.69	1.12	0.07	0.16
43	0.00	1.33	1.70	0.93	1.24	0.72	1.09	0.00	0.10
	-0.06	1.34	1.70	1.02	1.06	0.72	2.13	0.01	0.10
	-0.06	1.37	1.70	1.01	0.98	0.72	2.18	0.01	0.10
44	0.07	1.21	1.25	1.17	1.27	0.53	1.23	0.00	0.03
	0.25	1.30	1.25	1.63	1.16	0.53	1.10	0.00	0.03
	0.16	1.10	1.25	1.20	0.93	0.53	1.12	0.00	0.03
45	0.00	1.01	1.15	0.93	1.17	0.83	1.09	0.16	0.18
	-0.06	0.92	1.15	1.02	1.00	0.83	2.13	0.13	0.18
	-0.06	0.77	1.15	1.01	0.77	0.83	2.18	0.16	0.18
46	0.07	1.13	0.94	1.17	0.78	0.31	1.23	0.14	0.31
	0.25	0.94	0.94	1.63	0.31	0.31	1.10	0.17	0.31
	0.16	0.99	0.94	1.20	0.40	0.31	1.12	0.17	0.31
47	-0.12	0.97	1.20	0.75	0.96	0.78	6.22	0.07	0.15
	-0.09	0.98	1.20	0.81	0.41	0.78	1.53	0.08	0.15
	-0.09	0.83	1.20	0.82	0.51	0.78	2.01	0.10	0.15
48	0.03	1.05	0.79	1.08	0.97	0.54	0.25	0.00	0.00
	0.03	1.81	0.79	1.08	0.98	0.54	0.32	0.00	0.00
	-0.07	2.74	0.79	0.86	1.22	0.54	0.58	0.00	0.00
49	0.02	1.30	1.06	0.97	0.64	0.87	1.03	0.08	0.05
	-0.07	1.61	1.06	0.72	0.86	0.87	1.00	0.00	0.05
	-0.04	1.25	1.06	0.75	0.85	0.87	0.41	0.06	0.05
50	0.04	0.79	1.13	1.10	0.15	1.28	1.40	0.10	0.12
	0.06	0.48	1.13	1.14	0.63	1.28	1.62	0.09	0.12
	0.12	0.32	1.13	1.32	1.25	1.28	1.68	0.06	0.12
51	0.00	0.68	0.95	1.04	0.47	0.57	1.05	0.08	0.32
	-0.27	0.47	0.95	0.56	0.69	0.57	0.63	0.10	0.32
	-0.16	0.60	0.95	0.72	0.42	0.57	0.62	0.11	0.32
52	0.10	0.93	0.99	1.26	0.82	0.84	1.17	0.50	0.34
	0.10	1.09	0.99	1.25	1.00	0.84	1.26	0.63	0.34
	0.07	0.64	0.99	1.09	0.16	0.84	0.95	0.59	0.34
53	-0.04	0.89	0.92	0.91	0.89	0.87	1.03	0.33	0.24
	0.04	0.81	0.92	1.09	0.85	0.87	1.71	0.29	0.24
	0.07	0.90	0.92	1.17	0.88	0.87	2.27	0.33	0.24
54	0.03	1.12	1.17	1.08	1.87	0.71	1.33	0.04	0.14
	0.05	1.02	1.17	1.12	3.31	0.71	1.24	0.22	0.14
	0.05	0.75	1.17	1.19	3.13	0.71	1.41	0.35	0.14

	TDTA pr	TDTE post	TDTE pre	TDTE pr	LOG . EMPL post	LOG.EMPI. Bef.	LOG.EMPL pr
1	0.39	0.55	1.23	0.10	7.89	8.04	6.93
	0.42	0.46	1.23	0.09	8.05	8.04	6.97
	0.34	0.39	1.23	0.06	8.00	8.04	7.02
2	0.39	0.16	0.96	0.10	7.52	7.59	6.93
	0.42	0.14	0.96	0.09	7.43	7.59	6.97
	0.34	0.11	0.96	0.06	7.41	7.59	7.02
3	0.41	0.07	0.38	0.00	7.99	7.95	6.11
	0.26	0.06	0.38	0.00	7.95	7.95	6.40
	0.21	0.06	0.38	0.00	7.93	7.95	6.40
4	0.62	0.05	0.23	0.00	7.40	7.37	5.63
	0.69	0.03	0.23	0.00	7.53	7.37	5.65
	0.64	0.02	0.23	0.00	7.31	7.37	5.70
5	0.57	0.04	0.19	0.55	7.36	7.08	6.58
	0.80	0.03	0.19	1.13	7.33	7.08	6.58
	0.92	0.02	0.19	2.63	7.29	7.08	6.58
6	0.34	0.06	0.13	0.00	7.63	7.85	5.70
	0.24	0.05	0.13	0.00	7.57	7.85	5.70
	0.15	0.04	0.13	0.00	7.52	7.85	5.94
7	0.34	0.21	0.07	0.00	6.47	6.56	5.70
	0.24	0.33	0.07	0.00	6.44	6.56	5.70
	0.15	0.23	0.07	0.00	6.44	6.56	5.94
8	0.66	0.00	0.00	0.00	6.95	7.02	7.09
	0.69	0.00	0.00	0.28	6.93	7.02	7.21
	0.73	0.00	0.00	0.51	6.94	7.02	7.44
9	0.54	2.93	0.61	0.00	7.87	8.28	7.54
	0.54	1.97	0.61	0.00	8.12	8.28	7.55
	0.56	1.94	0.61	0.00	8.09	8.28	7.59
10	0.79	0.00	0.00	1.06	6.76	6.80	7.00
	0.79	0.00	0.00	1.09	6.83	6.80	7.02
	0.81	0.00	0.00	0.83	6.83	6.80	7.20
11	0.83	0.98	2.03	1.33	5.19	5.41	4.33
	0.79	0.56	2.03	2.02	5.08	5.41	4.33
	0.82	0.33	2.03	2.20	5.11	5.41	4.79
12	0.58	0.00	0.00	0.04	6.92	7.12	7.28
	0.53	0.00	0.00	0.03	6.89	7.12	7.31
	0.52	0.00	0.00	0.03	6.70	7.12	7.37
13	0.75	0.03	0.00	0.86	8.04	7.98	6.17
	0.59	0.04	0.00	0.30	8.16	7.98	6.17
	0.59	0.35	0.00	0.33	8.27	7.98	6.17
14	0.75	0.08	0.19	0.71	6.49	6.48	6.22
	0.69	0.07	0.19	0.33	6.37	6.48	6.22
	0.79	0.05	0.19	0.34	6.35	6.48	6.22
15	0.50	0.54	1.05	0.00	5.73	5.79	4.87
	0.41	0.64	1.05	0.00	5.42	5.79	5.01
	0.53	0.42	1.05	0.54	5.39	5.79	5.01
16	0.58	2.99	3.17	0.04	7.19	7.60	7.28
	0.53	3.03	3.17	0.03	6.74	7.60	7.31
	0.52	3.19	3.17	0.03	6.44	7.60	7.37
17	0.79	0.02	0.17	2.02	7.60	7.80	4.33
	0.82	0.01	0.17	2.20	7.30	7.80	4.79
	0.82	0.01	0.17	2.25	7.01	7.80	5.23
18	0.74	0.00	0.29	1.75	7.39	7.26	4.91
	0.73	1.65	0.29	1.77	7.20	7.26	4.91
	0.71	0.87	0.29	1.30	6.97	7.26	4.70
19	0.78	1.03	0.60	2.23	9.44	9.26	7.15
	0.77	0.86	0.60	1.84	9.24	9.26	7.15
	0.79	0.66	0.60	1.90	9.23	9.26	7.15

	TDTA pr	TDTE post	TDTE pre	TDTE pr	LOG . EMPL post	LOG.EMPI. Bef.	LOG.EMPL pr
20	0.56	0.17	0.32	0.84	7.02	7.07	5.52
	0.36	0.15	0.32	0.36	7.02	7.07	5.56
	0.34	0.13	0.32	0.36	7.05	7.07	5.56
21	0.64	0.00	0.00	0.00	6.84	7.05	6.16
	0.64	0.00	0.00	0.00	6.70	7.05	6.05
	0.64	0.00	0.00	0.00	6.68	7.05	5.98
22	0.56	0.82	3.81	0.84	7.59	7.56	5.52
	0.36	0.46	3.81	0.36	7.59	7.56	5.56
	0.34	0.22	3.81	0.36	7.57	7.56	5.56
23	0.64	0.00	0.00	0.00	8.16	8.56	6.16
	0.64	0.00	0.00	0.00	7.98	8.56	6.05
	0.64	0.00	0.00	0.00	7.98	8.56	5.98
24	0.53	0.00	0.23	0.03	6.67	6.96	7.31
	0.52	0.00	0.23	0.03	6.65	6.96	7.37
	0.48	0.00	0.23	0.02	6.58	6.96	7.46
25	0.48	0.20	0.61	0.00	7.31	7.40	4.86
	0.50	0.11	0.61	0.00	7.31	7.40	4.87
	0.41	0.08	0.61	0.00	7.31	7.40	5.01
26	0.56	0.00	0.00	0.84	8.50	8.73	5.52
	0.36	0.00	0.00	0.36	8.29	8.73	5.56
	0.34	0.00	0.00	0.36	8.29	8.73	5.56
27	0.83	0.13	1.02	2.16	8.00	7.96	6.40
	0.82	0.17	1.02	2.18	7.97	7.96	6.43
	0.61	0.02	1.02	0.50	8.12	7.96	6.43
28	0.56	1.16	3.99	0.84	8.39	8.44	5.52
	0.36	0.27	3.99	0.36	8.30	8.44	5.56
	0.34	0.72	3.99	0.36	8.29	8.44	5.56
29	0.56	0.00	0.14	0.84	7.34	7.36	5.52
	0.36	0.06	0.14	0.36	7.33	7.36	5.56
	0.34	0.71	0.14	0.36	7.32	7.36	5.56
30	0.83	0.00	3.22	2.77	7.34	8.27	7.15
	0.78	0.06	3.22	2.23	7.33	8.27	7.15
	0.77	0.71	3.22	1.84	7.32	8.27	7.15
31	0.35	0.00	0.02	0.08	9.54	9.51	7.40
	0.48	0.17	0.02	0.17	9.54	9.51	7.43
	0.72	0.13	0.02	0.53	9.54	9.51	5.13
32	0.89	0.37	0.53	0.00	7.43	7.50	3.69
	0.88	0.37	0.53	0.00	7.35	7.50	3.69
	0.91	0.27	0.53	0.00	7.35	7.50	3.69
33	0.55	0.03	0.54	1.02	6.91	7.00	3.33
	0.53	0.35	0.54	1.03	6.75	7.00	3.33
	0.53	0.28	0.54	1.03	6.66	7.00	3.33
34	0.48	0.03	0.05	0.03	8.90	8.89	7.04
	0.55	0.03	0.05	0.29	8.90	8.89	7.10
	0.46	0.03	0.05	0.15	8.81	8.89	7.20
35	0.67	0.00	0.07	0.01	8.03	8.33	6.58
	0.74	0.00	0.07	0.02	8.00	8.33	6.58
	0.78	0.01	0.07	0.02	7.99	8.33	6.58
36	0.71	0.36	0.59	0.68	8.16	8.07	6.57
	0.47	0.40	0.59	0.01	8.14	8.07	6.66
	0.54	0.40	0.59	0.01	8.14	8.07	6.75
37	0.71	0.00	0.00	0.68	8.25	8.24	6.57
	0.47	0.00	0.00	0.01	8.24	8.24	6.66
	0.54	0.38	0.00	0.01	8.23	8.24	6.75
38	0.25	0.00	0.00	0.00	7.39	7.56	5.77
	0.24	0.00	0.00	0.00	7.36	7.56	5.84
	0.21	0.00	0.00	0.00	7.42	7.56	5.84

	TDTA pr	TDTE post	TDTE pre	TDTE pr	LOG . EMPL post	LOG.EMPI. Bef.	LOG.EMPL pr
39	0.47	0.00	0.02	0.35	7.51	7.51	5.19
	0.44	0.00	0.02	0.30	7.48	7.51	5.19
	0.45	0.00	0.02	0.27	7.48	7.51	5.19
40	0.71	0.48	1.01	0.68	8.65	8.66	6.57
	0.47	0.42	1.01	0.01	8.57	8.66	6.66
	0.54	0.35	1.01	0.01	8.54	8.66	6.75
41	0.68	0.36	0.30	0.34	8.60	8.61	7.60
	0.51	0.42	0.30	0.20	8.58	8.61	7.40
	0.55	0.47	0.30	0.27	8.53	8.61	7.40
42	0.71	0.26	0.57	0.68	8.59	8.56	6.57
	0.47	0.32	0.57	0.01	8.50	8.56	6.66
	0.54	0.29	0.57	0.01	8.55	8.56	6.75
43	0.68	0.00	0.21	0.34	8.74	8.71	7.60
	0.51	0.03	0.21	0.20	8.74	8.71	7.40
	0.55	0.04	0.21	0.27	8.74	8.71	7.40
44	0.71	0.00	0.12	0.68	8.81	8.85	6.57
	0.47	0.00	0.12	0.01	8.79	8.85	6.66
	0.54	0.00	0.12	0.01	8.78	8.85	6.75
45	0.68	0.92	1.46	0.34	8.41	8.46	7.60
	0.51	0.79	1.46	0.20	8.37	8.46	7.40
	0.55	0.71	1.46	0.27	8.39	8.46	7.40
46	0.71	0.79	1.52	0.68	8.34	8.37	6.57
	0.47	0.68	1.52	0.01	8.37	8.37	6.66
	0.54	0.52	1.52	0.01	8.28	8.37	6.75
47	0.58	0.30	0.65	0.01	8.35	8.27	6.58
	0.66	0.33	0.65	0.01	8.37	8.27	6.58
	0.67	0.47	0.65	0.01	8.32	8.27	6.58
48	0.66	0.00	0.00	0.01	6.35	7.00	6.58
	0.67	0.00	0.00	0.01	6.17	7.00	6.58
	0.74	0.00	0.00	0.02	5.82	7.00	6.58
49	0.04	0.12	0.14	0.00	5.97	6.05	4.90
	0.04	0.00	0.14	0.00	5.70	6.05	4.98
	0.08	0.00	0.14	0.00	5.70	6.05	5.01
50	0.62	0.17	0.62	0.15	8.27	8.52	6.40
	0.63	0.15	0.62	0.13	8.16	8.52	6.40
	0.64	0.16	0.62	0.29	8.16	8.52	6.40
51	0.60	0.08	0.84	0.04	6.95	7.03	4.90
	0.51	0.00	0.84	0.06	6.94	7.03	4.90
	0.55	0.00	0.84	0.05	6.72	7.03	4.90
52	0.50	0.07	0.19	0.00	7.94	7.95	7.09
	0.59	0.07	0.19	0.00	7.70	7.95	7.09
	0.34	0.07	0.19	0.00	7.60	7.95	7.17
53	0.87	0.07	0.15	0.48	7.96	8.03	7.60
	0.89	0.01	0.15	1.39	7.94	8.03	7.60
	0.75	0.00	0.15	0.78	7.81	8.03	7.60
54	0.75	0.17	0.68	0.78	8.80	8.88	7.60
	0.72	0.21	0.68	0.85	8.75	8.88	7.60
	0.72	0.14	0.68	0.86	8.68	8.88	7.53

APPENDIX 8.3

The Results of the Regression Models Showing the Environmental Impacts on the Performance Measures for the Third Year Following Privatisation

Multiple Regression Analysis

Dependent variable: Return on Sales (the third year)

Parameter	Estimate	Standard Error	T Statistic	P-Value
CONSTANT	-0.315079	0.258395	-1.21937	0.2285
LOG SIZE	0.0328471	0.0212884	1.70296	0.0913
AOSPF	-0.0880825	0.0782244	-1.12602	0.2656
ROS pre-	0.970048	0.174593	5.55606	0.0000
ROS private	-0.0165431	0.14198	-0.116517	0.9077

Analysis of Variance

Source	Sum of Squares	Df	Mean Square	F-Ratio	P-Value
Model	0.688874	4	0.172218	8.62	0.0000
Residual	0.978809	49	0.0199757		

Total (Corr.) 1.66768 53
R-squared = 41.3072 percent
R-squared (adjusted for d.f.) = 36.516 percent
Standard Error of Est. = 0.141335
Mean absolute error = 0.0931464

Correlation matrix for coefficient estimates

	LOG SIZE	AOSPF	ROS pre-	ROS private
LOG SIZE	1.0000			
AOSPF	-0.3498	1.0000		
ROS pre-	0.1303	-0.1227	1.0000	
ROS private	-0.1771	0.0847	-0.2902	1.0000

Correlations between the dependent variable (ROS) and independent variables.

	ROS post	LOG SIZE	AOSPF	ROS pre	ROS pr
ROS post	1.0000	0.1033	-0.0199	0.6160	0.1864

Multiple Regression Analysis

Dependent variable: Return on Assets (the third year)

Parameter	Estimate	Standard Error	T Statistic	P-Value
CONSTANT	0.0615621	0.100732	0.611148	0.5439
LOG SIZE	-0.0008520	0.007997	-0.10654	0.9156
AOSPF	-0.0149907	0.029834	-0.502462	0.6176
ROA pre-	0.655943	0.183561	3.57344	0.0008
ROA private	-0.0244805	0.084998	-0.288013	0.7746

Analysis of Variance

Source	Sum of Squares	Df	Mean Square	F-Ratio	P-Value
Model	0.0389029	4	0.00972572	3.49	0.0138
Residual	0.136423	49	0.00278414		
Total (Corr.)	0.175326	53			

R-squared = 22.1889 percent

R-squared (adjusted for d.f.) = 15.837 percent

Standard Error of Est. = 0.052765

Mean absolute error = 0.0407366

Correlation matrix for coefficient estimates

	LOG SIZE	AOSPF	ROA pre-	ROA private
LOG SIZE	1.0000			
AOSPF	-0.3569	1.0000		
ROA pre-	0.1968	-0.0754	1.0000	
ROA private	0.0631	-0.2095	-0.2096	1.0000

Correlations between the dependent variable (ROA) and independent variables.

	ROA post	LOG SIZE	AOSPF	ROA pre	ROA pr
ROA post	1.0000	-0.1238	-0.0568	0.4624	0.0578

Multiple Regression Analysis

Dependent variable: Return on Equity (the third year)

Parameter	Estimate	Standard Error	T Statistic	P-Value
CONSTANT	0.0321149	0.336308	0.0954925	0.9243
LOG SIZE	0.00933171	0.0272997	0.341825	0.7339
APOSPF	0.00550482	0.107131	0.051384	0.9592
ROE pre-	0.407377	0.172519	2.36135	0.0222
ROE private	0.0641128	0.136273	0.470472	0.6401

Analysis of Variance

Source	Sum of Squares	Df	Mean Square	F-Ratio	P-Value
Model	0.245959	4	0.061489	1.80	0.1430
Residual	1.66963	49	0.034074		

Total (Corr.) 1.91559 53

R-squared = 12.8399 percent

R-squared (adjusted for d.f.) = 5.72479 percent

Standard Error of Est. = 0.184592

Mean absolute error = 0.127049

Correlation matrix for coefficient estimates

	LOG SIZE	APOSPF	ROE pre-	ROE private
LOG SIZE	1.0000			
APOSPF	-0.3213	1.0000		
ROE pre-	0.0436	-0.2133	1.0000	
ROE private	-0.0264	-0.2131	-0.1474	1.0000

Correlations between the dependent variable (ROE) and independent variables.

	ROE post	LOG SIZE	APOSPF	ROE pre	ROE pr
ROE post	1.0000	0.0744	0.1260	0.3475	0.1413

Multiple Regression Analysis

Dependent variable: Earnings before Interest and Taxes (the third year)

Parameter	Estimate	Standard Error	T Statistic	P-Value
CONSTANT	-3.36786	2.63338	-1.27891	0.2070
LOG SIZE	1.18521	0.619647	2.10638	0.0368
AOSPF	-0.366004	0.768008	-0.476563	0.6358
LOG_EBIT_pre-	1.00773	0.229019	4.40018	0.0001
LOG_EBIT private	0.0433724	0.0243719	1.776941	0.0858

Analysis of Variance

Source	Sum of Squares	Df	Mean Square	F-Ratio	P-Value
Model	90.4897	4	22.6224	12.09	0.0000
Residual	91.6568	49	1.87055		

Total (Corr.) 182.147 53

R-squared = 49.6796 percent

R-squared (adjusted for d.f.) = 45.5718 percent

Standard Error of Est. = 1.36768

Mean absolute error = 0.867993

Correlation matrix for coefficient estimates

	LOG SIZE	AOSPF	LOG_EBIT_pre-	LOG_EBIT private
LOG SIZE	1.0000			
AOSPF	-0.1151	1.0000		
LOG_EBIT_pre-	-0.2209	-0.1268	1.0000	
LOG_EBIT private	-0.4690	-0.1052	-0.4094	1.0000

Correlations between the dependent variable (EBIT) and independent variables.

	EBIT post	LOG SIZE	AOSPF	EBIT pre	EBIT pr
EBIT post	1.0000	0.4957	0.2115	0.6917	0.5022

Multiple Regression Analysis

Dependent variable: LOG ADJ SAL (Real Sales) (the third year)

Parameter	Estimate	Standard Error	T Statistic	P-Value
CONSTANT	-0.560528	0.632278	-2.69948	0.0095
LOG SIZE	0.0630676	0.025286	2.49417	0.0160
AOSPF	-0.312185	0.183853	-1.68029	0.0958
ADJ SAL pre-	0.613444	0.15424	3.97719	0.0002
ADJ SAL private	-0.0570029	0.0170359	-0.972439	0.3356

Analysis of Variance

Source	Sum of Squares	Df	Mean Square	F-Ratio	P-Value
Model	2.16295	4	0.540737	4.89	0.0021
Residual	5.41419	49	0.110494		

Total (Corr.) 7.57713 53

R-squared = 28.5457 percent

R-squared (adjusted for d.f.) = 22.7127 percent

Standard Error of Est. = 0.332406

Mean absolute error = 0.232727

Correlation matrix for coefficient estimates

	LOG SIZE	AOSPF	ADJ SAL pre-	ADJ SAL private
LOG SIZE	1.0000			
AOSPF	-0.3537	1.0000		
ADJ SAL pre-	-0.0068	-0.0325	1.0000	
ADJ SAL private	-0.2660	0.1216	0.0586	1.0000

Correlations between the dependent variable (SAL) and independent variables.

	LOG SAL post	LOG SIZE	AOSPF	LOG SAL pre-	LOG SAL pr
LOG SAL post	1.0000	0.2731	-0.0368	0.1572	-0.0335

Multiple Regression Analysis

Dependent variable: Adj SALEFF (Sale Efficiency) (the third year)

Parameter	Estimate	Standard Error	T Statistic	P-Value
CONSTANT	0.550234	1.00013	0.550161	0.5847
LOG SIZE	0.0164947	0.0835919	0.197324	0.8444
APOSPF	-0.478661	0.292694	-1.63537	0.1014
Adj SAEFF pre-	0.500725	0.238088	2.10311	0.0406
Adj SALEFF private	-0.008071	0.0270288	-0.298609	0.7665

Analysis of Variance

Source	Sum of Squares	Df	Mean Square	F-Ratio	P-Value
Model	1.76506	4	0.441264	1.60	0.1904
Residual	13.5503	49	0.276536		

Total (Corr.) 15.3153 53

R-squared = 11.5248 percent

R-squared (adjusted for d.f.) = 4.30229 percent

Standard Error of Est. = 0.525867

Mean absolute error = 0.336863

Correlation matrix for coefficient estimates

	LOG SIZE	APOSPF	Adj SAEFF pre-	Adj SALEFF private
LOG SIZE	1.0000			
APOSPF	-0.3336	1.0000		
Adj SAEFF pre-	-0.1160	-0.1240	1.0000	
Adj SALEFF private	-0.3522	0.1136	0.0141	1.0000

Correlations between the dependent variable (SALEFF) and independent variables.

	SALEFF post	LOG SIZE	APOSPF	SALEFF pre	SALEFF pr
SALEFF post	1.0000	-0.0149	-0.1767	0.2517	-0.0263

Multiple Regression Analysis

Dependent variable: **ADJNIEFF (Net Income Efficiency) (the third year)**

Parameter	Estimate	Standard Error	T Statistic	P-Value
CONSTANT	-1.45779	1.72134	-0.846896	0.4012
LOG SIZE	0.156359	0.14436	1.697112	0.0978
APOSPF	-1.324	0.532956	-2.48426	0.0164
NIEFF pre-	1.23843	0.131687	9.40434	0.0000
ADJNIEFF private	0.104031	0.0337225	3.0849	0.0033

Analysis of Variance

Source	Sum of Squares	Df	Mean Square	F-Ratio	P-Value
Model	106.36	4	26.59	29.79	0.0000
Residual	43.7435	49	0.892725		

Total (Corr.) 150.104 53

R-squared = 70.8578 percent

R-squared (adjusted for d.f.) = 68.4788 percent

Standard Error of Est. = 0.944841

Mean absolute error = 0.660395

Correlation matrix for coefficient estimates

	LOG SIZE	APOSPF	ADJ NIEFF pre-	ADJNIEFF private
LOG SIZE	1.0000			
APOSPF	-0.3744	1.0000		
ADJ NIEFF pre-	-0.1610	0.1729	1.0000	
ADJNIEFF private	-0.2080	0.1666	0.0630	1.0000

Correlations between the dependent variable (NIEFF) and independent variables.

	NIEFF post	LOG SIZE	APOSPF	NIEFF pre	NIEFF pr
NIEFF post	1.0000	0.1346	-0.2910	0.7705	0.2647

Multiple Regression Analysis

Dependent variable: TDTA (Total Debt to Total Assets) (the third year)

Parameter	Estimate	Standard Error	T Statistic	P-Value
CONSTANT	0.00406263	0.356938	0.0113819	0.9910
LOG SIZE	0.00562699	0.030982	0.181619	0.8566
AOSPF	-0.0963124	0.106306	-1.77612	0.0858
TDTA pre-	0.762164	0.163789	4.65334	0.0000
TDTA private	0.0469593	0.139071	0.337665	0.7371

Analysis of Variance

Source	Sum of Squares	Df	Mean Square	F-Ratio	P-Value
Model	0.939168	4	0.234792	6.28	0.0004
Residual	1.83337	49	0.037415		
Total (Corr.)	2.77253	53			

R-squared = 33.874 percent

R-squared (adjusted for d.f.) = 28.476 percent

Standard Error of Est. = 0.193431

Mean absolute error = 0.132182

Correlation matrix for coefficient estimates

	LOG SIZE	AOSPF	TDTA pre-	TDTA private
LOG SIZE	1.0000			
AOSPF	-0.3315	1.0000		
TDTA pre-	-0.3227	0.0380	1.0000	
TDTA private	-0.2686	0.0541	0.1841	1.0000

Correlations between the dependent variable (TDTA) and independent variables.

	TDTA post	LOG SIZE	AOSPF	TDTA pre	TDTA pr
TDTA post	1.0000	0.1662	-0.0601	0.5706	-0.0171

Multiple Regression Analysis

Dependent variable: TDTE (Total Debts to Total Equity) (the third year)

Parameter	Estimate	Standard Error	T Statistic	P-Value
CONSTANT	0.37056	0.803007	0.461466	0.6465
LOG SIZE	-0.0409355	0.0668947	-0.611939	0.5434
AOSPF	0.702166	0.238917	2.93896	0.0050
TDTE pre-	0.262129	0.0658339	3.98168	0.0002
TDTE private	-0.0565355	0.0951541	-0.594147	0.5551

Analysis of Variance

Source	Sum of Squares	Df	Mean Square	F-Ratio	P-Value
Model	5.34744	4	1.33686	7.10	0.0001
Residual	9.22442	49	0.188254		
Total (Corr.)	14.5719	53			

R-squared = 36.697 percent

R-squared (adjusted for d.f.) = 31.5294 percent

Standard Error of Est. = 0.433882

Mean absolute error = 0.25697

Correlation matrix for coefficient estimates

	LOG SIZE	AOSPF	TDTE pre-	TDTE private
LOG SIZE	1.0000			
AOSPF	-0.3123	1.0000		
TDTE pre-	-0.2063	-0.0777	1.0000	
TDTE private	-0.1749	0.0479	-0.1089	1.0000

Correlations between the dependent variable (TDTE) and independent variables.

	TDTE post	LOG SIZE	AOSPF	TDTE pre	TDTE pr
TDTE post	1.0000	0.1547	0.4017	0.4979	-0.0013

Multiple Regression Analysis

Dependent variable: LOG EMPL (Number of Employees) (the third year)

Parameter	Estimate	Standard Error	T Statistic	P-Value
CONSTANT	-1.23984	0.566648	-2.18802	0.0335
LOG SIZE	0.0774906	0.0479196	1.6171	0.1123
AOSPF	-0.00035055	0.171501	-0.00204401	0.9984
LOG_EMPL_pre-	1.02307	0.058041	17.6266	0.0000
LOG_EMPL private	-0.0192314	0.0448291	-0.428993	0.6698

Analysis of Variance

Source	Sum of Squares	Df	Mean Square	F-Ratio	P-Value
Model	44.3457	4	11.0864	129.68	0.0000
Residual	4.18889	49	0.0854875		

Total (Corr.) 48.5345 53

R-squared = 91.3693 percent

R-squared (adjusted for d.f.) = 90.6647 percent

Standard Error of Est. = 0.292382

Mean absolute error = 0.188334

Correlation matrix for coefficient estimates

	LOG SIZE	AOSPF	LOG_EMPL_pre-	LOG_EMPL private
LOG SIZE	1.0000			
AOSPF	-0.1879	1.0000		
LOG_EMPL_pre-	-0.4206	-0.1468	1.0000	
LOG_EMPL private	0.0228	-0.2659	-0.2899	1.0000

Correlations between the dependent variable (EMPL) and independent variables.

	EMPL post	LOG SIZE	AOSPF	EMPL pre	EMPL pr
EMPL post	1.0000	0.5380	0.3565	0.9532	0.3697

APPENDIX 8-4

Actual Data

In

The Third Year Following Privatisation

	LOG SIZE	AOSPF	ROS post	ROS pre	ROS pr	ROA post	ROA pre	ROA pr	ROE post
1	12.61	0.75	0.12	0.06	0.42	0.08	0.05	0.28	0.35
2	12.41	0.60	0.21	0.09	0.42	0.11	0.06	0.28	0.31
3	12.79	0.69	0.18	0.14	0.14	0.09	0.09	0.07	0.16
4	11.88	0.62	0.09	0.09	0.21	0.08	0.05	0.10	0.21
5	12.09	0.60	0.20	0.16	0.08	0.18	0.12	0.08	0.49
6	11.13	0.48	0.12	0.14	0.34	0.10	0.14	0.35	0.20
7	11.28	0.11	0.16	0.05	0.34	0.16	0.07	0.35	0.70
8	13.40	0.43	0.37	0.22	0.09	0.17	0.17	0.06	0.33
9	13.72	0.71	0.13	0.26	0.25	0.01	0.08	0.19	0.05
10	11.18	0.45	0.22	0.22	0.01	0.09	0.09	0.01	0.27
11	12.24	0.05	0.21	0.27	0.09	0.03	0.03	0.01	0.15
12	11.52	0.00	0.13	0.09	0.06	0.16	0.05	0.04	0.23
13	13.41	0.00	0.64	0.30	0.38	0.13	0.15	0.06	0.32
14	13.73	0.27	0.63	0.20	0.31	0.12	0.05	0.07	0.83
15	12.33	0.80	0.57	0.65	0.52	0.05	0.06	0.01	0.16
16	11.58	0.80	0.05	0.02	0.06	0.03	0.01	0.04	0.24
17	12.34	0.31	0.02	0.01	0.09	0.02	0.01	0.01	0.17
18	12.59	0.36	0.01	0.01	0.05	0.00	0.01	0.01	0.06
19	14.39	0.87	0.04	0.05	0.01	0.02	0.04	0.01	0.23
20	13.25	0.73	0.43	0.48	0.15	0.12	0.09	0.08	0.98
21	11.73	0.00	0.09	0.02	0.02	0.09	0.02	0.01	0.34
22	13.54	0.02	0.37	0.10	0.15	0.10	0.04	0.08	0.26
23	11.94	0.39	0.06	0.04	0.04	0.06	0.04	0.02	0.21
24	12.27	0.42	0.15	0.09	0.07	0.09	0.09	0.05	0.37
25	12.16	0.10	0.16	0.05	0.67	0.16	0.04	0.04	0.35
26	13.83	0.27	0.03	0.02	0.15	0.02	0.02	0.08	0.21
27	13.67	0.29	0.28	0.07	0.11	0.06	0.04	0.05	0.11
28	14.00	0.56	0.28	0.07	0.15	0.14	0.04	0.08	0.30
29	13.16	0.74	0.31	0.20	0.15	0.12	0.10	0.08	0.37
30	14.01	0.70	0.31	0.08	0.07	0.12	0.03	0.03	0.37
31	14.57	0.67	0.08	0.08	0.45	0.08	0.10	0.17	0.26
32	12.46	0.00	0.01	0.19	0.05	0.00	0.08	0.00	0.02
33	11.96	0.00	0.07	0.24	0.44	0.06	0.10	0.01	0.36
34	13.52	0.53	0.10	0.10	0.20	0.03	0.05	0.14	0.09
35	11.91	0.54	0.27	0.04	0.00	0.19	0.05	0.00	0.42
36	12.91	0.68	0.04	0.07	0.16	0.03	0.09	0.21	0.20
37	12.68	0.62	0.04	0.07	0.16	0.06	0.11	0.21	0.27
38	9.93	0.13	0.03	0.17	0.04	0.02	0.11	0.13	0.03
39	11.51	0.41	0.18	0.15	0.23	0.21	0.21	0.19	0.35
40	13.01	0.73	0.07	0.05	0.16	0.11	0.08	0.21	0.56
41	13.07	0.67	0.05	0.04	0.15	0.05	0.05	0.10	0.22
42	13.02	0.39	0.07	0.05	0.16	0.08	0.05	0.21	0.31
43	12.93	0.39	0.07	0.05	0.15	0.12	0.07	0.10	0.38
44	13.03	0.47	0.07	0.04	0.16	0.10	0.05	0.21	0.32
45	13.63	0.64	0.02	0.02	0.15	0.05	0.03	0.10	0.23
46	12.82	0.61	0.03	0.03	0.16	0.04	0.03	0.21	0.22
47	12.45	0.64	0.04	0.04	0.02	0.05	0.07	0.02	0.23
48	11.63	0.17	0.06	0.09	0.04	0.10	0.07	0.04	0.15
49	10.77	0.02	0.08	0.10	0.08	0.06	0.06	0.05	0.15
50	10.95	0.49	0.81	0.24	0.02	0.25	0.13	0.05	0.71
51	11.18	0.20	0.09	0.07	0.21	0.03	0.04	0.17	0.05
52	12.60	0.11	0.02	0.06	0.11	0.01	0.04	0.13	0.06
53	12.91	0.38	0.10	0.09	0.22	0.09	0.11	0.09	0.21
54	13.32	0.00	0.36	0.05	0.21	0.17	0.04	0.09	0.40

	ROE pre	ROE pr	log. EBITpost	log.EBIT. pre	Log .EBIT pr	ADJ SALpost	ADJ SAL pre	ADJ SAL pr	log SAL post
1	0.27	0.43	10.08	9.17	11.11	0.84	1.07	0.95	-0.08
2	0.25	0.43	10.20	9.08	11.11	0.92	1.18	0.95	-0.04
3	0.29	0.08	10.34	9.74	10.35	1.01	1.12	1.23	0.00
4	0.33	0.27	9.31	8.71	9.60	1.04	0.99	1.91	0.02
5	0.57	1.02	10.38	9.72	9.36	1.02	1.00	0.73	0.01
6	0.35	0.41	8.87	9.37	9.19	0.57	1.18	2.13	-0.24
7	0.43	0.41	9.43	8.19	9.19	0.78	1.04	2.13	-0.11
8	0.43	0.22	11.60	10.76	9.79	0.76	1.00	1.26	-0.12
9	0.23	0.43	9.28	10.45	11.44	0.53	1.28	1.18	-0.28
10	0.28	0.03	8.74	8.76	5.26	1.27	1.26	0.94	0.10
11	0.22	0.04	8.76	7.90	7.62	2.85	2.30	0.34	0.45
12	0.09	0.08	9.68	7.90	8.26	0.76	0.72	1.74	-0.12
13	0.35	0.16	11.37	10.45	10.69	0.83	1.04	2.80	-0.08
14	0.48	0.17	11.60	9.92	11.09	1.25	1.15	2.85	0.10
15	0.31	0.02	9.23	9.13	7.98	0.80	1.07	0.05	-0.10
16	0.25	0.08	7.91	6.88	8.26	0.54	0.95	1.74	-0.27
17	0.09	0.04	8.30	6.96	7.60	0.96	0.72	0.21	-0.02
18	0.04	0.04	0.00	5.64	8.19	0.61	0.51	0.64	-0.21
19	0.85	0.03	10.34	10.60	9.39	0.78	1.30	1.70	-0.11
20	0.40	0.12	11.16	9.79	11.00	0.87	0.34	2.47	-0.06
21	0.11	0.03	9.35	7.42	6.77	0.77	0.64	0.45	-0.11
22	0.25	0.12	11.24	9.62	11.00	0.51	1.08	2.47	-0.29
23	0.37	0.05	9.12	8.51	7.54	0.94	1.26	0.45	-0.03
24	0.52	0.10	9.84	9.17	8.49	0.74	0.88	1.92	-0.13
25	0.21	0.08	10.31	8.38	9.50	1.34	1.01	1.25	0.13
26	0.32	0.12	9.99	8.61	11.00	1.22	0.73	2.47	0.09
27	0.23	0.12	10.88	8.86	10.12	1.16	1.00	21.10	0.06
28	0.17	0.12	12.04	10.87	11.00	0.92	0.96	2.47	-0.04
29	0.24	0.12	11.07	9.89	11.00	1.13	0.87	2.47	0.05
30	0.18	0.13	11.07	9.05	11.10	1.13	0.96	2.58	0.05
31	0.27	0.62	11.99	11.67	12.39	0.98	1.16	0.88	-0.01
32	0.23	0.01	6.76	9.29	6.05	0.75	0.64	0.06	-0.12
33	0.31	0.03	9.20	8.95	7.40	1.07	0.47	0.16	0.03
34	0.17	0.26	9.84	10.24	11.72	0.62	1.30	1.65	-0.21
35	0.11	0.01	10.23	7.78	5.70	0.80	1.22	0.70	-0.10
36	0.59	0.45	9.43	10.36	11.17	0.69	1.35	1.46	-0.16
37	0.53	0.45	9.83	10.34	11.17	0.77	1.10	1.46	-0.11
38	0.48	0.16	5.76	8.25	7.76	0.28	0.99	0.96	-0.55
39	0.38	0.34	9.96	9.82	9.51	0.62	0.96	1.38	-0.21
40	0.35	0.45	10.78	9.86	11.17	0.83	0.81	1.46	-0.08
41	0.19	0.22	10.10	9.73	11.06	0.77	0.95	0.87	-0.11
42	0.21	0.45	10.45	9.61	11.17	1.04	1.06	1.46	0.02
43	0.27	0.22	10.81	10.05	11.06	1.38	1.65	0.87	0.14
44	0.19	0.45	10.70	9.75	11.17	1.05	1.29	1.46	0.02
45	0.25	0.22	10.65	10.41	11.06	0.75	1.20	0.87	-0.12
46	0.16	0.45	9.49	8.90	11.17	0.90	0.94	1.46	-0.05
47	0.33	0.07	9.43	9.35	8.50	0.87	1.20	0.82	-0.06
48	0.21	0.15	9.32	9.32	9.12	1.53	1.42	0.86	0.18
49	0.18	0.06	7.88	7.94	7.73	0.96	1.15	0.92	-0.02
50	0.60	0.15	9.55	9.72	8.70	0.23	1.20	1.32	-0.64
51	0.03	0.38	7.56	8.64	9.47	0.52	1.14	0.69	-0.28
52	0.35	0.19	7.48	9.18	10.35	0.47	1.04	1.18	-0.33
53	0.33	0.37	10.46	10.20	11.10	0.75	0.96	1.17	-0.12
54	0.29	0.33	11.54	9.93	11.17	0.64	1.22	1.12	-0.19

	log SAL pre	log SAL pr	SALEFF post	SAEFF pre	SALEFF pr	ADJNIEFF post	j NIEFF pre	NIEFF pr	TDTA post
1	0.03	-0.02	0.78	0.96	0.87	0.88	0.57	1.22	0.16
2	0.07	-0.02	1.02	1.09	0.87	1.28	0.59	1.22	0.04
3	0.05	0.09	1.07	1.15	0.86	1.24	1.03	0.83	0.03
4	0.00	0.28	1.10	0.98	1.59	1.38	1.19	5.32	0.07
5	0.00	-0.14	1.11	1.34	0.73	1.37	1.30	3.50	0.01
6	0.07	0.33	0.71	1.06	1.68	0.93	1.64	2.50	0.22
7	0.02	0.33	0.86	1.02	1.68	1.72	0.67	2.50	0.36
8	0.00	0.10	0.79	0.95	0.89	0.84	0.59	0.94	0.20
9	0.11	0.07	0.62	1.24	0.80	0.52	2.11	0.83	0.61
10	0.10	-0.03	1.16	1.20	0.71	1.02	1.07	0.16	0.00
11	0.36	-0.47	3.67	2.20	0.13	1.31	0.61	0.10	0.27
12	-0.14	0.24	0.93	0.58	1.54	1.07	0.43	3.07	0.00
13	0.02	0.45	0.63	1.07	2.80	1.27	1.01	4.54	0.21
14	0.06	0.45	1.42	1.15	2.86	2.02	0.53	4.98	0.01
15	0.03	-1.30	1.20	1.08	0.04	0.91	0.76	1.86	0.12
16	-0.02	0.24	1.55	0.86	1.54	2.82	0.48	3.07	0.58
17	-0.14	-0.68	1.72	0.59	0.09	1.51	0.28	0.07	0.11
18	-0.29	-0.19	0.94	0.57	0.79	0.27	0.14	0.22	1.24
19	0.11	0.23	0.88	1.43	1.70	0.43	0.85	0.48	0.18
20	-0.47	0.39	0.86	0.33	2.37	0.88	0.36	1.79	0.04
21	-0.19	-0.35	1.08	0.62	0.64	2.40	0.36	0.51	0.03
22	0.03	0.39	0.40	0.86	2.37	12.16	7.36	1.79	0.11
23	0.10	-0.35	1.13	0.84	0.64	0.96	0.40	1.09	0.19
24	-0.06	0.28	0.81	0.65	1.61	1.08	0.49	3.25	0.00
25	0.00	0.10	1.43	0.98	1.04	2.74	0.55	20.20	0.04
26	-0.14	0.39	1.86	0.71	2.37	0.82	0.23	1.79	0.40
27	0.00	1.32	1.17	1.06	20.42	4.12	0.88	22.07	0.30
28	-0.02	0.39	1.03	0.94	2.37	1.47	0.38	1.79	0.68
29	-0.06	0.39	1.16	0.85	2.37	0.96	0.46	1.79	0.24
30	-0.02	0.41	1.16	1.01	2.58	0.96	0.32	4.01	0.24
31	0.06	-0.06	0.99	1.22	8.44	0.89	1.06	6.38	0.04
32	-0.19	-1.22	0.84	0.61	0.06	0.05	0.82	0.08	0.58
33	-0.33	-0.80	1.47	0.46	0.16	1.67	1.40	0.53	0.25
34	0.11	0.22	0.69	1.35	1.41	0.57	1.06	1.30	0.33
35	0.09	-0.15	0.87	0.94	0.70	1.05	0.18	-0.08	0.00
36	0.13	0.16	0.76	1.59	1.20	0.63	2.58	1.12	0.30
37	0.04	0.16	0.79	1.12	1.20	0.61	1.50	1.12	0.18
38	0.00	-0.02	0.28	0.84	0.89	0.05	0.84	1.00	0.29
39	-0.02	0.14	0.65	0.98	1.38	0.78	0.98	2.93	0.00
40	-0.09	0.16	0.93	0.80	1.20	0.83	0.50	1.12	0.07
41	-0.02	-0.06	0.83	0.94	1.01	0.55	0.55	2.18	0.12
42	0.03	0.16	1.03	1.04	1.20	1.05	0.69	1.12	0.07
43	0.22	-0.06	1.37	1.70	1.01	0.98	0.72	2.18	0.01
44	0.11	0.16	1.10	1.25	1.20	0.93	0.53	1.12	0.00
45	0.08	-0.06	0.77	1.15	1.01	0.77	0.83	2.18	0.16
46	-0.03	0.16	0.99	0.94	1.20	0.40	0.31	1.12	0.17
47	0.08	-0.09	0.83	1.20	0.82	0.51	0.78	2.01	0.10
48	0.15	-0.07	2.74	0.79	0.86	1.22	0.54	0.58	0.00
49	0.06	-0.04	1.25	1.06	0.75	0.85	0.87	0.41	0.06
50	0.08	0.12	0.32	1.13	1.32	1.25	1.28	1.68	0.06
51	0.06	-0.16	0.60	0.95	0.72	0.42	0.57	0.62	0.11
52	0.02	0.07	0.64	0.99	1.09	0.16	0.84	0.95	0.59
53	-0.02	0.07	0.90	0.92	1.17	0.88	0.87	2.27	0.33
54	0.09	0.05	0.75	1.17	1.19	3.13	0.71	1.41	0.35

	TDTA pre	TDTA pr	TDTE post	TDTE pre	TDTE pr	LOG . EMPL post	LOG.EMPI. pre	LOG.EMPL pr
1	0.20	0.34	0.39	1.23	0.06	8.00	8.04	7.02
2	0.19	0.34	0.11	0.96	0.06	7.41	7.59	7.02
3	0.16	0.21	0.06	0.38	0.00	7.93	7.95	6.40
4	0.19	0.64	0.02	0.23	0.00	7.31	7.37	5.70
5	0.04	0.92	0.02	0.19	2.63	7.29	7.08	6.58
6	0.05	0.15	0.04	0.13	0.00	7.52	7.85	5.94
7	0.33	0.15	0.23	0.07	0.00	6.44	6.56	5.94
8	0.00	0.73	0.00	0.00	0.51	6.94	7.02	7.44
9	0.21	0.56	1.94	0.61	0.00	8.09	8.28	7.59
10	0.01	0.81	0.00	0.00	0.83	6.83	6.80	7.20
11	0.36	0.82	0.33	2.03	2.20	5.11	5.41	4.79
12	0.00	0.52	0.00	0.00	0.03	6.70	7.12	7.37
13	0.03	0.59	0.35	0.00	0.33	8.27	7.98	6.17
14	0.02	0.79	0.05	0.19	0.34	6.35	6.48	6.22
15	0.21	0.53	0.42	1.05	0.54	5.39	5.79	5.01
16	0.43	0.52	3.19	3.17	0.03	6.44	7.60	7.37
17	0.41	0.82	0.01	0.17	2.25	7.01	7.80	5.23
18	0.47	0.71	0.87	0.29	1.30	6.97	7.26	4.70
19	0.29	0.79	0.66	0.60	1.90	9.23	9.26	7.15
20	0.13	0.34	0.13	0.32	0.36	7.05	7.07	5.56
21	0.03	0.64	0.00	0.00	0.00	6.68	7.05	5.98
22	0.61	0.34	0.22	3.81	0.36	7.57	7.56	5.56
23	0.00	0.64	0.00	0.00	0.00	7.98	8.56	5.98
24	0.09	0.48	0.00	0.23	0.02	6.58	6.96	7.46
25	0.12	0.41	0.08	0.61	0.00	7.31	7.40	5.01
26	0.32	0.34	0.00	0.00	0.36	8.29	8.73	5.56
27	0.20	0.61	0.02	1.02	0.50	8.12	7.96	6.43
28	0.91	0.34	0.72	3.99	0.36	8.29	8.44	5.56
29	0.06	0.34	0.71	0.14	0.36	7.32	7.36	5.56
30	0.40	0.77	0.71	3.22	1.84	7.32	8.27	7.15
31	0.01	0.72	0.13	0.02	0.53	9.54	9.51	5.13
32	0.20	0.91	0.27	0.53	0.00	7.35	7.50	3.69
33	0.17	0.53	0.28	0.54	1.03	6.66	7.00	3.33
34	0.18	0.46	0.03	0.05	0.15	8.81	8.89	7.20
35	0.04	0.78	0.01	0.07	0.02	7.99	8.33	6.58
36	0.23	0.54	0.40	0.59	0.01	8.14	8.07	6.75
37	0.16	0.54	0.38	0.00	0.01	8.23	8.24	6.75
38	0.01	0.21	0.00	0.00	0.00	7.42	7.56	5.84
39	0.01	0.45	0.00	0.02	0.27	7.48	7.51	5.19
40	0.24	0.54	0.35	1.01	0.01	8.54	8.66	6.75
41	0.12	0.55	0.47	0.30	0.27	8.53	8.61	7.40
42	0.16	0.54	0.29	0.57	0.01	8.55	8.56	6.75
43	0.10	0.55	0.04	0.21	0.27	8.74	8.71	7.40
44	0.03	0.54	0.00	0.12	0.01	8.78	8.85	6.75
45	0.18	0.55	0.71	1.46	0.27	8.39	8.46	7.40
46	0.31	0.54	0.52	1.52	0.01	8.28	8.37	6.75
47	0.15	0.67	0.47	0.65	0.01	8.32	8.27	6.58
48	0.00	0.74	0.00	0.00	0.02	5.82	7.00	6.58
49	0.05	0.08	0.00	0.14	0.00	5.70	6.05	5.01
50	0.12	0.64	0.16	0.62	0.29	8.16	8.52	6.40
51	0.32	0.55	0.00	0.84	0.05	6.72	7.03	4.90
52	0.34	0.34	0.07	0.19	0.00	7.60	7.95	7.17
53	0.24	0.75	0.00	0.15	0.78	7.81	8.03	7.60
54	0.14	0.72	0.14	0.68	0.86	8.68	8.88	7.53

APPENDIX 8.5

The Results of the Regression Models Showing the Environmental Impacts on the Performance Measures for Year 2004

Multiple Regression Analysis

Dependent variable: ROS (Year 2004)

Parameter	Estimate	Standard Error	T Statistic	P-Value
CONSTANT	0.23081	1.40747	0.16399	0.8704
LOG SIZE	0.0142872	0.109795	0.130127	0.8970
AOSPF	-0.558516	0.42735	-2.36135	0.0222**
ROS before	1.51514	0.799689	2.18802	0.0337**
ROS pr	-0.541063	0.878123	-0.616159	0.5406

Analysis of Variance

Source	Sum of Squares	Df	Mean Square	F-Ratio	P-Value
Model	5.83954	4	1.459886	2.15	0.0881***
Residual	33.1545	49	0.676622		
Total (Corr.)	37.9941	53			

R-squared = 27.47364 percent

R-squared (adjusted for d.f.) = 23.5621 percent

Standard Error of Est. = 0.647018

Correlation matrix for coefficient estimates

	LOG SIZE	AOSPF	ROS before	ROS pr
LOG SIZE	1.0000			
AOSPF	-0.1661	1.0000		
ROS before	0.0214	-0.0992	1.0000	
ROS pr	0.0754	0.0649	0.0093	1.0000

Correlations between the dependent variable (ROS) and independent variables.

	ROS post	LOG SIZE	AOSPF	ROS pre	ROS pr
ROS post	1.0000	-0.0064	-0.1532	0.1926	-0.0754

Multiple Regression Analysis

Dependent variable: ROA (Year 2004)

Parameter	Estimate	Standard Error	T Statistic	P-Value
CONSTANT	0.214542	0.134997	1.58923	0.1184
LOG SIZE	-0.0143843	0.0102584	-1.4022	0.1672
AOSPF	-0.0184964	0.0391319	-0.472669	0.6385
ROA before	0.436947	0.256812	1.70143	0.0952***
ROA pr	0.292452	0.156731	1.86595	0.0680***

Analysis of Variance

Source	Sum of Squares	Df	Mean Square	F-Ratio	P-Value
Model	0.0667866	4	0.0166967	2.84	0.0339**
Residual	0.287987	49	0.0058772		
Total (Corr.)	0.354774	53			

R-squared = 18.8251 percent

R-squared (adjusted for d.f.) = 12.1986 percent

Standard Error of Est. = 0.0766634

Mean absolute error = 0.0431045

Correlation matrix for coefficient estimates

	LOG SIZE	AOSPF	ROA before	ROA pr
LOG SIZE	1.0000			
AOSPF	-0.2067	1.0000		
ROA before	0.1213	-0.0083	1.0000	
ROA pr	0.2244	-0.1913	-0.0395	1.0000

Correlations between the dependent variable (ROA) and independent variables.

	ROA post	LOG SIZE	AOSPF	ROA pre	ROA pr
ROA post	1.0000	-0.2796	-0.0590	0.2636	0.2936

Multiple Regression Analysis

Dependent variable: ROE (Year 2004)

Parameter	Estimate	Standard Error	T Statistic	P-Value
CONSTANT	1.99334	1.08474	1.83763	0.0722***
LOG SIZE	-0.124212	0.083580	-1.48614	0.1436
AOSPF	0.111191	0.333241	0.333664	0.7401
ROE before	-0.551203	0.59563	-0.925412	0.3593
ROE pr	0.0918831	0.589681	0.155818	0.8768

Analysis of Variance

Source	Sum of Squares	Df	Mean Square	F-Ratio	P-Value
Model	1.26529	4	0.316321	0.78	0.5435
Residual	19.8668	49	0.405445		

 Total (Corr.) 21.1321 53

R-squared = 5.98751 percent

R-squared (adjusted for d.f.) = 0.0 percent

Standard Error of Est. = 0.636745

Mean absolute error = 0.264541

Correlation matrix for coefficient estimates

	LOG SIZE	AOSPF	ROE before	ROE pr
LOG SIZE	1.0000			
AOSPF	-0.1830	1.0000		
ROE before	0.0315	-0.2788	1.0000	
ROE pr	0.1691	-0.0530	-0.0877	1.0000

Correlations between the dependent variable (ROE) and independent variables.

	ROE post	LOG SIZE	AOSPF	ROE pre	ROE pr
ROE post	1.0000	-0.2078	-0.0239	-0.1189	0.0446

Multiple Regression Analysis

Dependent variable: LOG . EBIT (Year 2004)

Parameter	Estimate	Standard Error	T Statistic	P-Value
CONSTANT	-0.192586	2.0476	-0.09405	0.9254
LOG SIZE	0.677478	0.157793	4.29345	0.0001*
AOSPF	-0.131134	0.573574	0.22862	0.8201
LOG.EBIT. Bef.	0.109901	0.164596	1.66773	0.0992***
LOG.EBIT pr	0.1229911	0.115674	1.88702	0.0591***

Analysis of Variance

Source	Sum of Squares	Df	Mean Square	F-Ratio	P-Value
Model	34.2895	4	8.57237	7.74	0.0001*
Residual	54.2886	49	1.10793		
Total (Corr.)	88.578	53			

R-squared = 38.711 percent

R-squared (adjusted for d.f.) = 33.7079 percent

Standard Error of Est. = 1.05258

Mean absolute error = 0.724746

Correlation matrix for coefficient estimates

	LOG SIZE	AOSPF	LOG.EBIT Bef.	LOG.EBIT pr
LOG SIZE	1.0000			
AOSPF	0.0456	1.0000		
LOG.EBIT. Bef.	-0.4881	-0.3884	1.0000	
LOG.EBIT pr	0.1268	-0.0714	0.0201	1.0000

Correlations between the dependent variable (EBIT) and independent variables.

	EBIT post	LOG SIZE	AOSPF	EBIT pre	EBIT pr
EBIT post	1.0000	0.6138	0.1654	0.3947	0.5547

Multiple Regression Analysis

Dependent variable: LOG ADJ Real SAL (Year 2004)

Parameter	Estimate	Standard Error	T Statistic	P-Value
CONSTANT	-2.84458	1.03741	-2.742	0.0085*
LOG SIZE	0.19927	0.0825346	2.41438	0.0195**
AOSPF	-0.364513	0.315152	-1.15663	0.2530
log ADJ Real S	1.9891	0.664122	2.99509	0.0043*
log ADJ Real SAL	0.217356	0.0695801	1.71345	0.0908***

Analysis of Variance

Source	Sum of Squares	Df	Mean Square	F-Ratio	P-Value
Model	5.15776	4	1.28944	3.38	0.0161**
Residual	18.7022	49	0.381677		

Total (Corr.) 23.8599 53

R-squared = 21.6168 percent

R-squared (adjusted for d.f.) = 15.2182 percent

Standard Error of Est. = 0.6178

Mean absolute error = 0.435021

Correlation matrix for coefficient estimates

	LOG SIZE	AOSPF	log ADJ R S pre	log ADJ R S pr
LOG SIZE	1.0000			
AOSPF	-0.2061	1.0000		
log ADJ Real S pre	0.1842	-0.1771	1.0000	
log ADJ Real S pr	0.1925	-0.0837	0.1046	1.0000

Correlations between the dependent variable (SAL) and independent variables.

	LOG SAL post	LOG SIZE	AOSPF	LOG SAL pre-	LOG SAL pr
LOG SAL post	1.0000	0.2455	-0.0423	0.3262	0.1173

Multiple Regression Analysis

Dependent variable: Adj SALEFF (Year 2004)

Parameter	Estimate	Standard Error	T Statistic	P-Value
CONSTANT	-1.64369	1.80389	-0.911191	0.3667
LOG SIZE	0.219247	0.139626	1.7755	0.0858***
APOSPF	-0.893742	0.540525	-1.69347	0.0986***
SAEFF before	0.328707	0.477511	0.688376	0.4945
Adj SALEFF pr	0.211570	0.1519626	1.66065	0.0992***

Analysis of Variance

Source	Sum of Squares	Df	Mean Square	F-Ratio	P-Value
Model	9.13504	4	2.283765	2.09	0.0932***
Residual	53.54279	49	1.0927121		

Total (Corr.) 62.67783 53

R-squared = 13.2945 percent

R-squared (adjusted for d.f.) = 6.21654 percent

Standard Error of Est. = 0.307768

Mean absolute error = 0.189468

Correlation matrix for coefficient estimates

	LOG SIZE	APOSPF	SAEFF before	Adj SALEFF pr
LOG SIZE	1.0000			
APOSPF	-0.1771	1.0000		
SAEFF before	0.0303	-0.2449	1.0000	
Adj SALEFF pr	-0.2520	0.0476	-0.0366	1.0000

Correlations between the dependent variable (SALEFF) and independent variables.

	SALEFF post	LOG SIZE	APOSPF	SALEFF pre	SALEFF pr
SALEFF post	1.0000	0.1938	-0.1739	0.0449	0.0889

Multiple Regression Analysis

Dependent variable: ADJNIEFF (Year 2004)

Parameter	Estimate	Standard Error	T Statistic	P-Value
CONSTANT	0.49519	4.99371	-0.0991	0.9214
LOG SIZE	0.20249	0.400635	0.5054	0.6155
AOSPF	-1.739	1.56961	-1.6601	0.0992***
ADJ NIEFF before	0.00193	0.421343	0.0046	0.9963
ADJNIEFF pr	0.08978	0.116092	1.7734	0.0853***

Analysis of Variance

Source	Sum of Squares	Df	Mean Square	F-Ratio	P-Value
Model	91.9568	4	22.6224	12.24	0.0000*
Residual	90.5897	49	1.84755		
Total (Corr.)	182.565	53			

R-squared = 49.6796 percent

R-squared (adjusted for d.f.) = 45.5718 percent

Standard Error of Est. = 1.36768

Mean absolute error = 0.867993

Correlation matrix for coefficient estimates

	LOG SIZE	AOSPF	ADJ NIEFF before	ADJNIEFF pr
LOG SIZE	1.0000			
AOSPF	-0.1967	1.0000		
ADJ NIEFF before	-0.1047	0.0906	1.0000	
ADJNIEFF pr	-0.1179	0.1930	0.0080	1.0000

Correlations between the dependent variable (NIEFF) and independent variables.

	NIEFF post	LOG SIZE	AOSPF	NIEFF pre	NIEFF pr
NIEFF post	1.0000	0.0544	-0.1675	0.0209	0.1446

Multiple Regression Analysis

Dependent variable: TDTA (Year 2004)

Parameter	Estimate	Standard Error	T Statistic	P-Value
CONSTANT	0.304668	0.514646	0.591996	0.5566
LOG SIZE	-0.007102	0.0408957	-1.48614	0.1436
AOSPF	-0.0820608	0.157545	-0.925412	0.3593
TDTA before	0.642399	0.255974	2.50963	0.0155**
TDTA pr	-0.106609	0.237019	-1.15663	0.2530

Analysis of Variance

Source	Sum of Squares	Df	Mean Square	F-Ratio	P-Value
Model	0.711657	4	0.177914	2.60	0.0498***
Residual	3.35299	49	0.068428		

Total (Corr.) 4.064647 53

R-squared = 17.2945 percent

R-squared (adjusted for d.f.) = 14.21654 percent

Standard Error of Est. = 0.307768

Mean absolute error = 0.189468

Correlation matrix for coefficient estimates

	LOG SIZE	AOSPF	TDTA before	TDTA pr
LOG SIZE	1.0000			
AOSPF	-0.1793	1.0000		
TDTA before	-0.2283	0.0341	1.0000	
TDTA pr	-0.0902	0.2056	0.2015	1.0000

Correlations between the dependent variable (TDTA) and independent variables.

	TDTA post	LOG SIZE	AOSPF	TDTA pre	TDTA pr
TDTA post	1.0000	0.0397	-0.0479	0.3528	-0.1154

Multiple Regression Analysis

Dependent variable: TDTE (Year 2004)

Parameter	Estimate	Standard Error	T Statistic	P-Value
CONSTANT	0.67903	1.33815	1.48614	0.1436
LOG SIZE	-0.0527467	0.10664	-1.15663	0.2530
AOSPF	0.277308	0.408721	1.697478	0.0977***
TDTE before	0.387545	0.120111	3.22655	0.0022*
TDTE pr	0.0356146	0.183685	1.78389	0.0744***

Analysis of Variance

Source	Sum of Squares	Df	Mean Square	F-Ratio	P-Value
Model	7.45326	4	1.86331	2.81	0.0354
Residual	32.4945	49	0.663152		

Total (Corr.) 39.9477 53

R-squared = 18.6575 percent

R-squared (adjusted for d.f.) = 12.0173 percent

Standard Error of Est. = 0.814342

Mean absolute error = 0.427241

Correlation matrix for coefficient estimates

	LOG SIZE	AOSPF	TDTE before	TDTE pr
LOG SIZE	1.0000			
AOSPF	-0.1583	1.0000		
TDTE before	-0.1605	-0.0616	1.0000	
TDTE pr	0.0182	-0.0054	0.0113	1.0000

Correlations between the dependent variable (TDTE) and independent variables.

	TDTE post	LOG SIZE	AOSPF	TDTE pre	TDTE pr
TDTE post	1.0000	0.0223	0.1155	0.4191	0.0204

Multiple Regression Analysis

Dependent variable: LOG . EMPL (Year 2004)

Parameter	Estimate	Standard Error	T Statistic	P-Value
CONSTANT	-1.69415	1.03984	-1.62924	0.1097
LOG SIZE	0.192264	0.0721676	2.66413	0.0104**
AOSPF	-0.0450312	0.276845	-0.162658	0.8715
LOG.EMPL. Bef.	0.842768	0.0968895	8.69824	0.0000*
LOG.EMPL pr	0.0225741	0.0605097	0.373066	0.7107

Analysis of Variance

Source	Sum of Squares	Df	Mean Square	F-Ratio	P-Value
Model	36.2677	4	9.06691	34.51	0.0000*
Residual	12.8739	49	0.262733		

 Total (Corr.) 49.1416 53
 R-squared = 73.8024 percent
 R-squared (adjusted for d.f.) = 71.6638 percent
 Standard Error of Est. = 0.512574
 Mean absolute error = 0.347959

Correlation matrix for coefficient estimates

	LOG SIZ	AOSPF	LOG.EMPL. Bef.	LOG.EMPL pr
LOG SIZE	1.0000			
AOSPF	-0.0010	1.0000		
LOG.EMPL. Bef.	-0.3811	-0.3734	1.0000	
LOG.EMPL pr	0.1032	0.0105	0.0202	1.0000

Correlations between the dependent variable (EMPL) and independent variables.

	EMPL post	LOG SIZE	AOSPF	EMPL pre	EMPL pr
EMPL post	1.0000	0.5237	0.3288	0.8366	-0.0558

APPENDIX 8-6

Actual Data

In

Year 2004

	LOG SIZE	AOSPF	ROS post	ROS pre	ROS pr	ROA post	ROA pre	ROA pr	ROE post	ROE pre
1	12.91	0.75	0.09	0.06	0.36	0.06	0.05	0.23	0.23	0.27
2	12.57	0.60	0.14	0.09	0.36	0.07	0.06	0.23	0.21	0.25
3	13.05	0.69	0.16	0.14	0.18	0.06	0.09	0.14	0.14	0.29
4	12.26	0.62	0.10	0.09	0.15	0.07	0.05	0.11	0.19	0.33
5	12.57	0.60	0.14	0.16	0.06	0.09	0.12	0.09	0.19	0.57
6	10.88	0.45	0.50	0.14	0.33	0.34	0.14	0.30	1.71	0.35
7	11.50	0.02	0.14	0.05	0.36	0.14	0.07	0.27	0.35	0.43
8	13.13	0.45	0.46	0.22	0.24	0.13	0.17	0.12	0.15	0.43
9	13.41	0.71	0.20	0.26	0.04	0.05	0.08	0.01	0.19	0.23
10	11.16	0.45	0.38	0.22	0.06	0.06	0.09	0.01	0.15	0.28
11	12.17	0.05	0.45	0.27	0.13	0.03	0.03	0.05	0.05	0.22
12	12.02	0.00	0.10	0.09	0.52	0.14	0.05	0.01	0.25	0.09
13	14.02	0.00	0.18	0.30	0.53	0.03	0.15	0.00	0.08	0.35
14	13.66	0.26	0.31	0.20	0.13	0.06	0.05	0.05	0.21	0.48
15	12.17	0.80	0.43	0.65	0.05	0.04	0.06	0.01	0.11	0.31
16	11.56	0.11	0.08	0.02	0.08	0.02	0.01	0.03	0.32	0.25
17	12.49	0.20	0.00	0.01	0.14	0.00	0.01	0.17	0.04	0.09
18	12.39	0.28	3.07	0.01	0.15	0.45	0.01	0.08	4.48	0.04
19	14.31	0.92	0.03	0.05	0.05	0.02	0.04	0.02	0.20	0.85
20	13.56	0.73	0.57	0.48	0.15	0.07	0.09	0.08	0.38	0.40
21	11.90	0.00	0.09	0.02	0.05	0.05	0.02	0.02	0.19	0.11
22	13.73	0.00	0.06	0.10	0.13	0.03	0.04	0.05	0.07	0.25
23	12.17	0.39	0.09	0.04	0.53	0.07	0.04	0.00	0.27	0.37
24	12.04	0.32	0.10	0.09	0.15	0.06	0.09	0.08	0.19	0.52
25	12.32	0.10	0.07	0.05	0.01	0.05	0.04	0.00	0.14	0.21
26	13.88	0.25	0.01	0.02	0.15	0.00	0.02	0.08	0.03	0.32
27	13.75	0.27	0.17	0.07	0.14	0.07	0.04	0.17	0.12	0.23
28	13.90	0.56	0.02	0.07	0.23	0.01	0.04	0.06	0.01	0.17
29	14.14	0.07	0.12	0.20	0.03	0.06	0.10	0.00	0.10	0.24
30	13.38	0.70	0.07	0.08	0.25	0.03	0.03	0.00	0.20	0.18
31	14.03	0.67	0.34	0.08	0.16	0.19	0.10	0.10	0.35	0.27
32	15.26	0.00	0.10	0.19	0.01	0.07	0.08	0.02	0.25	0.23
33	13.16	0.00	5.56	0.24	0.03	0.23	0.10	0.05	0.47	0.31
34	13.51	0.53	0.06	0.10	0.04	0.03	0.05	0.13	0.04	0.17
35	12.18	0.51	0.19	0.04	0.23	0.11	0.05	0.19	0.17	0.11
36	12.77	0.68	0.08	0.07	0.03	0.05	0.09	0.05	0.19	0.59
37	12.63	0.62	0.04	0.07	0.10	0.04	0.11	0.07	0.18	0.53
38	9.43	0.13	0.08	0.17	0.03	0.13	0.11	0.05	0.81	0.48
39	11.64	0.00	0.07	0.15	0.10	0.09	0.21	0.07	0.18	0.38
40	12.93	0.81	0.06	0.05	0.03	0.08	0.08	0.05	0.23	0.35
41	13.32	0.67	0.03	0.04	0.10	0.04	0.05	0.07	0.18	0.19
42	12.98	0.39	0.06	0.05	0.03	0.08	0.05	0.05	0.30	0.21
43	13.26	0.39	0.03	0.05	0.01	0.05	0.07	0.02	0.24	0.27
44	12.94	0.42	0.04	0.04	0.01	0.08	0.05	0.02	0.24	0.19
45	13.58	0.64	0.13	0.02	0.10	0.04	0.03	0.08	0.18	0.25
46	12.91	0.61	0.01	0.03	0.02	0.01	0.03	0.05	0.08	0.16
47	12.51	0.63	0.02	0.04	0.16	0.03	0.07	0.18	0.17	0.33
48	12.28	0.17	0.04	0.09	0.08	0.09	0.07	0.09	0.23	0.21
49	10.63	0.01	0.07	0.10	0.20	0.04	0.06	0.09	0.10	0.18
50	10.95	0.49	0.81	0.24	0.21	0.25	0.13	0.09	0.71	0.60
51	10.98	0.20	0.03	0.07	0.03	0.02	0.04	0.05	0.05	0.03
52	12.75	0.10	0.02	0.06	0.15	0.00	0.04	0.11	0.05	0.35
53	13.35	0.16	0.01	0.09	0.26	0.01	0.11	0.01	0.01	0.33
54	14.14	0.00	0.12	0.05	0.09	0.06	0.04	0.09	0.10	0.29

	ROE pr	LOG . EBITpost	LOG.EBIT. pre	LOG. EBIT pr	ADJ SALpost	SAL pre	SAL pr	log SAL post	log SAL pre
1	0.30	10.07	9.17	11.40	0.84	1.07	0.77	-0.18	0.03
2	0.30	9.92	9.08	11.40	0.92	1.18	0.86	-0.20	0.07
3	0.19	10.30	9.74	11.34	1.01	1.12	0.81	-0.11	0.05
4	0.20	9.53	8.71	12.32	1.04	0.99	2.03	-0.07	0.00
5	0.72	10.18	9.72	9.87	1.02	1.00	1.29	-0.01	0.00
6	0.41	9.82	9.37	10.48	0.57	1.18	2.50	-1.32	0.07
7	0.42	9.51	8.19	11.95	0.78	1.04	0.94	-0.24	0.02
8	0.18	11.07	10.76	12.00	0.76	1.00	0.76	-1.29	0.00
9	0.06	10.35	10.45	7.14	0.53	1.28	0.45	-0.24	0.11
10	0.06	8.31	8.76	8.08	1.27	1.26	0.06	-0.96	0.10
11	0.09	8.51	7.90	8.76	2.85	2.30	0.80	-0.21	0.36
12	0.02	10.09	7.90	9.22	0.76	0.72	0.33	0.19	-0.14
13	0.00	10.49	10.45	6.50	0.83	1.04	0.00	-0.01	0.02
14	0.09	10.77	9.92	8.76	1.25	1.15	0.80	-0.11	0.06
15	0.05	9.04	9.13	7.84	0.80	1.07	0.14	-0.33	0.03
16	0.08	7.87	6.88	9.04	0.54	0.95	0.92	-1.32	-0.02
17	0.50	6.82	6.96	13.02	0.96	0.72	4.09	-0.29	-0.14
18	0.12	11.59	5.64	11.00	0.61	0.51	2.37	-1.97	-0.29
19	0.06	10.51	10.60	7.68	0.78	1.30	0.57	-0.15	0.11
20	0.12	10.97	9.79	11.00	0.87	0.34	2.37	-0.84	-0.47
21	0.06	8.92	7.42	7.68	0.77	0.64	0.57	-0.92	-0.19
22	0.09	10.07	9.62	8.76	0.51	1.08	0.85	-0.34	0.03
23	0.00	9.50	8.51	6.50	0.94	1.26	0.03	-0.23	0.10
24	0.12	9.18	9.17	11.00	0.74	0.88	2.37	-0.76	-0.06
25	0.01	9.39	8.38	7.44	1.34	1.01	8.19	0.00	0.00
26	0.12	7.89	8.61	11.00	1.22	0.73	2.37	-0.83	-0.14
27	0.50	11.07	8.86	13.02	1.16	1.00	6.32	0.63	0.00
28	0.10	8.87	10.87	11.94	0.92	0.96	0.83	-0.61	-0.02
29	0.02	11.38	9.89	6.06	1.13	0.87	0.08	0.27	-0.06
30	0.01	10.03	9.05	6.32	1.13	0.96	0.07	0.28	-0.02
31	0.21	12.35	11.67	12.46	0.98	1.16	2.03	0.09	0.06
32	0.06	12.63	9.29	8.16	0.75	0.64	1.28	0.14	-0.19
33	0.10	11.70	8.95	9.84	1.07	0.47	1.55	-2.14	-0.33
34	0.15	9.89	10.24	8.01	0.62	1.30	0.84	-0.14	0.11
35	0.34	9.98	7.78	9.51	0.80	1.22	1.38	-0.27	0.09
36	0.10	9.68	10.36	9.84	0.69	1.35	1.64	-1.11	0.13
37	0.12	9.52	10.34	10.98	0.77	1.10	0.46	-0.75	0.04
38	0.10	7.38	8.25	9.84	0.28	0.99	1.55	-0.73	0.00
39	0.12	9.28	9.82	10.98	0.62	0.96	0.46	-0.42	-0.02
40	0.10	10.35	9.86	9.84	0.83	0.81	1.55	-0.62	-0.09
41	0.12	10.01	9.73	10.98	0.77	0.95	0.46	-0.13	-0.02
42	0.10	10.41	9.61	9.84	1.04	1.06	1.32	0.03	0.03
43	0.06	10.33	10.05	8.16	1.38	1.65	1.04	0.45	0.22
44	0.06	10.42	9.75	8.16	1.05	1.29	1.38	0.02	0.11
45	0.09	10.37	10.41	8.31	0.75	1.20	0.86	-2.60	0.08
46	0.15	8.37	8.90	8.70	0.90	0.94	1.32	-0.49	-0.03
47	0.30	9.12	9.35	9.66	0.87	1.20	1.02	-0.16	0.08
48	0.18	9.82	9.32	10.64	1.53	1.42	1.69	1.05	0.15
49	0.31	7.47	7.94	11.07	0.96	1.15	1.85	-0.42	0.06
50	0.33	9.55	9.72	11.17	0.23	1.20	1.19	-1.45	0.08
51	0.10	7.08	8.64	9.84	0.52	1.14	1.55	-0.40	0.06
52	0.20	7.35	9.18	12.32	0.47	1.04	2.03	-0.96	0.02
53	0.01	8.18	10.20	6.37	0.75	0.96	0.08	-0.58	-0.02
54	0.45	11.38	9.93	12.21	0.64	1.22	4.86	0.27	0.09

	log SAL pr	Adj SALEFFpost	SAEFF pre	SALEFF pr	NIEFF post	NIEFF pre	NIEFF pr	TDTA post
1	0.12	0.97	0.96	0.87	0.83	0.57	0.95	0.06
2	0.22	1.03	1.09	0.87	0.89	0.59	1.02	0.02
3	0.61	1.13	1.15	0.86	1.15	1.03	1.05	0.08
4	1.15	1.11	0.98	1.59	1.56	1.19	1.47	0.04
5	0.29	1.01	1.34	0.73	0.85	1.30	5.07	0.00
6	1.75	0.39	1.06	1.68	1.01	1.64	3.63	0.34
7	0.67	0.94	1.02	1.68	1.61	0.67	3.86	0.27
8	0.43	0.29	0.95	0.89	0.88	0.59	0.76	0.04
9	-0.37	2.93	1.24	0.80	3.87	2.11	0.67	0.66
10	-0.34	0.41	1.20	0.71	0.71	1.07	0.03	0.00
11	0.05	1.28	2.20	0.13	1.00	0.61	3.65	0.12
12	-1.07	1.49	0.58	1.54	1.34	0.43	0.80	0.00
13	-4.69	0.66	1.07	2.80	0.66	1.01	0.21	0.31
14	0.05	1.29	1.15	2.86	0.99	0.53	3.65	0.01
15	-0.82	1.18	1.08	0.04	0.68	0.76	0.07	0.13
16	-0.29	1.01	0.86	1.54	2.94	0.48	0.38	0.69
17	1.41	1.44	0.59	0.09	0.90	0.28	14.70	0.47
18	0.90	0.23	0.57	0.79	21.62	0.14	1.79	2.01
19	-1.14	1.05	1.43	1.70	0.46	0.85	1.18	0.11
20	0.90	0.40	0.33	2.37	0.55	0.36	1.79	0.61
21	-1.14	0.89	0.62	0.64	2.04	0.36	1.18	0.17
22	0.06	0.72	0.86	2.37	3.75	7.36	3.39	0.28
23	-2.78	1.22	0.84	0.64	1.46	0.40	0.48	0.18
24	0.90	0.53	0.65	1.61	0.48	0.49	1.79	0.03
25	2.71	1.33	0.98	1.04	1.09	0.55	0.62	0.15
26	0.90	0.65	0.71	2.37	0.29	0.23	1.79	0.42
27	1.84	1.90	1.06	20.42	3.98	0.88	21.70	0.25
28	-0.11	0.67	0.94	2.37	0.46	0.38	0.32	0.17
29	-2.51	3.76	0.85	2.37	5.34	0.46	0.07	0.26
30	-2.59	1.75	1.01	2.58	0.83	0.32	0.13	0.69
31	1.15	1.21	1.22	8.44	1.66	1.06	1.53	0.70
32	0.25	1.30	0.61	0.06	1.44	0.82	-0.84	0.03
33	0.53	0.16	0.46	0.16	1.29	1.40	0.26	0.25
34	0.07	1.08	1.35	1.41	0.54	1.06	1.04	0.12
35	0.32	0.92	0.94	0.70	0.75	0.18	2.93	0.00
36	0.59	0.41	1.59	1.20	0.72	2.58	0.26	0.25
37	0.07	0.52	1.12	1.20	0.88	1.50	0.64	0.33
38	0.53	0.52	0.84	0.89	0.65	0.84	0.26	0.46
39	0.07	0.87	0.98	1.38	0.40	0.98	0.64	0.15
40	0.53	0.69	0.80	1.20	0.48	0.50	0.26	0.02
41	0.07	1.10	0.94	1.01	0.46	0.55	0.64	0.24
42	0.37	1.19	1.04	1.20	0.94	0.69	0.21	0.08
43	0.04	1.73	1.70	1.01	0.53	0.72	1.29	0.01
44	0.33	1.18	1.25	1.20	0.61	0.53	0.21	0.01
45	0.05	0.10	1.15	1.01	0.62	0.83	0.55	0.23
46	0.28	0.89	0.94	1.20	0.14	0.31	1.68	0.15
47	-0.02	1.01	1.20	0.82	0.37	0.78	0.66	0.17
48	0.56	6.71	0.79	0.86	2.17	0.54	1.09	0.06
49	0.20	0.93	1.06	0.75	0.56	0.87	3.20	0.00
50	0.11	0.32	1.13	1.32	1.25	1.28	1.41	0.06
51	0.53	0.78	0.95	0.72	0.44	0.57	0.26	0.16
52	1.15	1.03	0.99	1.09	0.27	0.84	1.47	0.63
53	-2.49	0.78	0.92	1.17	0.39	0.87	0.15	0.41
54	1.58	3.76	1.17	1.19	5.34	0.71	10.39	0.26

	TDTA pre	TDTA pr	TDTE post	TDTE pre	TDTE pr	LOG . EMPL post	LOG.EMPI. Bef.	LOG.EMPL pr
1	0.20	0.23	0.13	1.23	0.01	7.78	8.04	7.30
2	0.19	0.23	0.06	0.96	0.01	7.28	7.59	7.30
3	0.16	0.23	0.04	0.38	0.00	7.75	7.95	6.85
4	0.19	0.46	0.13	0.23	0.20	7.19	7.37	7.49
5	0.04	0.88	0.00	0.19	0.37	7.35	7.08	6.61
6	0.05	0.27	0.00	0.13	0.00	7.37	7.85	6.54
7	0.33	0.36	0.38	0.07	0.48	6.36	6.56	7.82
8	0.00	0.34	0.00	0.00	0.00	6.93	7.02	7.92
9	0.21	0.76	1.73	0.61	1.96	6.94	8.28	7.33
10	0.01	0.81	0.00	0.00	2.06	6.68	6.80	6.21
11	0.36	0.43	0.12	2.03	0.00	4.91	5.41	7.50
12	0.00	0.47	0.00	0.00	0.20	6.70	7.12	6.21
13	0.03	0.60	0.51	0.00	0.61	8.41	7.98	5.52
14	0.02	0.43	0.03	0.19	0.00	aa	6.48	7.50
15	0.21	0.80	0.32	1.05	2.17	5.30	5.79	5.44
16	0.43	0.61	5.44	3.17	0.00	6.16	7.60	4.70
17	0.41	0.67	0.00	0.17	0.91	6.94	7.80	7.15
18	0.47	0.34	0.85	0.29	0.36	6.91	7.26	5.56
19	0.29	0.64	0.00	0.60	0.00	9.15	9.26	5.75
20	0.13	0.34	2.50	0.32	0.36	7.11	7.07	5.56
21	0.03	0.64	0.00	0.00	0.00	6.21	7.05	5.75
22	0.61	0.43	0.38	3.81	0.00	7.31	7.56	7.50
23	0.00	0.60	0.00	0.00	0.61	7.74	8.56	5.52
24	0.09	0.34	0.00	0.23	0.36	6.55	6.96	5.56
25	0.12	0.67	0.01	0.61	1.08	7.09	7.40	7.00
26	0.32	0.34	0.05	0.00	0.36	8.31	8.73	5.56
27	0.20	0.67	0.04	1.02	0.91	8.01	7.96	7.15
28	0.91	0.36	0.17	3.99	0.34	8.21	8.44	7.47
29	0.06	0.94	0.02	0.14	0.00	7.79	7.36	3.69
30	0.40	0.49	1.45	3.22	0.91	7.06	8.27	3.33
31	0.01	0.53	1.32	0.02	0.22	8.22	9.51	7.49
32	0.20	0.72	0.00	0.53	0.01	9.43	7.50	6.58
33	0.17	0.51	0.00	0.54	0.00	7.17	7.00	6.66
34	0.18	0.16	0.12	0.05	0.00	8.72	8.89	6.02
35	0.04	0.45	0.00	0.07	0.27	7.89	8.33	5.19
36	0.23	0.51	0.43	0.59	0.00	8.02	8.07	6.66
37	0.16	0.40	0.01	0.00	0.13	8.17	8.24	8.39
38	0.01	0.51	0.00	0.00	0.00	7.35	7.56	6.66
39	0.01	0.40	0.03	0.02	0.13	7.25	7.51	8.39
40	0.24	0.51	0.01	1.01	0.00	8.40	8.66	6.66
41	0.12	0.40	0.32	0.30	0.13	8.37	8.61	8.39
42	0.16	0.51	0.08	0.57	0.00	8.40	8.56	6.66
43	0.10	0.72	0.07	0.21	0.01	8.64	8.71	6.58
44	0.03	0.72	0.00	0.12	0.01	8.68	8.85	6.58
45	0.18	0.13	0.98	1.46	0.00	8.10	8.46	5.01
46	0.31	0.64	1.14	1.52	0.29	8.00	8.37	6.40
47	0.15	0.39	0.86	0.65	0.03	8.10	8.27	4.90
48	0.00	0.51	0.00	0.00	0.00	5.55	7.00	7.13
49	0.05	0.72	0.00	0.14	0.85	5.62	6.05	7.19
50	0.12	0.72	0.16	0.62	0.86	8.16	8.52	7.53
51	0.32	0.51	0.00	0.84	0.00	6.69	7.03	6.66
52	0.34	0.46	0.07	0.19	0.20	6.91	7.95	7.49
53	0.24	0.48	0.34	0.15	0.91	7.65	8.03	3.33
54	0.14	0.80	0.02	0.68	2.64	7.79	8.88	7.15