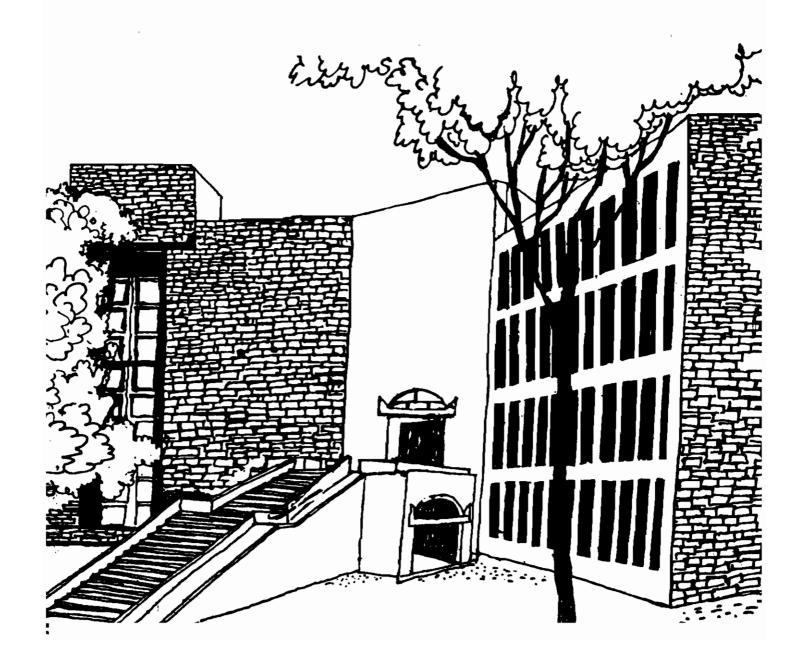


Working Paper



CORPORATE PERFORMANCE - POST LIBERALISATION

Ву

V. Raghunathan Prabina Das

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Corporate Performance - Post Liberalisation by

V. Raghunathan & Prabina Das*

Introduction

The economic reform process initiated by the Government of India since July 1991 envisaged a major shift from an over regulated and protected regime to a deregulated and market oriented system. The period since 1991 has seen some important changes in the approach to and the content of India's economic policy. The Government amply demonstrated its commitment to provide a distinct outward orientation to its policy regime in order to facilitate India's rapid integration to world economy. There is a common thread running through the various measures introduced since1991-92, and that is to improve the productivity and efficiency of the system. So, as a consequence of the new economic measures, what has been the performance of the Indian economy, during the 1990s?

The policy reforms started yielding encouraging results soon after the initial adjustment period and the economy was set on reasonably high growth path. The performance of the economy was fairly good, peaking between 1994 and 1997 when the GDP growth consistently registered a rate higher than 7%. The average growth rate in GDP since 1991 has been upwards of 5.5%. The inflation, which reigned in double digits before the 1990s was brought down to single digits since then. External debt a as percentage of GDP came down from 28% in 1991 to about 23 in 1998. The country's short term debt came down from Rs 8,544 crore (10.2% of GDP) in 1991 to Rs 3,531 crore (3.7% of GDP) in 1998, thus showing a decrease both in absolute and relative terms, which in the context of the debacle of the Far-eastern economies, is a notable achievement. The exchange rate during the period remained reasonably steady, and provided a reasonable depreciation providing some buoyancy to export. The average foreign exchange reserves, from a position of near bankruptcy in 1990-91, was improved to a healthy level, providing a cover for about seven months of imports by 1998. The monsoons on the whole have been above normal in every year since 1990-91, except for the first two years, when it was 91% and 93% respectively of the normal. Thus, all in all, the economic performance of the country over the years, the last three years included, appear to have been fairly good.

However, the magic of liberalisation which has been working well with positive impact on the economy has not been without its hiccups. The year 1996-97 witnessed a sharp slow down in

^{*} V. Raghunathan is a Professor of Finance & Accounting at IIM, Ahmedabad and Prabina Das is a doctoral student at IIT, Kharagpur.

industrial growth and the slump continued through 1998-99. The primary market is known to be in deep coma for the last three years. The Sensex, in 1998-99, was on an average back to where it was in 1990-91, notwithstanding a roller-coaster ride in between. Every industrialist in the country has been crying industrial recession for the last three years.

These arguments lead us to the tentative hypothesis that it is not the slow down in the economy that has triggered the slow down in the manufacturing sector; rather, it is the slow down in the manufacturing sector that seems to be slowing down the economy. This study is an attempt at providing some evidence to this hypothesis.

Methodology:

This study focuses on the performance of the manufacturing companies in the Indian private sector (both Indian and multi-national) over the ten year period from 1989-90 to 1998-99. This study also gives insight into how the fundamentals of the companies have evolved during the 1990s. However, the study is not in the mode of a rigorous research paper, in that, the analyses are based on aggregate financial statements of the manufacturing companies, and not on the financial statements of the individual companies. This has rendered the carrying out of the standard tests of significance of the parameters obtained difficult. Nevertheless, the study provides ample understanding of the relative performance of large, medium and small manufacturing companies taken as a whole, in the country, over a ten year period. The paper also provides ample data for bench-marking of various operational parameters, since the data presented are, for the large part, industry aggregates.

We have divided the set of registered manufacturing companies in the private sector into three categories based on their net-worth: less than Rs. 10 crore; between Rs. 10 and Rs. 100 crore and greater than Rs. 100 crore (henceforth referred to as a set of small, medium and large companies respectively). The analysis covers each of these sets of companies as well as the overall set comprising the small, medium and large companies put together. Further, in addition to the set of large companies, another set, comprising the Top-100 companies has been created. Thus, the analysis covers the following sets of companies:

- 1. Aggregate set of companies: Set of all private manufacturing companies on Prowess
- 2. Top-100: Set of the top 100 private manufacturing companies on Prowess in terms of networth
- 3. High Net-worth Companies: Set of all private manufacturing companies on Prowess with networth higher than Rs 100 crore

- 4. Medium Net-worth Companies: Set of all private manufacturing companies on Prowess with net-worth between Rs. 10 and Rs. 100 crore
- Low Net-worth Companies: Set of all private manufacturing companies on Prowess with networth less than Rs 10 crore.

The analysis essentially covers the following corporate performance parameters for all the five category of companies:

- 1. Profitability
- 2. Asset Productivity
- 3. Capital Structure
- 4. Solvency
- 5. Working Capital
- 6. Liquidity
- 7. Dividend Policy
- 8. Growth Rate in Operating Parameters

The above parameters, which are essentially in the form of ratios, percentages, turnover etc. for the three sets of companies have been obtained using the Industry Research features of the Prowess Database.

The data for the study comprises all the private manufacturing companies available on the Prowess data-base. As on March 1999, Prowess contained data on 5603 private manufacturing companies. Of these, 360 were large net-worth companies, 1,566 medium net-worth companies and 3,677 small net-worth companies.

It hay be noted, however, that the number of companies indicated above in any given set of companies is not uniform over the years. The numbers indicated are simply the sum total of all the companies in a category, on which Prowess contains data for any of the years. Also, the number of companies from year to year have been changing because Prowess, in its earlier years, started with a smaller number of companies and added to its list over the years. Some companies might even have dropped out of the Prowess database along the way. Even the number of companies in the recent years (say, 1998) need not be the highest, as many of the companies may not have sent in their results to Prowess, at the time of the study. Also, it will be noticed that the number of companies on which data is available for 1999 is particularly small, as most annual

results are yet to come in by April-May, 1999. The actual number of companies in each of the year, on which the parameters are based, are shown in the appropriate Tables.

However, the number of companies, in each set is sufficiently large to make the results obtained fairly stable¹. This has been confirmed by us by comparing the corporate performance parameters obtained in the study for each set of companies with the same parameters obtained against the common sample feature of Prowess. The common sample feature of data-base picks up the set of companies which are common in all the years of the study. It has been confirmed that the conclusions of our study remain unaffected even if we were to replace the non-common set of companies (used in the study) with the common set companies.

Analysis of the Corporate Performance Parameters

The following sub-sections discuss the findings against each performance parameter:

1. Profitability

For the aggregate set, profitability to the investors (return on net-worth or RONW, defined as "PAT/Net-worth") has averaged around 15% till 1996, dropping steeply to around 9%, 7% and 2% by 1997, 1998 and 1999 respectively (Table 1). The RONW until 1996 for the top-100 and high net-worth companies (Tables 1a and 1b) is somewhat higher at an average of about 17%, while it has dropped to about 12% in 1998 for the top-100 and 7% in 1999 for the high net-worth companies – a drop that is much less steep than that for the aggregate set. For the medium networth companies, the average RONW until 1996 is comparable to the top-100 or the large set of companies, but the fall is steeper, down to 1.6% by 1999 (see Table 1c).

However, for low net-worth companies (Tables 1d), the picture is quite different, and worth taking note of. While the RONW of the aggregate group, top-100, high and medium net-worth companies has all along remained positive, though declining in the last three years considerably, the profitability of the low net-worth companies has all along remained negative.

Again, notwithstanding the positive return on net-worth at an average of around 13.5%, neither the manufacturing sector as a whole, nor any one section of the industry (large, medium or small) can be said to be making any economic value added (EVA) to the economy. In other words, the EVA of the sector has always been negative, assuming a required rate of return on capital at a conservative 20%. Even with the usually inflated figures normally reported in financial accounts, none of the categories of companies as a whole has ever shown a return on net-worth upwards of 20% over the years, indicating negative EVA in each one of the ten years under study. This

The only exception to this was the set of top-100 in 1999, for which data was available only for 8 companies, so that the relevant data for the top-100 group of companies for 1999 has been dropped.

assessment about the EVA is rather a crude one. The real situation, properly accounted for, in all likelihood will be much worse. And that is bad commentary about the performance of the country's manufacturing sector. And finally, the retention of earnings of the manufacturing sector as a whole has been declining, as profitability has shrunk over the years.

While commenting upon the profitability of the manufacturing sector, it would appropriate to draw attention to the production of crucial infrastructural inputs like petroleum, coal, power and cement in the economy during the period of the study. There appears to be a fairly high correlation between the dismal performance of the industry in the last three years with the falling production levels in all the infrastructural inputs, including cargo handling of the railways and ports (Table 1e).

2. Asset Productivity

Table 2 indicates that the asset productivity of the Indian corporate sector as a whole has been systematically declining, whichever way productivity is defined. In fact, between 1990 and 1999, for the industry as a whole, the productivity of assets appears to be down to about 71% on an average (Table 2a)². During the same period, the reduction in productivity for the net-worth companies is down to around 74% (Table 2b); that of the medium net-worth companies about 66% (Table 2c); and that of the low net-worth companies a dismal 48% (Table 2d). Clearly, the fall in productivity has been directly proportional to the size of the firms; the smallest performing the worst.

3. Capital Structure

The debt-equity ratio (financial leverage) of most categories of companies reached a minimum in 1996 and then begun to climb up again. However, in all these cases, the 1999 level of financial leverage remains lower than the 1990 level (Tables 3, 3a, 3b and 3c).

However, the situation of the low net-worth companies has not been quite so typical. The financial leverage of these companies has not only been rather high, but it has also been more erratic. Starting from about 9 in 1990, it goes up all the way to 14 by 1993 and then steeply drops to about 3 by 1996. The increase in leverage after 1996 is far higher for these companies. With the net-worth turning negative by 1998, the leverage has effectively increased to infinity (Table 3d)³. Thus, with ever shrinking net-worth, the low net-worth set of companies, as a group, have virtually become bankrupt.

² The average measure of productivity has been arrived at by providing the eight measures of productivity in Table 1 with equal weights.

³ Note that with a negative net-worth, the debt to equity ratio appears as negative in Table 6d.

The same story is retold by the fixed assets to capital employed ratio, which has decreased marginally in all the categories except the low net-worth companies, where, the ratio has in fact increased.

4. Solvency

For almost all the sets of companies, the interest coverage ratio, having steadily improved till 1995-96, began to deteriorate steadily thereafter (Table 4 and 4a through 4d). However, in all the sectors, by 1999, the situation has been worse than it was in 1990. The low net-worth set of companies, never really comfortable on solvency, has turned virtually insolvent by 1998, the situation getting even worse by 1999, as the profit before interest and taxes has turned negative. As can be seen from Table 4 (a, b, c etc.) all definitions of interest coverage tell more or less the same story.

5. Working Capital

On the whole, the Indian corporate sector showed a marginal deterioration in the working capital position (Table 5). The raw-material level in virtually all the groups of companies have shown significant improvement, while the opposite has been true with respect to finished good inventories.

However, the steep increase in the number of days of debtors as compared to the increase in finished goods inventory seems to suggest that the companies have tried to shift much of their finished goods inventories towards debtors, probably by booking pre-mature sales, in order to prop up already sagging profits (See Tables 5a through 5d).

Further, on the aggregate, the net working capital cycle length has increased marginally from 1990 to 1999, mainly due to a whopping increase in the cycle length for the medium net-worth companies from 89 to 127 during the period.

As far as the working capital position is concerned, it is the medium net-worth companies which are the worst hit and not the low net-worth companies. Could it be because the low net-worth companies were never really integrated with the rest of the manufacturing sector, as is also evident from the various performance parameters analyzed, so that the real brunt of the squeeze from the larger companies was really faced only by the mid-sized companies and not by the small ones?

6. Liquidity

There appears to be some improvement in the liquidity position of the industry as a whole (Table 6) and for that matter, all the groups (Tables 6a, 6b and 6c) except the low net-worth category (Table 6d). Could this improvement in liquidity be a symptom of companies who have nowhere

to invest? The worsening of the liquidity position of low net-worth companies by 1998 and 99 is also evident from the negative working capital (note the negative inventories to working capital ratio in Table 6d).

7. Dividend Policy

For the aggregate group (Table 7), the dividend pay-out ratio that has averaged around 35% until 1998, has increased to 51% by 1999, forced by the rapid erosion in profitability. This has implied a reduction in the proportion of profits ploughed back in recent years. This appears to be consistent with the standard view in corporate finance that companies must increase dividend pay-out if they cannot earn the required rate of return for the shareholders. However, the top-100 and high net-worth companies (Tables 7a and 7b) have attempted to maintain a stable dividend pay-out policy of around 30% over the years. But the medium net-worth companies, who have averaged a dividend pay out level of around 30% until 1998, have gone up to a whopping 84% by 1999 (Table 7c). As far as the low net-worth companies are concerned, they have in any case been showing losses during every year of the period of study (Table 7d). The dividends paid are clearly accounted for by a small minority of the companies in the group.

8. Growth Rate in Operating Parameters

For the aggregate group, sales have grown at an average rate of 18% per annum during the period of the study (Table 8)⁴. While the top-100 and high net-worth companies have shown an average annual sales growth of 21% and 20% respectively, the medium and low net-worth companies have shown much lower growth of 14% and 10% respectively⁵. At the same time, the growth rate in net fixed assets are systematically higher than their respective growth of sales for all the categories (this is much less pronounced in case of the loss making low net-worth companies for understandable reasons). This explains the lack of growth and overall decline in productivity of capital of the companies. What is most striking is the fact that even as the productivity of capital has systematically declined, the share premium reserve in all the categories of companies has grown at a rather steep rate, including the low net-worth companies, for which the growth rate of share premium reserves has been 37%, while the set of companies as a whole has been making losses in every one of the years under study!

⁴ The average rates in Table 7 have been estimated by taking into account the figures for each of the years under study using log-linear regression.

⁵ Note, however, that the profit after tax figures have grown at a higher rate. This is essentially on account of the higher rate of growth of other income and non-operating income.

Conclusions on Corporate Performance and Implications

The performance parameters briefly discussed above tell an eloquent story for the Indian manufacturing sector as a whole. Following are the conclusions in brief:

- Negative EVA: The Indian manufacturing sector, though not loss making on the whole, is certainly not showing any economic value added to its shareholders. In other words, the shareholders have not been earning a reasonable rate of return on their investments for the shareholders.
- 2. Not a Growth Sector: The above implies that none of the categories of the Indian manufacturing sector qualifies as a growth sector, even when viewed over a ten year time span. This is because, for growth firms, the return on investment must be higher than the shareholders' required rate of return⁶. Each and every one of the sectors (large, medium and small) is essentially shrinking in terms of productivity, profitability and competitiveness, the small scale sector more so than the others.
- 3. Disproportionate Charging of Share Premium: Even as the productivity and profitability have been declining for the manufacturing sector as a whole, the share premium reserve appears to have grown disproportionately in all the categories of companies. Perhaps this explains the current state of primary market in the country.
- 4. Credibility of Accounting Statements: In almost every sector, the other income and nonoperating income appear to have grown much faster than the operating income, explaining why, despite plummeting productivity, the profits after taxes have grown at a rate faster than sales. Is this a commentary on the accounting juggling of the Indian corporate sector?
- 5. Satisfactory Financial Leverage: The debt to equity level of the manufacturing companies on the whole has not only been declining steadily over the years, but is also more or less in tune with international norms.
- 6. Comfortable Liquidity: The liquidity level of the industry as a whole has not suffered much, but profitable projects appear to be few and far between.
- 7. Low Dividend Returns: For all the sets of companies (except the loss making set of low networth firms), dividend as a percentage of net-worth, at around 6% in 1990 and around 4.5% in 1999, is not only low but also falling steadily. The same fact is also true of the equity dividends as a percentage of equity capital plus share premium. This, combined with increasing pay out ratio, reinforces our earlier surmise that in real terms, the growth companies are few and far between.

⁶ Eugene F. Fama and Merton H. Miller, *Theory of Finance*, Holt, Rinehart and Winston (1972), pp 92-94.

- 8. Increasing Dividend Pay-out: The average dividend pay-out of the Indian manufacturing sector as a whole is between 30 to 35%, but has been going up steeply in the last three years, due to reducing profitability a situation intuitively appealing.
- 9. Corporate Taxation: The average corporate tax paid as a percentage of profit before taxes, after hitting a low in 1995, has been climbing up again steadily since, even as the pre-tax profitability has been on a steady decline. While this might well have been on account of the minimum alternate tax (MAT), the situation leaves no one in doubt as to the desirability of having deferred tax accounting as a mandatory requirement.
- 10. Correlation between Industry Performance and Infrastructural Production: There exists high correlation between the production in the infrastructure sector and the performance of the manufacturing sector a situation intuitively appealing (Table 1e). Clearly, apart from the productivity in these sectors, there is an urgent need to boost the pace of investment, which has remained more or less stagnant over the years (Table 9). Higher production and productivity in these sectors are certainly a necessary condition, if not a sufficient one, for the Indian manufacturing sector to emerge out of the morass that it finds itself in.
- 11. Indian Companies are Worse Performers than the Multi-nationals: In fact, the situation for the domestic manufacturing companies is much worse than the aggregate picture (which included domestic and multi-national companies operating in India) presented earlier. We make this statement on the strength of our earlier work, which, based on secondary market returns over the 1992-98 period, showed that the multinational companies operating in India have done far better than the flagship companies of the large Indian corporate houses (see Tables 10a and 10b)⁷. Incidentally, further studies by the Confederation of Indian Industries in 1999, strengthen our findings in this regard.

The Small Sector

As far as the performance of our small scale sector is concerned, it presents the ugliest face of the Indian corporate sector and stands starkly apart from the mid-sized and the larger companies. Ironically, this is also the sector which has received considerable hand-holding from the government over the years in various ways and continues to remain the much pampered baby of the government.

Following are some of the major findings with respect to this sector:

1. This sector as a whole has never shown profits in any year since 1990 (and perhaps since much earlier, though we have no data here to substantiate this assessment).

⁷ V. Raghunathan, "The Statistics of Swadeshi", Business Today, July 7, 1998.

- 2. The reserves and surplus (including share premium) of the sector have remained negative in every year since 1990, and still deteriorating, except for two years in between (1995 and 1996) when they were modestly positive.
- 3. By 1998, the net-worth of the sector as a whole has turned negative and has remained negative in 1999
- 4. The productivity of the sector has been by far the worst of all the sectors.
- 5. The sector, always high on the financial leverage, is technically bankrupt, given that the networth has turned negative.
- 6. Its sales have grown the slowest in the sector.
- 7. The dividend paying companies are clearly in a small minority. On an aggregate, in any year, the sector is paying out dividends in excess of its profits and thus the networth of the sector has been steadily worsening.
- 8. The rate of growth of the share premium reserves of the sector has been fairly aggressive; growing at an annual rate of 37% even while it has shown ever increasing losses in each and every year since 1989!
- 9. The burden of corporate taxes in this sector are clearly borne by a small minority of companies, considering that the profit before taxes in all the years have been negative.

An earlier investigation by one of the authors reveals that about 95% of the public issues made by the Indian companies between 1992 and 1995 had under performed in comparison to the market return, computed from the date of the issue to March 1997⁸. Over 60% of the issues had underperformed the market by more than 25%. Interestingly, over 80% of the companies that made public issues were small companies!

Clearly, allowing small companies to be listed on the stock exchanges is fraught with danger -- a belief the first author has held for long⁹. Once it was believed that Over the Counter Exchange of India might be the logical entry point for these companies. However, given their perpetual dismal performance, it was hardly surprising that the investors' interest in these stocks waned rapidly. Market making in such poorly performing companies could hardly be expected to develop in an

V. Raghunathan and J. R. Varma, "State of Primary Market", Unpublished paper, IIM, Ahmedabad, 1997.
 For example, author's paper, "Recent Trends in International Corporate Finance", Annual Conference of the Western India Regional Council of the Institute of Company Secretaries of India, Ahmedabad, April 6-7, 1996.

environment where the stocks of the smaller firms held little interest for the investors. How could a jobber give a two way quote if there were only sellers in the market, with nobody to buy?

In our country, however, the situation has been peculiar. The listing requirements are so lax in the stock exchanges that we have the dubious distinction of having the largest number of smallest listed companies in the world! And much of the problem of vanishing, bankrupt or sick companies hails from this category. and these are the companies that have been the front runners in making ridiculously priced premium issues.

Thus the investors have been losing out on two counts: one, they have been losing their capital (inclusive of premium) steadily and two, the problem of NPAs has gradually been shifting from the shoulders of professional banks on to them (the investors).

It is thus evident that permitting capital market access to all and sundry is a luxury our capital market can ill afford. Nor are there any takers for the small firm stocks in the OTC market. So what should be done to meet the genuine capital requirement of this sector? Perhaps the only realistic answer is to force these companies to fund their capital requirement through banks. In turn, the banks must gear themselves to manage their advances far more professionally, while the government simply has to create the right environment for more effective recoveries. This is the model followed in West Germany over the years, where the small scale companies have traditionally depended upon bank funds for several years before entering the stock market with IPOs. Are our policy makers willing to stop the small companies from accessing the capital market and force them towards bank funding with tightened discipline?

In conclusion

The Indian industry lacks vitality by a wide margin. The manufacturing sector does not appear to be geared to facing the market realities of global competitiveness. Its profitability is so low that it does not earn a reasonable return for its investors. Thus, its EVA has been negative at least for the last ten years (and presumably longer). Ten years is probably enough time for the industry to have readied itself to face the emerging competitive conditions. Unfortunately it does not appear to have happenend. What is more, the Indian companies emerge far worse in terms of performance as compared to the multi-national companies. The country's small scale sector, which in many countries comprise the back-bone of the economy, is bleeding capital, is truly sick and, in fact, bankrupt. The manufacturing sector is hardly in a shape to be called a growth sector

even on a 10 year time frame. And this, combined with the fact that our financial sector is in no better shape, does not augur well for the country's economic development on the whole. The Indian manufacturing sector has not yet readied itself to take on the global competition in the wake of liberalisation, even though the economy itself does not appear to have fared too badly at all. It would appear by all account that it is the manufacturing sector that seems to be weighing down the economy and not vice-versa.

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Table 1: Profitability	Ratios of Aggregate Set of Companies

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Margins as % of Net sales										
PBDIT (NNRT)	15.0	15.6	16.1	15.6	15.8	16.9	17.2	16.5	16.4	14.7
PBIT (NNRT)	11.1	11.9	12.4	11.8	12.6	13.8	14.1	12.9	12.3	10.5.2
PBT (NNRT)	5.2	5.8	5.7	4.4	5.9	7.7	7.9	5.6	4.8	2.2
PAT (NNRT)	3.6	4.1	3.7	2.9	4.3	6.2	6.3	4.1	3.4	1
Corporate tax as % of PBT	29.2	26.6	32.3	28.6	21.3	16.9	17.9	25.5	26.1	32.5
Returns as % of Total assets										
PBDIT (NNRT)	18.3	18.3	17.9	16.2	15.7	15.5	15.3	13.6	12.5	12
PBIT (NNRT)	13.5	13.9	13.8	12.2	12.6	12.7	12.5	10.6	9.4	8.6
As % of Capital employed									-	
PBDIT (NNRT)	29.1	30.3	29.9	26.5	24.9	23.6	23.1	20.1	18.0	17.8
PBIT (NNRT)	21.6	23.0	23.0	19.9	19.9	19.3	18.9	15.7	13.5	12.8
As % of Net worth										
PAT (NNRT)	16.3	18.1	15.8	11.1	14.2	16.2	15.0	9.0	7.2	2.4
No. of Companies	1391	1768	2062	2653	3586	4293	4338	3926	2636	209

PBDIT (NNRT) = (net_profit +tax+exp_interest+depriciation+lease_rent-extra_ordinary_income+extra_ordinary_exp)
PBIT (NNRT) = (net_profit +tax+exp_interest+lease_rent-extra_ordinary_income+extra_ordinary_exp)
PBT (NNRT) = (net_profit +tax-extra_ordinary_income+extra_ordinary_exp)
PAT (NNRT) = (net_profit +tax-extra_ordinary_income+extra_ordinary_exp)

Table 1a: Profitability Ratios of Top-100 Companies

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	1990	1991	1992	1993	1994	1995	1996	1997	1998
Margins as % of Net sales									
PBDIT (NNRT)	18.8	19.6	20.0	19.9	19.8	21.9	22.8	21.7	21.4
PBIT (NNRT)	14.0	15.1	15.4	15.1	16.0	18.1	19.1	17.3	16.6
PBT (NNRT)	7.7	8.9	8.7	7.8	9.4	12.2	13.4	10.6	9.7
PAT (NNRT)	6.0	6.8	6.1	6.0	7.6	10.1	10.9	8.4	7.8
Corporate tax as % of PBT	21.8	22.5	28.4	20.4	17.2	15.4	17.6	19.7	18.5
Returns as % of Total assets									
PBDIT (NNRT)	18.9	18.3	17.8	16.0	15.2	15.3	15.7	14.2	12.9
PBIT (NNRT)	14.1	14.1	13.7	12.1	12.3	12.7	13.1	11.3	10.0
As % of Capital employed				T					
PBDIT (NNRT)	27.2	26.9	26.4	23.2	21.3	21.1	21.7	19.2	17.2
PBIT (NNRT)	20.3	20.6	20,3	17.7	17.3	17.4	18.1	15.4	13.3
As % of Net worth									
PAT (NNRT)	18.1	19.2	17.0	14.6	15.8	17.4	17.6	13.0	11.8
No. of companies	83	88	93	95	96	99	99	96	93

Table 1b: Profitability Ratios of High Net-worth Companies

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Margins as % of Net sales					,					
PBDIT (NNRT)	16.9	17.7	18.4	18.0	18.0	19.5	20.2	19.4	19	15.0
PBIT (NNRT)	12.7	13.6	14.3	13.8	14.6	16.1	16.8	15.5	14.6	11.2
PBT (NNRT)	6.9	7.9	7.9	6.8	8.3	10.4	11.1	8.7	7.6	4.4
PAT (NNRT)	5.1	5.9	5.5	5	6.5	8.6	9	6.8	6	3.2
Corporate tax as % of PBT	25.3	23.8	29.6	23	18.9	16.2	17.4	20.6	19.9	20.9
Returns as % of Total assets										
PBDIT (NNRT)	18.9	18.7	18.6	16.7	15.8	15.7	15.9	14.4	13.1	13.0
PBIT (NNRT)	14.2	14.4	14.5	12.8	12.8	13	13.3	11.5	10.2	9.8
As % of Capital employed										
PBDIT (NNRT)	28.3	28.7	28.8	25.4	23.3	22.5	22.7	20.1	18	18.5
PBIT (NNRT)	21.2	22.1	22.4	19.4	18.9	18.6	18.9	16.1	13.9	13.9
As % of Net worth										
PAT (NNRT)	17.8	19.6	18	14.5	16	17.4	17.1	12.3	10.6	7.2
No. of companies	266	293	313	334	349	357	360	350	326	42

Table 1c: Profitability Ratios of Medium Net-worth Companies

TADIC 1C: LIGHTEDING TORCE	00 0, 11	<u> </u>								
	1990	1991	1992	1993	1994	1995	1996	1997	1996	1999
Margins as % of Net sales										
PBDIT (NNRT)	13.3	13.7	14.2	13.9	14.5	15.3	15.0	14.3	13.7	12.4
PBIT (NNRT)	9.9	10.5	11.1	7.1	8.2	9.4	8.8	7.3	6.5	9.0
PBT (NNRT)	4.5	4.9	4.8	10.8	11.8	12.7	12.4	11.3	10.4	1.6
PAT (NNRT)	2.9	3.2	3.0	4.0	5.4	6.8	6.3	4.2	3.2	0.5
Corporate tax as % of PBT	34.1	30.0	32.9	31.9	21.4	16.6	15.5	26.6	28.5	25.4
Returns as % of Total assets										
PBDIT (NNRT)	19.3	19.3	18.7	17.4	17.8	17.2	16.4	14.5	13.3	12.7
PBIT (NNRT)	14.5	14.8	14.6	13.5	14.5	14.3	13.6	11.5	10.0	9.2
As % of Capital employed										0.5
PBDIT (NNRT)	33.7	35.5	33.9	30.8	30.2	27.9	26.3	23.2	21.0	20.7
PBIT (NNRT)	25.2	27.2	26.5	23.8	24,5	23.1	21.7	18.3	15.9	15.0
As % of Net worth										
PAT (NNRT)	18.6	18.8	16.5	12.2	16.9	18.3	15.6	8.5	5.9	1.6
No. of companies	602	740	846	1011	1290	1404	1396	1294	1010	80

Table 1d: Profitability Rati	os of L	ow net-	worth (compani	les					
Margins as % of Net sales	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
PBDIT (NNRT)	9.7	10.6	10.2	8.9	9.3	9.8	8.9	5.8	3.3	0.6
PBIT (NNRT)	6.5	7.0	6.7	5.1	6.2	7.0	5.9	2.2	-1.6	-5.7
PBT (NNRT)	-1.0	-1.0	-2.1	-4.8	-3.2	-1.4	-3.0	-8 .5	-14.9	-22.4
PAT (NNRT)	-1.6	-1.5	-2.6	-5.3	-3.7	-1.9	-3.4	-8.9	-15.2	-22.4
Corporate tax as % of PBT	-90.2	-116.9	~37.2	-14.5	-41.2	120.0	-18.6	-4.9	-2.4	
Returns as % of Total assets										
PBDIT (NNRT)	12.7	13.9	12.7	10.7	10.9	10.9	9.0	5.3	2.8	0.4
PBIT (NNRT)	8.5	9.2	8.4	6.2	7.3	7.7	6.0	2.1	-1.3	-4.2
As % of Capital employed										
PBDIT (NNRT)	25.3	30.7	29.3	24.6	24.0	21.8	17.2	10.4	5.8	0.8
PBIT (NNRT)	16.9	20.4	19.3	14.2	16.1	15.4	11.4	4.0	-2.8	-8.2
As % of Net worth						·				
PAT (NNRT)	-27.7	-38.8	-74.0	-188.8	-88.6	-16.9	-20.9	-57.5	-310.5	-346.6
No. of companies	523	735	903	1308	1947	2532	2582	2282	1300	87

Table 1e: Trends in Performance of Infrastructure

1990-91	91-92	92-93	93-94	94-95	95-96	96-97	97-98	97-98*	98-99*
211.7	229.3	238.3	246.0	253.8	270.0	285.4	295.67	178.1	179.7
264.3	287	301.1	323.5	351.0	380.5	394.9	421.0	273.6	290.4
33.34	30.35	26.95	2.07	32.2	35.1	32.8	33.8	22.6	21.7
51.42	51.42	53.5	54.3	56.5	58.7	62.9	65.10	43.1	44.4
318.4	338.0	350.0	358.7	365	390.6	409.0	429.45	276.7	270.5
152.9	156.6	166.6	179.3	197.3	215.3	227.4	251.50	162.0	162.2
1	_	58.8	61.7	65.2	71.6	76.3	82.9	53.0	54.5
	211.7 264.3 33.34 51.42 318.4	211.7 229.3 264.3 287 33.34 30.35 51.42 51.42 318.4 338.0 152.9 156.6	211.7 229.3 238.3 264.3 287 301.1 33.34 30.35 26.95 51.42 51.42 53.5 318.4 338.0 350.0 152.9 156.6 166.6	211.7 229.3 238.3 246.0 264.3 287 301.1 323.5 33.34 30.35 26.95 2.07 51.42 51.42 53.5 54.3 318.4 338.0 350.0 358.7 152.9 156.6 166.6 179.3	211.7 229.3 238.3 246.0 253.8 264.3 287 301.1 323.5 351.0 33.34 30.35 26.95 2.07 32.2 51.42 51.42 53.5 54.3 56.5 318.4 338.0 350.0 358.7 365 152.9 156.6 166.6 179.3 197.3	211.7 229.3 238.3 246.0 253.8 270.0 264.3 287 301.1 323.5 351.0 380.5 33.34 30.35 26.95 2.07 32.2 35.1 51.42 51.42 53.5 54.3 56.5 58.7 318.4 338.0 350.0 358.7 365 390.6 152.9 156.6 166.6 179.3 197.3 215.3	211.7 229.3 238.3 246.0 253.8 270.0 285.4 264.3 287 301.1 323.5 351.0 380.5 394.9 33.34 30.35 26.95 2.07 32.2 35.1 32.8 51.42 51.42 53.5 54.3 56.5 58.7 62.9 318.4 338.0 350.0 358.7 365 390.6 409.0 152.9 156.6 166.6 179.3 197.3 215.3 227.4	211.7 229.3 238.3 246.0 253.8 270.0 285.4 295.67 264.3 287 301.1 323.5 351.0 380.5 394.9 421.0 33.34 30.35 26.95 2.07 32.2 35.1 32.8 33.8 51.42 51.42 53.5 54.3 56.5 58.7 62.9 65.10 318.4 338.0 350.0 358.7 365 390.6 409.0 429.45 152.9 156.6 166.6 179.3 197.3 215.3 227.4 251.50	211.7 229.3 238.3 246.0 253.8 270.0 285.4 295.67 178.1 264.3 287 301.1 323.5 351.0 380.5 394.9 421.0 273.6 33.34 30.35 26.95 2.07 32.2 35.1 32.8 33.8 22.6 51.42 51.42 53.5 54.3 56.5 58.7 62.9 65.10 43.1 318.4 338.0 350.0 358.7 365 390.6 409.0 429.45 276.7 152.9 156.6 166.6 179.3 197.3 215.3 227.4 251.50 162.0

Provisional figures

Source: Economic Survey 1991-1998.

Table 2: Asset Utilisation Ratios of Aggregate Companies

	1990	1991	1992	1993	1994	1995	1996	1997	1996	1999
VOP / Total assets	1.2	1.2	1.1	1.1	1.0	0.9	0.9	0.8	0.8	0.8
VOP / Gross fixed assets	2.1	2.0	2.0	1.9	1.9	1.9	1.8	1.6	1.4	1.6
VOP / Net fixed assets	3.7	3.6	3.6	3.3	3.1	2.9	2.7	2.4	2.1	2.3
VOP / Capital employed	2.0	2.0	1.9	1.7	1.6	1.4	1.4	1.2	1.1	1.2
Net sales / Total assets	1.2	1.2	1.1	1.0	1.0	0.9	0.9	0.8	8.0	.9
Net sales / Gross fixed assets	2.0	2.0	2.0	1.9	1.9	1.8	1.8	1.6	1.4	1.8
Net sales / Net fixed assets	3.6	3.6	3.5	3.3	3.1	2.8	2.7	2.4	2.1	2.5
Net sales / Capital employed	1.9	1.9	1.9	1.7	1.6	1.4	1.3	1.2	1.1	1.3
No. of Companies	1391	1768	2062	2653	3586	4293	4338	3926	2636	209

Note:

VOP(Value of Output) = Gross sales -- indirect taxes + change in stock

Table 2a: Asset Utilisation Ratios of Top-100 Net-worth Companies

	1990	1991	1992	1993	1994	1995	1996	1997	1996
VOP / Total assets	1.0	0.9	0.9	0.8	0.8	0.7	0.7	0.7	0.6
VOP / Gross fixed assets	1.7	1.6	1.7	1.6	1.5	1.4	1.4	1.3	1.2
VOP / Net fixed assets	2.9	2.8	2.9	2.6	2.4	2.2	2.1	1.9	1.7
VOP / Capital employed	1.5	1.4	1.4	1.2	1.1	1.0	1.0	0.9	0.8
Net sales / Total assets	1.0	0.9	0.9	0.8	0.8	0.7	0.7	0.7	0.6
Net sales / Gross fixed assets	1.7	1.6	1.6	1.5	1.5	1.4	1.4	1.3	1.2
Net sales / Net fixed assets	2.8	2.7	2.8	2.6	2.4	2.2	2.1	1.9	1.7
Net sales / Capital employed	1.45	1.37	1.32	1.17	1.08	0.96	0.95	0.89	0.8
No. of companies	83	88	93	95	98	99	99	96	93

Table 2b: Asset Utilisation Ratios of High Net-worth Companies

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
VOP / Total assets	1.1	1.1	1.0	1.0	0.9	0.8	0.8	0.7	0.7	0.8
VOP / Gross fixed assets	1.9	1.8	1.9	1.8	1.7	1.7	1.7	1.5	1.4	1.7
VOP / Net fixed assets	3.3	3.2	3.3	3.0	2.8	2.6	2.5	2.2	2.0	2.3
VOP / Capital employed	1.7	17	1.6	1.4	1.3	1.2	1.2	1.1	1.0	1.1
Net sales / Total assets	1.1	1.1	1.0	0.9	0.9	0.8	0.8	0.7	0.7	0.8
Net sales / Gross fixed assets	1.9	1.8	1.8	1.7	1.7	1.7	1.7	1.5	1.4	1.6
Net sales / Net fixed assets	3.2	3.2	3.2	3.0	2.8	2.6	2.5	2.2	2.0	2.3
Net sales / Capital employed	1.7	1.6	1.6	1.4	1.3	· 1.2	1.1	1.0	1.0	1.1
No. of companies	266	293	313	334	349	357	360	350	326	42

Table 2c:Asset Utilisation Ratios of Medium Net-worth Companies

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
VOP / Total assets	1.5	1.4	1.3	1.3	1.2	1.2	1.1	1.0	1.0	1.0
VOP / Gross fixed assets	2.5	2.5	2.4	2.3	2.3	2.3	2.3	2.0	1.8	1.8
VOP / Net fixed assets	4.7	4.7	4.3	4.1	3.9	3.5	3.3	2.9	2.6	2.6
VOP / Capital employed	2.6	2.7	2.4	2.3	2.1	1.9	1.8	1.6	1.6	1.6
Net sales / Total assets	1.5	1.4	1.3	1.2	1.2	1.1	1.1	1.0	1.0	1.0
Net sales / Gross fixed assets	2.5	2.5	2.4	2.3	2.3	2.2	2.2	2.0	1.7	1.9
Net sales / Net fixed assets	4.6	4.6	4.2	4.0	3.8	3.4	3.2	2.8	2.6	2.8
Net sales / Capital employed	2.5	2.6	2.4	2.2	2.1	1.8	1.8	1.6	1.5	1.7
No. of companies	602	740	846	1011	1290	1404	1396	1294	1010	80

Table 2d: Asset Utilisation Ratios of Low Net-worth Companies

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
VOP / Total assets	1.3	1.4	1.3	1.2	1.2	1.1	1.0	0.9	0.8	0.7
VOP / Gross fixed assets	2.2	2.2	2.1	2.0	1.9	1.9	1.8	1.5	1.3	1.0
VOP / Net fixed assets	3.9	3.9	3.7	3.5	3.2	3.0	2.6	2.2	2.0	1.5
VOP / Capital employed	2.7	3.0	2.9	2.8	2.6	2.3	2.0	1.8	1.8	1.4
Net sales / Total assets	1.3	1.3	1.2	1.2	1.2	1.1	1.0	0.9	0.8	0.7
Net sales / Gross fixed assets	2.2	2.1	2.0	2.0	1.9	1.9	1.8	1.5	1.3	1.1
Net sales / Net fixed assets	3.8	3.8	3.6	3.4	3.1	2.9	2.6	2.2	2.0	1.5
Net sales / Capital employed	2.6	2.9	2.9	2.8	2.6	2.2	1.9	1.8	1.8	1.4
No. of companies	523	735	903	1308	1947	2532	2582	2282	1300	87

Table 3: Capital Structure of Aggregate Set of Companies

	1990	1991	1992	1993	1994	1996	1996	1997	1998	1999
Debt Equity ratio	1.7	1.7	1.8	1.7	1.3	1.1	1.0	1.2	1.3	1.3
Fixed assets/Capital employed	1.1	1.1	1.1	1.1	1.0	0.9	0.9	1.0	1.0	1.0
No. of Companies	1391	1768	2062	2653	3586	4293	4338	3926	2636	209

Table 3a: Capital Structure of Top-100 Companies

	1990	1991	1992	1993	1994	1996	1996	1997	1998
Debt Equity ratio	1.3	1.3	1.4	1.3	1.0	0.9	0.8	1.0	1.2
Fixed assets/Capital employed	1.0	1.0	1.0	1.0	0.9	0.9	0.9	0.9	0.9
No. of companies	83	88	93	95	98	99	99	96	93

Table 3b: Capital Structure of High Net-worth Companies

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Debt Equity ratio	1.4	1.3	1.5	1.3	1.0	0.9	0.9	1.0	1,1	1.1
Fixed assets/Capital employed	1.0	1.0	1.0	1.0	0.9	0.9	0.9	0.9	0.9	0.9
No. of companies	266	293	313	334	349	357	360	350	326	42

Table 3c: Capital Structure of Medium Net-worth Companies

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Debt Equity ratio	1.9	1.9	1.9	1.7	1.3	1.1	1.1	1.1	1.2	1.3
Fixed assets/Capital employed	1.1	1.1	1.1	1.1	1.0	0.9	0.9	1.0	1.0	1.0
No. of companies	602	740	846	1011	1290	1404	1396	1294	1010	80

Table 3d: Capital Structure of Low Net-worth Companies

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Debt Equity ratio	9.2	11.3	12.4	14.2	6.3	3.2	3.1	5.0	-37.4	-13.7
Fixed assets/Capital employed	1.4	1.5	1.5	1.5	1.4	1.2	1.2	1.4	1.7	1.7
No. of companies	523	735	903	1308	1947	2532	2582	2282	1300	87

Table 4: Interest Coverage Ratios of Aggregate Set of Companies

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
PBIT / Interest	2.0	2.1	2.0	1.8	2.2	2.6	2.5	2.0	1.8	1.5
PBIT (NNRT) / Interest	1.9	2.0	1.9	1.7	2.0	2.4	2.4	1.9	1.7	1.3
PBDIT (NNRT) / Interest	2.6	2.7	2.5	2.2	2.5	2.9	2.9	2.4	2.3	1.9
Cash profits / Interest	1.3	1.4	1.2	1.1	1.4	1.9	1.8	1.2	1.2	0.9
No. of Companies	1391	1768	2062	2653	3586	4293	4338	3926	2636	209

Table 4a: Interest Coverage Ratios of Top-100 Companies

	1990	1991	1992	1993	1994	1995	1996	1997	1998
PBIT / Interest	2.3	2.6	2.4	2.2	2.7	3.5	3.6	2.8	2.6
PBIT (NNRT) / Interest	2.3	2.5	2.4	2.2	2.6	3.3	3.6	2.7	2.5
PBDIT (NNRT) / Interest	3.1	3.3	3.1	2.8	3.2	4.0	4.3	3.4	3.3
Cash profits / Interest	1.8	2.0	1.7	1.6	2.0	2.7	2.8	2.1	2.0
No. of Companies	83	88	93	95	98	99	99	96	93

Table 4b: Interest Coverage Ratios of High Net-worth Companies

	1990	1991	1992	1993	1994	1995	1996	1997	1996	1999
PBIT / Interest	2.3	2.5	2.4	2.2	2.6	3.3	3.3	2.5	2.3	1.9
PBIT (NNRT) / Interest	2.3	2.4	2.3	2.1	2.5	3.0	3.1	2.4	2.2	1.7
PBDIT (NNRT) / Interest	3.0	3.2	3.0	2.7	3.0	3.7	3.8	3.1	2.9	2.3
Cash profits / Interest	1.7	1.8	1.6	1.5	1.9	2.5	2.5	1.8	1.7	1.3
No. of Companies	266	293	313	334	349	367	360	350	326	42

Table 4c: Interest Coverage Ratios of Medium Net-worth Companies

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
PBIT / Interest	1.9	2.1	1.9	1.7	2.2	2.5	2.3	1.8	16	1.7
PBIT (NNRT) / Interest	1.9	1.9	1.8	1.6	2.0	2.3	2.2	1.7	1.5	1.3
PBDIT (NNRT) / Interest	2.5	2.5	2.3	2.1	2.4	2.8	2.6	2.2	2.0	1.8
Cash profits / Interest	1.2	1.3	1.1	1.0	1.4	1.7	1.5	1.0	0.9	1.0
No. of Companies	602	740	846	1011	1290	1404	1396	1294	1010	80

Table 4d: Interest Coverage Ratios of Low Net-worth Companies

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
PBIT / Interest	0.9	1.0	0.9	0.7	0.9	1.1	0.8	0.3	-0.1	- 0.5
PBIT (NNRT) / Interest	0.9	0.9	0.8	0.5	0.7	0.9	0.7	0.2	-0.1	-0.4
PBDIT (NNRT) / interest	1.3	1.4	1.2	0.9	1.0	1.2	1.1	0.6	0.3	-0.3
Cash profits / Interest	0.3	0.3	0.2	0.0	0.1	0.4	0.1	-0.4	-0.8	-1.1
No. of companies	523	736	903	1308	1947	2532	2582	2282	1300	87

Table 6: Working Capital Situation of Aggregate Companies

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Turnovers (Times)										
Raw materials turnover	6.7	6.2	6.5	6.6	7.0	7.3	7.2	7.0	7.3	7.6
Stores turnover	1.3	1.4	1.3	1.3	1.3	1.3	1.4	1.4	1.3	1.4
Semi-finished goods turnover	19.3	18.9	18.8	18.6	19.0	20.5	21.7	20.8	19.2	27.3
Finished goods turnover	13.7	12.9	12.4	11.6	12.0	12.8	12.8	12.2	12.1	12.0
Debtors turnover	8.9	8.6	8.1	7.4	7.1	7.1	7.0	6.5	6.3	5.5
Creditors turnover	5.7	5.5	5.3	5.3	5.4	5.4	5.4	5.2	5.1	5.1
Holding period (days)										
Raw materials	74	78	74	74	70	65	64	67	66	62
Production	19	19	19	20	19	18	17	18	19	13
Finished Goods	27	28	29	32	30	28	29	30	30	30
Debtors	41	43	45	49	51	51	53	56	58	67
Net Working capital cycle.	96	102	99	104	103	95	95	100	102	101
Credit period .	41	43	45	49	51	51	53	56	58	67
No, of companies	1391	1768	2062	2653	3586	4293	4338	3926	2636	209

Table 5a: Working Capital Situation of Top-100 Companies

	1990	1991	1992	1993	1994	1995	1996	1997	1996
Turnovers (Times)			-						
Raw materials turnover	6.9	6.2	6.4	6.3	6.8	7.1	7.0	7.2	7.8
Stores turnover	0.9	1.0	1.0	1.0	1.0	1.0	1.1	1.1	1.0
Semi-finished goods turnover	16.9	15.7	15.5	15.2	14.8	15.7	16.9	16.0	14.0
Finished goods turnover	13.9	13.9	14.0	12.1	13.0	15.8	15.7	15.7	15.1
Debtors turnover	9.3	8.7	8.2	7.2	7.0	7.1	7.3	6.9	6.6
Creditors turnover	6.0	5.6	5.2	4.9	4.9	4.9	5.0	5.0	4.8
Holding period (days)									
Raw materials	83	87	82	85	80	74	73	72	70
Production	22	23	24	24	25	23	22	23	26
Finished Goods	26	26	26	30	28	23	23	23	24
Debtors	39	42	45	51	52	51	50	53	55
Net Working capital cycle .	109	114	106	115	111	97	94	96	100
Credit period .	39	42	45	51	52	51	50	53	55
No. of companies	83	88	93	95	98	99	99	96	93

Table 6b: Working Capital Situation of High Net-worth Companies

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Turnovers (Times)										
Rew materials turnover	6.5	5.9	6.2	6.4	6.8	7.0	7.0	7.1	7.6	7.9
Stores turnover	1.1	1.1	1.2	1.1	1.1	1.2	1.2	1.2	1.2	1.6
Semi-finished goods turnover	18.9	17.9	17.2	16.5	16.3	17.7	19.4	19.2	17.8	26.6
Finished goods turnover	13 .7	13.4	13.1	11.8	12.4	14.0	14.0	13.7	13.4	12.8
Debtors turnover	9.3	8.9	8.5	7.5	7.1	7.2	7.2	6.8	6.5	5.7
Creditors turnover	5.8	5.5	5.2	5.1	5.1	5.1	5.2	5.1	5.0	5.1
Holding period (days)										
Raw materials	80	84	80	80	76	70	69	69	67	€0
Production	19	20	21	22	22	21	19	19	20	14
Finished Goods	27	27	28	31	29	26	26	27	27	29
Debtors	39	41	43	49	51	51	51	54	56	64
Net Working capital cycle .	102	107	102	109	108	96	94	98	99	95
Credit period .	39	41	43	49	51	51	51	54	56	64
No. of companies	266	293	313	334	349	357	360	350	326	42

Table 5c: Working Capital Situation of Medium Net-worth Companies

	1990	1991	1992	1993	1994	1995	1996	1997	1996	1999
Turnovers (Times)										
Raw materials turnover	6.9	6.4	6.7	6.8	7.1	7.3	7.0	6.6	6.7	6.6
Stores turnover	1.9	1.8	1.7	1.7	1.7	1.8	1.9	1.9	1.8	1.0
Semi-finished goods turnover	21.0	21.3	22.4	22.6	24.5	25.5	26.1	24.3	23.0	27.4
Finished goods turnover	13.8	12.4	11.6	11.2	11.2	11.3	11.2	10.3	9.8	10.1
Debtors turnover	8.6	8.2	7.8	7.4	7.2	7.0	6.7	6.2	5.9	4.8
Creditors turnover	5.9	5.7	5.7	5.7	6.1	6.1	5.9	5.5	5.4	5.1
Holding period (days)										
Raw materials	65	71	68	66	සෙ	59	60	64	65	73
Production	17	17	16	16	15	14	14	15	16	13
Finished Goods	26	29	32	33	33	32	33	36	37	36
Debtors	42	45	47	50	51	52	55	59	62	77
Net Working capital cycle .	89	98	98	101	102	97	100	108	112	127
Credit period .	42	45	47	50	51	52	55	59	62	77
No. of companies	602	740	846	1011	1290	1404	1396	1294	1010	80

Table 6d: Working Capital Situation of Low Net-worth Companies

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Turnovers (Times)										
Raw materials turnover	7.2	6.9	7.4	7.5	7.9	8.0	8.1	7.6	7.6	8.7
Stores turnover	1.8	1.7	1.7	1.7	1.7	1.6	1.7	1.6	1.5	1.7
Semi-finished goods turnover	18.2	19.5	20.1	22.2	23.3	24.8	24.7	22.3	20.2	36.0
Finished goods turnover	13.9	12.2	11.4	11.6	12.0	12.5	12.0	11.4	11.7	12.4
Debtors turnover	7.9	8.0	7.5	7.3	7.1	6.9	6.4	6.1	5.6	5.5
Creditors turnover	4.9	5.2	5.0	5.2	5.4	5.5	5.3	4.9	4.4	4.3
Holding period (days)										
Raw materials	65	69	6 5	65	60	58	56	60	62	55
Production	20	19	18	16	16	15	15	16	18	10
Finished Goods	26	30	30	32	30	29	31	32	31	29
Debtors	46	46	46	50	52	53	57	60	65	67
Net Working capital cycle .	83	93	91	92	90	87	89	95	92	77
Credit period .	46	46	49	50	52	53	57	60	65	67
No. of companies	523	736	903	1308	1947	2532	2582	2282	1300	87

Table 6: Liquidity of Aggregate Set of Companies

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Quick ratio	0.5	0.4	0.5	0.5	0.5	0.6	0.5	0.5	0.5	0.6
Current ratio	1.4	1.3	1.3	1.4	1.4	1.5	1.4	1.4	1.4	1.4
Inventories / Working capital (%)	161.2	187.2	162.2	153.4	131.9	113.5	131.6	131.2	127.7	122.1
No. of companies	1391	1768	2062	2653	3586	4293	4338	3926	2636	209

Table 6a: Liquidity of Top-100 Companies

	1990	1991	1992	1993	1994	1995	1996	1997	1996
Quick ratio	0.5	0.5	0.5	0.6	0.6	0.7	0.6	0.6	0.6
Current ratio	1.5	1.4	1.5	1.5	1.6	1.6	1.5	1.5	1.5
Inventories / Working capital (%)	121.1	141.9	121.3	111.0	92.1	83.0	103.5	93.3	96.2
No. of companies	83	88	93	95	98	99	99	96	93

Table 6b: Liquidity of High Net-worth Companies

	1990	1991	1992	1993	1994	1995	1996	1997	1996	1999
Quick ratio	0.5	0.5	0.5	0.5	0.6	0.7	0.6	0.6	0.6	0.6
Current ratio	1.5	1.4	1.4	1.5	1.5	1.6	1.5	1.5	1.5	1.5
Inventories / Working capital (%)	133.5	154.9	131.0	120.9	101.7	90.5	110.6	102.6	101.7	97.0
No. of companies	266	293	313	334	349	357	360	350	326	42

Table 6c: Liquidity of Medium Net-worth Companies

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Quick ratio	0.4	0.4	0.5	0.5	0.5	0,5	0.5	0.5	0.5	0.5
Current ratio	1.4	1.3	1.3	1.4	1.4	1.5	1.4	1.4	1.4	1.4
Inventories / Working capital (%)	177.8	187.5	168.4	165.1	140.9	125.8	136.5	146.8	142.1	124.4
No. of companies	602	740	846	1011	1290	1404	1396	1294	1010	80

Table 6d: Liquidity of Low Net-worth Companies

	_									
_	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Quick Ratio	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.3	0.2	0.23
Current ratio	11	1.1	1.0	1.0	1.0	1.1	1.1	1.0	8.0	0.73
Inventories / Working capital (%)	525.0	1008.2	2775.0	20853.7	12647.1	420.7	521.5	-811.4	-185.4	-9 5.0
No. of companies	523	736	903	1308	1947	2532	2582	2282	1300	87

Table 7: Dividend Pay-out of Average Net-worth Companies

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Appropriation of profits (as % of PAT)										
Dividends	36.8	31.5	33.2	38.2	31.7	27.1	26.8	39.8	46.4	84.0
Equity dividends	36.4	31.2	33.0	38.0	31.5	26.9	26.4	39.1	45.3	79.6
Preference dividends	0.3	0.3	0.2	0.2	0.2	0.2	0.4	0.7	1.0	4.39
Retained profits	63.2	68.6	66.8	61.8	68.3	72.9	73.2	60.2	53.7	16.0
Shareholders' Dividend Return										
Dividends / Net worth	6.3	6.4	5.9	5.5	5.7	5.2	4.5	3.9	3.8	4.64
Equity dividends / Equity capital & share premium	13.3	13.5	12.6	10.6	9.7	8.1	7.0	6.3	6.4	6.9
No. of companies	1391	1768	2062	2653	3586	4293	4338	3926	2636	209

Table 7a: Dividend Pay-out of Top-100 Net-worth Companies

	1990	1991	1992	1993	1994	1995	1996	1997	1998
Appropriation of profits (as % of PAT)									
Dividends	32.0	30.8	31.8	31.0	29.8	25.1	24.0	30.1	31.0
Equity dividends	31.7	30.6	31.6	30.9	29.6	24.9	23.6	29.6	30.3
Preference dividends	0.3	0.2	0.2	0.1	0.2	0.2	0.4	0.5	0.7
Retained profits	68.0	69.2	68.2	69.0	70.2	74.9	76.0	69.9	69.0
Shareholders' Dividend Return									
Dividends / Net worth	5.9	6.1	5.6	5.0	5.2	4.9	4.4	4.1	3.9
Equity dividends / Equity capital & share premium	13.2	13.9	13.2	11.1	10.0	8.3	7.3	7.3	7.2
No. of companies	83	88	93	95	98	99	99	96	93

Table 7b: Dividend Pay-out of High Net-worth Companies

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Appropriation of profits (as % of PAT)										
Dividends	32.8	29.8	30.1	30.8	29.3	26.1	25.2	31.4	33.3	50.9
Equity dividends	32.6	29.6	29.9	30.6	29.2	25.9	24.8	30.8	32.5	48.1
Preference dividends	0.3	0.2	0.2	0,1	0.2	0.2	0.4	0.6	8.0	2.7
Retained profits	67.2	70.2	69.9	69.2	70.7	73.9	74.8	68.6	66.8	49.1
Shareholders' Dividend Return										
Dividends / Net worth	6.0	6.2	5.8	5.2	5.4	5.1	4.7	4.1	3.9	4.9
Equity dividends / Equity capital & share premium	14.3	14.8	14.4	12.1	10.7	9.0	8.0	7.4	7.3	8.6
No. of companies	266	293	313	334	349	357	360	350	326	42

Table 7c: Dividend Pay-out of Medium Net-worth Companies

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Appropriation of profits (as % of PAT)										
Dividends	35.7	27.5	28.7	34.6	26.0	24.0	23.3	37.0	49.0	36.8
Equity dividends	35.3	27.2	28.5	34.3	25.8	23.8	23.0	36.4	48.1	35.3
Preference dividends	0.4	0.3	0.3	0.2	0.1	0.2	0.3	0.6	0.9	1.5
Retained profits	64.3	72.5	71.3	65.5	74.1	76.1	76.7	63.0	51.0	63.2
Shareholders' Dividend Return										
Dividends / Net worth	6.8	6.4	5.8	5.4	5.7	5.1	4.2	3.4	3.3	3.5
Equity dividends / Equity capital & share premium	14.0	14.2	12.3	10.1	9.9	8.2	6.7	5.7	5.7	5.2
No. of companies	602	740	846	1011	1290	1404	1396	1294	1010	80

Table 7d: Dividend Pay-out of Low Net-worth Companies

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Appropriation of profits (as % of PAT)										
Dividends	-42.0	-52.7	-28.1	-14.2	-35.7	-1034.4	-25.2	-5.3	-2.4	-0.6
Equity dividends	-4 0.7	-51.4	-27.8	-14.0	-35.4	-1025.8	-24.9	-5.2	-2.4	-0.5
Preference dividends	-1.2	-1.2	-0.3	-0.2	-0.3	-8 .6	-0.3	-0.1	-0.1	0.0
Retained profits	142.0	152.7	128.1	114.2	135.7	1134.4	125.2	105.3	102.4	100.6
Shereholders' Dividend Return										
Dividends / Net worth	6.3	5.3	5.0	4.8	4.8	4.3	2.5	1.6	1.4	2.13
Equity dividends / Equity capital + share premium	5.9	4.8	4.5	4.3	4.2	3.7	2.1	1.4	1.1	0.3
No. of companies	523	735	903	1308	1947	2532	2582	2282	1300	87

Table 8: Average Annual Growth Rates of Key Parameters from 1990 to 1999 (Based on Common Sample)

	Average	Top100	Highnet	Mednet	lownet
Net Fixed Assets	25%	28%	27%	20%	11%
Total Assets	23%	26%	24%	17%	10%
Net Worth	28%	31%	1%	24%	*
Reserves & Surplus	31%	34%	32%	28%	*
Free Reserve	37%	39%	3 7 %	37%	*
Share Premium	50%	48%	68%	65%	37%
Total Borrowings	21%	24%	22%	15%	11%
Net Sales	18%	21%	20%	14%	10%
Cost of goods sold	18%	20%	20%	15%	10%
Operating Income	19%	22%	21%	14%	*
Other Income	24%	27%	25%	16%	10%
Non-recurring income	24%	30%	26%	17%	27%
Non-recurring expenses	24%	25%	22%	12%	18%
PBDIT	20%	18%	22%	14%	0%
PBT	23%	27%	25%	15%	*
Corporate tax	18%	23%	20%	12%	3%
PAT	25%	28%	26%	16%	*

^{*} Growth rates have been difficult to estimate on account of decreases and negative figures.

Table 9: Gross Capital Formation in Infra-structure

	1990	1991	1992	1993	1994	1995	1996	1997
Mining & Quarrying	2992	2844	2380	2223	1998	4932	3461	1926
Electricity, Gas and Water	5772	6151	6932	6432	7229	6337	6514	6186
Construction	995	1039	714	948	994	959	1107	1181
Transport Storage & Communication	5875	6043	5993	6739	8011	7918	8499	9728
Railways	982	1055	997	1436	1571	1208	1214	1269

Source: Gross Capital Formation at 1980-81 Prices, National Accounts Statistics of India

Table 10a: Annual Secondary Market Returns from the Indian Companies (January 1992-January 1998)

Group	Company	Annual Return	Industry
Bajaj Group	Bajaj Auto Ltd	35%	Automobile
Balaji (Reddys) Group	Balaji Distilleries Ltd.	-30%	Liquor
	Balaji Industrial Corpn. Ltd.	44%	Steel
Bhilwara Group	H E G Ltd.	1%	Welding Machines
	Rajasthan Spinning & Wvg. Mills Ltd.	6%	Textiles
Birla Group	Century Textiles & Inds. Ltd.	-24%	Textiles
_	Grasim Industries Ltd.	2%	Diversified
	Hindustan Motors Ltd.	-3%	Automobile
	Indian Rayon & Inds. Ltd.	6%	Textiles
	Orient Paper & Inds. Ltd.	-25%	Paper
BPL Group	BPL Ltd.	-8%	Consumer
			Electronics
Escorts (Nandas) Group	Escorts Ltd.	-4%	Automobile
Essar (Ruias) Group	Essar Steel Ltd.	-20%	Steel
Godrej Group	Godrej Soaps Ltd.	-3%	FMCG
Goenka (Duncans) Group	NRC Ltd.	-21%	Textiles
Hero (Munjals) Group	Hero Honda Motors Ltd.	35%	Automobile
` • • • • • • • • • • • • • • • • • •	Majestic Auto Ltd.	6%	Automobile
Mafatlal Group	Mafatlal Industries Ltd.	-90%	Textiles
•	National Organic Chemical Inds. Ltd.	3%	Chemical
Mahindra &	Mahindra & Mahindra Ltd.	38%	Automobile
Mahindra Group			
Modi Group	Godfrey Phillips India Ltd.	17%	Cigarettes
	Modi Rubber Ltd.	-10%	Rubber
Muthaiah Group	Spic	-12%	Petrochemcials
Raunaq Singh Group	Apollo Tyres Ltd.	-11%	Tyres
Reliance Group	Reliance Industries Ltd.	20%	Diversified
RPG Enterprises	C E S C Ltd.	-23%	Power
	Ceat Ltd.	-22%	Tyres
Shriram Group	D C M Shriram Consolidated Ltd.	-35%	Diversified
	D C M Shriram Inds. Ltd.	-79%	Diversified
	S R F Ltd.	-21%	Textiles
Singhania Group	J K Corp Ltd.	-35%	Diversified
-	J K Industries Ltd.	-24%	Tyres
	J K Synthetics Ltd.	-52%	Textiles
	Raymond Ltd.	-8%	Textiles
Tata Group	Telco	9%	Automobile
-	Tisco	4%	Steel

Thapar Group	Ballarpur Industries Ltd.	6%	Рарег
	Crompton Greaves Ltd.	-17%	Electric Machinery
	J C T Ltd.	-37%	Textiles
TVS Group	Sundram Fastners	31%	Light Engineering
	TVS Suzuki	48%	Automobile
Videocon Group	Videocon International Ltd.	-9%	Electronics

Table 10b: Annual Secondary Market Returns from the MNCs (January 1992-January 1998)

Company	Annual Return	Industry
Bata India Ltd.	13%	Shoes
Cadbury India Ltd.	17%	Chocolates
Colgate-Palmolive (India) Ltd.	24%	FMCG
Glaxo India Ltd.	27%	Pharma
Hindustan Lever Ltd.	45%	FMCG
ITC Ltd.	32%	Cigarettes
Nestle India Ltd.	18%	Chocolates
Philips India Ltd.	-12%	Electronics
Procter & Gamble India Ltd.	19%	FMCG
Reckitt & Colman Of India Ltd.	19%	FMCG
Singer India Ltd.	3%	Consumer Durables
Smithkline Beecham Consumer Healthcare Ltd.	16%	FMCG

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