

## A Study on Wealth Creation (1994-99)

MOST Inquire Rank	THE FASTEST	CAGR % of adjusted Mkt.Cap. ('94 to '99)	Rank based on size	THE BIGGEST	Wealth Created in Rs. Cr. ('94 to '99)
1	Satyam Computers	136.9	1	Hindustan Lever	34110
2	Wipro	122.8	2	Wipro	18159
3	BFL Software	117.1	3	ITC	15591
4	Infosys Technologies	101.8	4	Infosys Technologies	9145
5	Information Tech	100.0	5	Ranbaxy Labs.	4650
6	Fujitsu ICIM	88.8	6	Glaxo (India)	4632
7	NIIT	80.5	7	NIIT	4422
8	Amara Raja Batteries	75.9	8	Satyam Computers	4141
9	Pentafour Software	62.5	9	BHEL	3962
10	DSQ Software	60.3	10	Castrol India	3482

- Sustained earnings growth is the biggest driver for wealth creation. High-growth companies (>25% p.a.) account for 76% of the wealth created.
- Information technology companies are among the fastest wealth creators.
- High earnings growth firms with high RoE, bought at a reasonable PE/Earnings Growth ratio (PEG), create maximum wealth.

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## Concept, Objective & Methodology

### Purpose

Equity markets worldwide have become the biggest source of Wealth Creation. The world market capitalisation grew 20% during 1999, adding approximately \$5 trillion, on the back of \$6 trillion added during 1998. The smart increase in the global market capitalisation implores in to take a closer look at the creation of wealth in the past and the possible ramifications for the Indian market as well. It may be noted that the Indian markets too have added almost \$100 bn in market cap during 1999, an increase of 65%.

As Philip Fisher rightly says, "It seems logical that before even thinking of buying any common stock, the first step is to see how money has been most successfully made in the past."

The Wealth Creation study is aimed primarily at achieving this objective.

### Concept

Wealth Creation is the process by which a company enhances the market value of capital entrusted to it by its shareholders. It is a basic measure of success for any commercial venture. Wealth Creation is achieved by rational actions of a company in a sustained manner.

For an investor, wealth created by his company is the difference between the market value of his holdings and his investment cost (adjusted for dilutions). Equity investments are associated with a greater degree of risk and hence, for an equity investor, wealth created by his company must be greater than that from other relatively low-risk assets.

At the time of making an investment decision we are familiar with the financial statistics of the company, its management, products, price *etc.* Yet do we stop to ask ourselves, "Does this company have the ability to create great wealth for us on a sustained basis?" We hope this study (the fourth in the series) brings us closer to an answer.

### Objective

To find the financial characteristics of those companies that have created wealth for their shareholders in the recent past. This would enable us to identify future Wealth Creators.

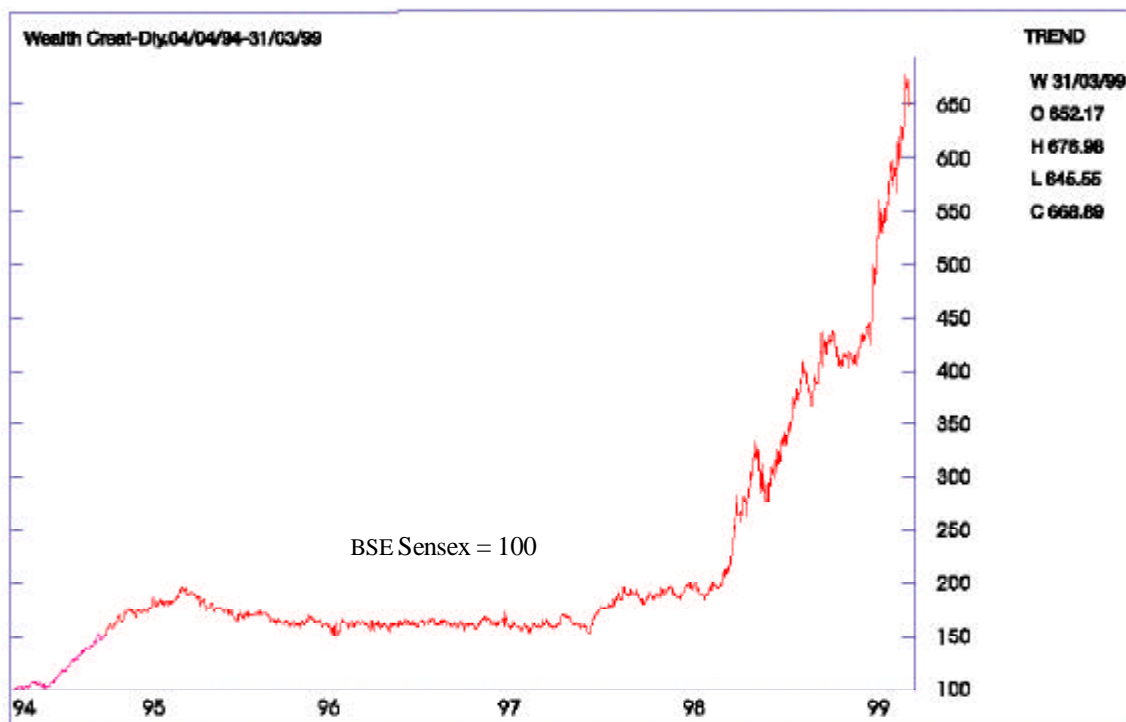
### Methodology

For the purpose of our study\*, we have identified the top 100 Wealth Creators for the period April 1994 to March 1999 in the Indian Stock Market. These companies have the distinction of adding atleast Rs.100 crores to their market capitalisation over this period, adjusted for dilutions. We have termed this group the "**MOST-Inquire 100 Wealth Creators**". The ranks have then been accorded on the basis of the speed of Wealth Creation *i.e.* compounded growth in wealth over the period of study.

\* The database used for this study is that of Capitaline Olé and Trends.

## The Wealth Creator Group v/s BSE Sensex

This study pertains to the period between April '94 and March '99. During this period, the BSE Sensex has fallen from 3781 to 3740, a fall of 0.22% CAGR. The chart below presents the relative performance of the 'MOST-Inquire 100' v/s the BSE Sensex during this period. The 'MOST-Inquire 100' has demonstrated a 569% outperformance to the market during this period.



## Wealth Creators ~ Business Analysis

### I Nature of Business

The evolution of information technology as a wealth creating business, seen in the last study, now appears complete. Against three infotech firms that figured in the ten fastest wealth creators between 1993-98, the ten fastest wealth creators between 1994-99 consist of nine infotech firms. Moreover, the total representation of infotech companies has increased from 5% during 1993-98 to 20% in 1994-99.

Continuing its past trend, businesses such as pharmaceuticals, FMCG and automobiles dominate the wealth creators, constituting 53% of the group, against 48% in the previous year and has contributed to 62% of wealth created.

Industry	No. of Cos.	Contribution to Wealth Created %	RoCE 1999	RoCE 1994
FMCG	19	38.9	31.4	23.4
Information Tech.	20	30.2	31.3	21.5
Pharmaceuticals	21	14.1	18.5	21.7
Automobiles	13	8.8	21.4	23.9
Engineering	6	3.2	11.8	12.3
Media/Telecom	2	1.1	25.8	18.1
Petrochemicals	1	0.7	13.3	11.8
Consumer Durables	2	0.3	17.7	2.6
Cement	1	0.2	22.5	17.8
Chemicals	2	0.2	24.5	7.6
Banking & Finance	1	0.1	46.7	32.9
Aluminium	1	0.1	39.5	-6.0
Others	11	2.1	26.0	23.1
<b>Total</b>	<b>100</b>	<b>100.0</b>	<b>22.7</b>	<b>18.8</b>

### II Business Activity

The importance of focus in business cannot be over-emphasised. Almost 96% of companies in our Wealth Creators list have followed a focused and consistent business policy.

Business Activity 1999



Business Activity 1998

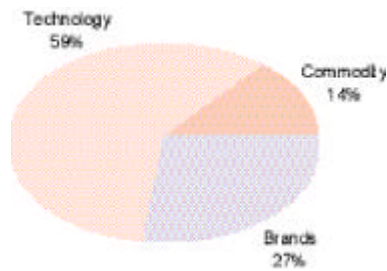


## Wealth Creators ~ Business Analysis (Contd.)

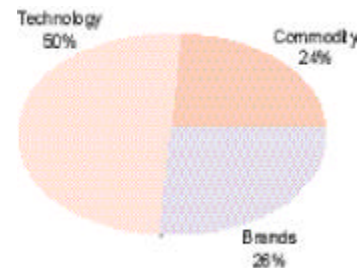
### III Product Attribute

The technological edge to a product is an important source of wealth creation. Companies with a greater element of technology in their product lines have a greater propensity to create wealth. Almost 60% of the wealth creators have technology as a feature of their product lines. Over the past four years, technology has emerged as a key attribute of wealth creators consistently. Commodity companies, on the other hand, are represented inconsistently. This further highlights the fact that commodity businesses do not create wealth on a consistent basis.

Product Attribute 1999



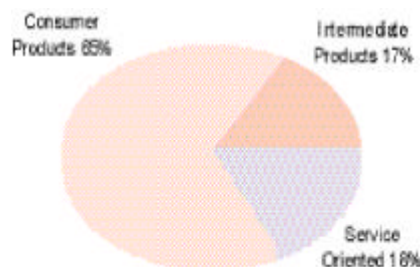
Product Attribute 1998



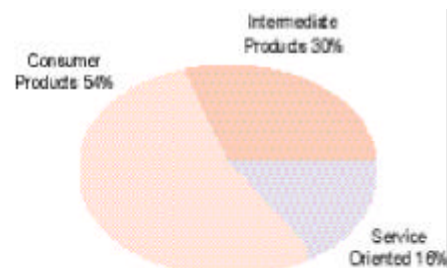
### IV Consumer Profile

A strong consumer or service franchise is critical to wealth creation. Consumer products and service-oriented businesses constitute 83% of the wealth creators compared to 70% a year earlier. Intermediate product companies formed only 17% of wealth creators, a fallout of a smaller representation of commodity companies.

Consumer Profile 1999



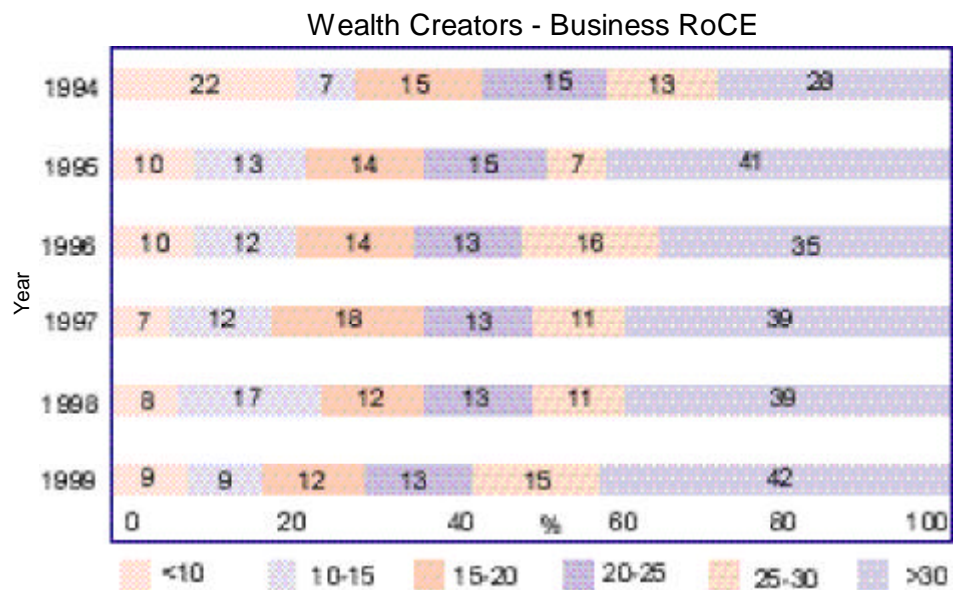
Consumer Profile 1998



## Wealth Creators ~ Business Economics

Wealth Creation is concurrent with the overall improvement in the economics of a business.

- Companies (from the 'MOST-Inquire 100'), with a RoCE of less than 10%, numbered 22 in 1994. This has reduced to nine in 1999.
- At the other end of the spectrum, in the year 1994, 28 companies earned returns in excess of 30% on invested capital. This swelled to 42 companies by 1999.
- Of the 28 companies that started off with a RoCE of over 30% in the base year, 61% have retained their positions in the top RoCE bracket, implying that businesses with good economics generally tend to get better with time.





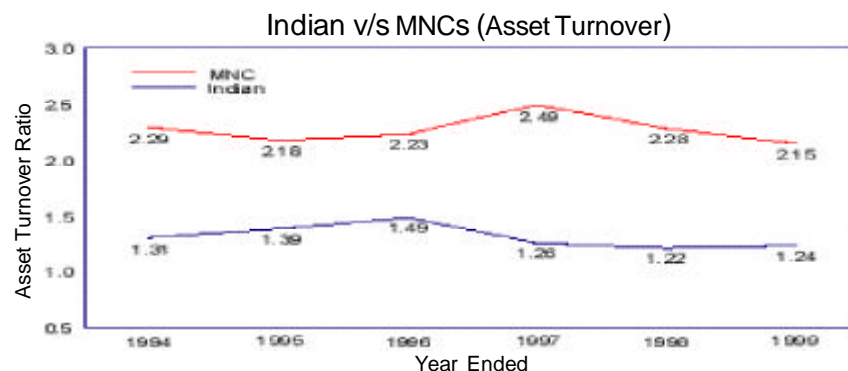
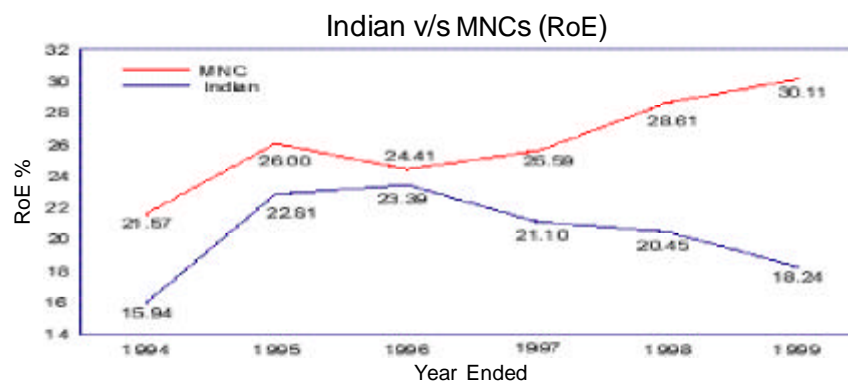
## Wealth Creators ~ Indian Companies v/s MNCs

Management	Cos. listed	1999	1998	Changes
MNCs	181	44	49	(5)
TVS	30	5	4	1
Essel	3	2	1	1
Gol	312	2	6	(4)
Hero	5	2	1	1
Swaraj	3	2	2	0
Shiv Nadar	3	2	0	2
Tata	79	2	5	(3)
Others	7108	39	32	7
	7724	100	100	

Profitability of all companies expanded during 1994-99, although the expansion has been much faster in the case of MNCs. However, the RoE increase amongst MNCs has risen consistently from 21.6% to 30.1%. Against this, Indian firms' RoE expansion has been sluggish, rising from 15.9% in 1994 to 18.2% by 1999. This is explained by two factors:

1. MNCs have accounted for a mere 17% of all the funds raised by the Wealth Creator group.
2. The dividend payout of Indian firms has been a very conservative 19.7% versus 42.3% by MNCs.

Indian companies engaged in new-generation businesses such as IT, media, retailing *etc.* are likely to increase in future. This may see the Indian-MNC divide disappearing in the coming years.

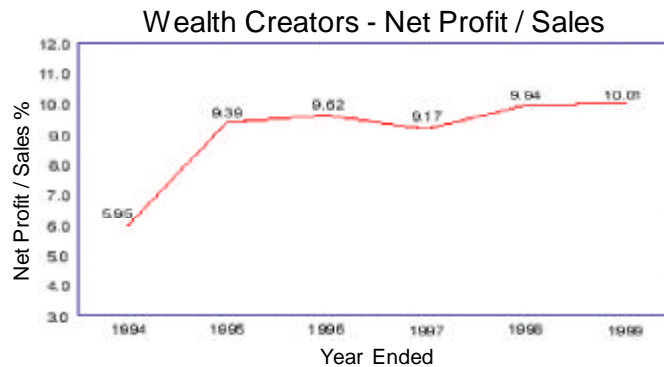




## Wealth Creators ~ DuPont Analysis

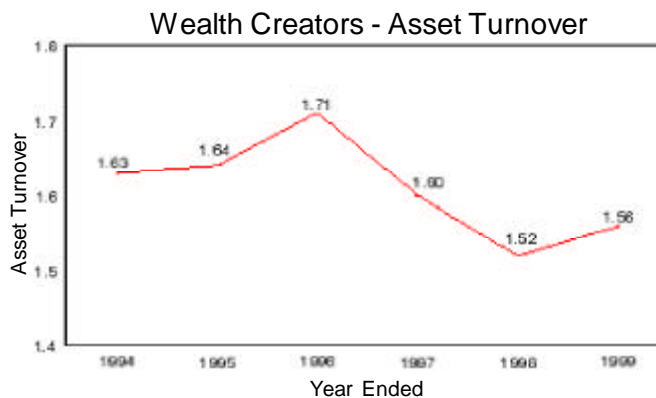
### Net Profit/Sales

The high-growth opportunity available to the corporate sector between 1994-97 led to a massive increase in profitability margins of wealth creators, from 5.95% in 1994 to 9.6% by 1996. However, slower growth in the period between 1997-99 prevented a further increase in margins.



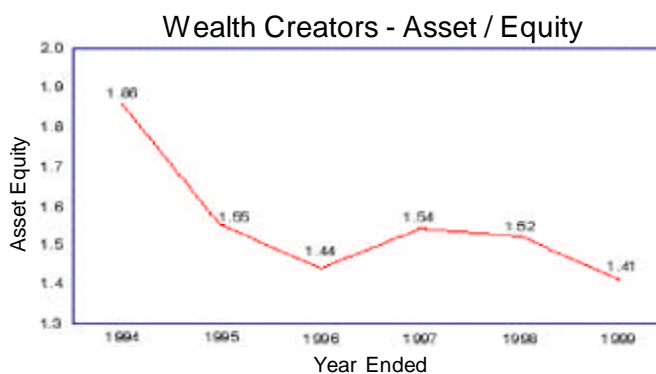
### Asset Turnover Ratio

Asset turnover of wealth creators, too, has been a function of overall growth, rising between 1994 and 1996 on the back of industrial expansion and falling subsequently. The fall was a result of growth slowing down, compared to the enhanced capital investment.



### Asset/Equity Ratio (Leverage)

Whenever wealth creators have exhibited strong growth, those periods have normally witnessed a rapid decline in the asset/equity ratio, indicating that growth has largely been funded from internal accruals. Leveraging has been resorted to only in times of slower growth.



## Significance of Growth

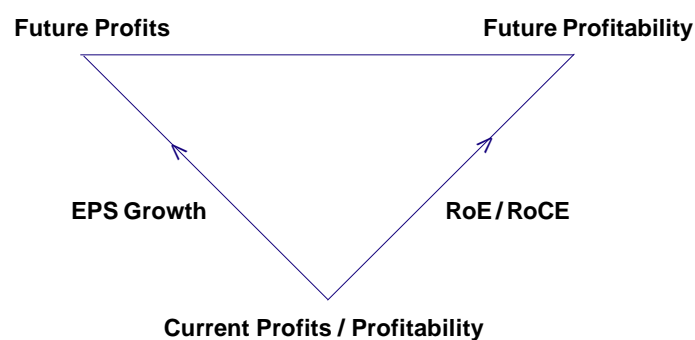
Earnings growth and earning power are the key drivers to wealth creation. Wealth creators, over the last three studies, have been showing accelerated earnings growth, accompanied by an acceleration in market capitalisation as well. The high growth rates that the new-generation businesses are likely to demonstrate is expected to further increase the significance of growth in stock valuations in the coming years.

Performance of top 10 Wealth Creators	1991-96	1992-97	1993-98	1994-99
Fastest Wealth Creators (Top 10) 5 year Mcap. CAGR %	82.8	42.4	62.7	94.4
Fastest Wealth Creators (Top 10) 5 year Earnings CAGR %	45.0	50.7	72.0	73.6

The value of any company depends primarily on three factors:

1. Current profit
2. Current capital employed
3. Future growth in profits and profitability

*'All prices depend upon someone's estimate of future income' - Burr Williams*



## Characteristics of Growth

*Consistency, profitability and sustainability* are the key drivers to the valuation of growth.

### **Consistency of growth**

Cyclical growth is much more difficult to predict compared to secular growth. Secular or consistent growth hence commands much higher valuations. *In short, what gets measured gets valued.*

### **Profitable growth**

For growth to become self-financing and capable of generating free-cash flows, it must be profitable. Earnings growth achieved at a significant capital cost may not be as valuable.

### **Sustainability of growth**

The current value of companies depends considerably on the perceived longevity of their earnings growth. The greater the sustainability of such earnings growth, the better is likely to be the valuation of such growth.

### **Profit Growth of the 'MOST-Inquire 100'**

- The median profit growth of the 'MOST-Inquire 100' during the period between 1994-99 is 31.8% CAGR.
- The median profit growth of the BSE Sensex companies is 23.2% during this period.
- The top ten wealth creators in the 'MOST-Inquire 100' registered a median CAGR of 95% in earnings.
- Barring four, all other companies in the 'MOST-Inquire 100' have recorded earnings growth.
- Companies with more than 25% p.a. growth in earnings have contributed to 76% of the total wealth created.
- Only 117 companies have earnings growth in excess of 25% p.a. between 1994-99. Of these, 65 companies are wealth creators.

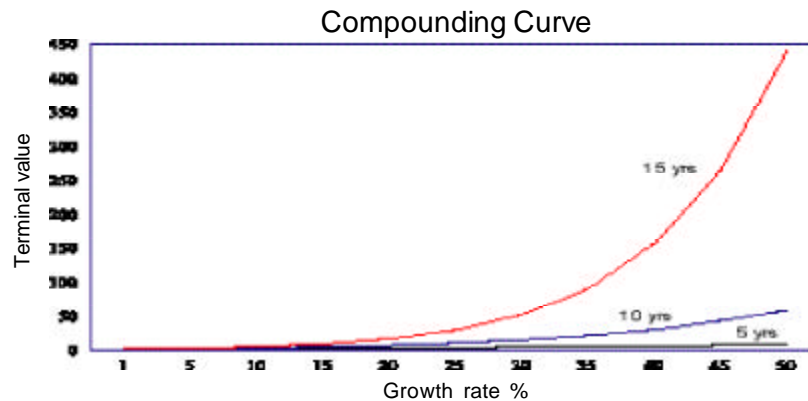
### **Profitability of the 'MOST-Inquire 100'**

- The median RoCE of the 'MOST-Inquire 100' increased from 22.6% in 1994 to 29% by 1999.
- The median RoE of the 'MOST-Inquire 100' expanded from 19% in 1994 to 24% by 1999.
- Almost 66% of the companies of the 'MOST-Inquire 100' have increased their RoCE / RoE in this period.

## Valuation of Growth

### *The magic of compounding*

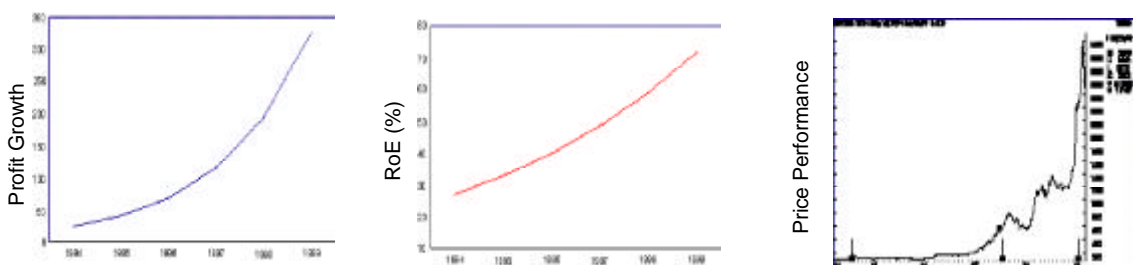
What makes growth valuable is its power to compound returns over a period of time. The concept of compounding can have a significant impact on investment returns (*refer compounding curve below*).



### *Infosys - An example of compounding returns:*

The effect of compounding earnings growth on stock returns is best illustrated with the performance of Infosys over the past five years.

- EPS grew @68.4% p.a. during 1994-99.
- RoE increased from 29% in 1994 to 78%\* by 1999, a CAGR of 22%.
- P/E grew @21.6% p.a. during 1994-99.
- The combined effect was a 102% CAGR in stock price during 1994-99.



Thus, high earnings growth (68.4%), high profitability growth (22% p.a) bought at a sufficiently low PEG (0.4), led to compounded returns of 102% for shareholders

\* Adjusted for capital raised through the ADR issue during 1998-99.

## How to Value Growth?

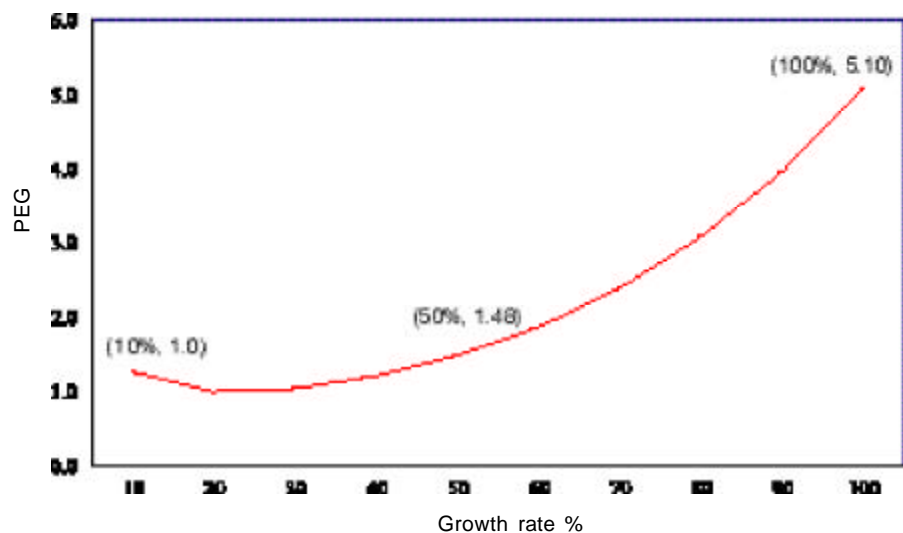
### What is the right PEG?

Earnings compounded at different rates of growth result in different levels of the terminal book value. The graph below depicts the PEG when earnings are compounded at rates between 10% and 100% for a specified period of eight years.

- Earnings that compound @10% p.a. when bought at a PEG of 1, leads to recovery of capital in eight years.
- Earnings that compound @50% p.a. can be purchased up to a PEG of 1.48 to ensure capital recovery in eight years.
- For earnings that compound @100% p.a. (though high growth rates are by itself unsustainable beyond a particular level), one could pay a PEG of even 5.1, and still ensure capital recovery in eight years.

The appropriate PEG for any stock would vary substantially with respect to its underlying growth rate.

PEG at different growth rates leading to recovery of capital in 8 years



## The Impact of RoE on Returns

### Infosys Technologies - An example

The analysis presented above implicitly assumes that the RoE of any company over the specified period of time, would approach the earnings growth rate. In reality, this assumption generally does not hold true as the earnings growth, RoE and P/E of companies are dynamic.

The performance analysis of Infosys (presented below) however brings the importance of profitability of growth into sharp focus. The high earnings growth of Infosys during 1994-99 has been supported by a consistently improving RoE. This indicates that the business, while maintaining such high rates of growth, was becoming inherently more profitable. This helped increase its PEG even further.

Infosys Technologies	9903	9803	9703	9603	9503	9403
EPS Growth %	117.11	46.79	77.39	57.73	51.95	---
P/E	71.51	48.51	19.61	17.10	25.89	26.92
PEG *	--	0.41	0.42	0.22	0.45	0.52
RoE %	78.00	45.64	35.06	26.99	21.50	28.82
5-year Mcap CAGR %	101.75					

\* PEG calculated on the basis of year-end P/E to 1-year forward earnings growth rate.

## The Impact of PEG on Returns

### Hindustan Lever - An example

HLL's performance over the past five years is a classic example of the importance of buying stocks at reasonable P/E multiples relative to their underlying growth.

The table below provides a snapshot of HLL's performance during the period between 1994-99.

HLL	9812	9712	9612	9512	9412	9312
EPS Growth %	43.78	35.27	26.80	25.93	43.27	---
P/E	41.12	49.17	38.84	38.04	45.30	63.25
PEG *	--	1.12	1.10	1.42	1.75	1.46
RoE %	69.82	75.54	41.47	31.45	27.08	37.87
5-year Mcap CAGR %	23.67					

\* PEG calculated on the basis of year-end P/E to 1-year forward earnings growth rate.

- EPS increased @34.8% p.a. during 1994-99.
- RoE increased from 38% in 1994 to 70% by 1999, a CAGR of 13%.
- However the P/E multiple declined from 63x in 1994 to 41x by 1999, a CAGR of -8.2%.
- The HLL stock managed to deliver a return of 23.7% CAGR over this period.

The contrast between the performance of Infosys Technologies and HLL lies mainly in the PEG prevailing at the time of acquisition in 1994.

While Infosys was purchased at a PEG of 0.52, HLL was acquired at a PEG ratio of 1.46. Infosys delivered CAGR returns of 105% against HLL's returns of 23.7% between 1994-99.

Thus, buying stocks at low PEG is extremely crucial.

## Wealth Creators ~ Effect of Profit Growth on Price Performance

- The 'MOST-Inquire 100' have been arranged on the basis of their PEG *i.e.* the ratio of their P/E multiples as on 1994 to their earnings CAGR during 1994-99.
- The group has been divided into two parts on the basis of their median PEG of 0.83. Companies with a PEG above 0.83 are denoted as 'HIGH PEG' stocks and those below 0.83 as 'LOW PEG' stocks.
- The groups have then been further sub-divided on a cut-off market capitalisation CAGR of 25%.

		PEG 1994	
		High (10.54)	Low (0.01)
Price Performance	137%	<b>QII</b> Castrol HLL Nestle Glaxo <b>15</b> MCap. CAGR (30.6%) Earnings CAGR (27.2%)	<b>QI</b> Infosys Satyam PTL, Hero Honda <b>34</b> MCap. CAGR (45.2%) Earnings CAGR (51.3%)
	25%	Bajaj Auto Bata SB Pharma Exide <b>35</b> MCap. CAGR (13.4%) Earnings CAGR (28.3%) <b>QIII</b>	Blue Star IPCL BHEL Pentasoft <b>16</b> MCap. CAGR (15.6%) Earnings CAGR (26.9%) <b>QIV</b>
0%		Low	

### Observation

Of the 50 LOW PEG stocks (QI), 68% have given superior returns. Quadrant I has a median market capitalisation CAGR of 45%.

### Conclusion

Stocks bought at a LOW PEG have a tendency to deliver far superior returns.

### Observation

Amongst the HIGH PEG stocks (QIII) 70% have given very low returns. The 34 companies in Quadrant III have a median market capitalisation CAGR of only 13%.

### Conclusion

Stocks purchased at a HIGH PEG ratio find it difficult to manage very high returns.

"P/E multiples, in isolation, provide no indication to valuation. No P/E multiple can be regarded as HIGH or LOW unless it is measured relative to a stock's underlying earnings growth potential." The PEG, hence, becomes an important yardstick for valuation of growth.



## Wealth Creators ~ Effect of Profitable Growth on Price Performance

The 'MOST-Inquire 100' have been arranged on the basis of their PEG *i.e.* the ratio of their P/E multiples as on 1994 to their earnings CAGR during 1994-99.

The group has been divided into two parts on the basis of their median PEG of 0.83. Companies with a PEG above 0.83 are denoted as 'HIGH PEG' stocks and those below 0.83 as 'LOW PEG' stocks.

The groups have then been further sub-divided on the basis of the median RoE of 24% at the end of 1999.

		PEG 1994	
		High (10.54)	Low (0.01)
RoE 1999	64%	<b>QII</b>  CAGR H - 43.6 M - 24.1 L - 6.5	<b>QI</b>  CAGR H - 136.9 M - 46.0 L - 21.3
	24%	CAGR H - 88.8 M - 12.2 L - 4.0	CAGR H - 101.8 M - 21.8 L - 7.5
	-23%	<b>QIII</b>	<b>QIV</b>
	Low	H = High M = Median L = Low	

### Observations

Median CAGR of the market capitalisation of Quadrant I is the highest at 46% p.a.

### Conclusion

The fastest wealth creators are, thus, companies purchased at LOW PEG ratios and at discounts to their terminal RoE which is reflected in Quadrant I.

### Observations

Quadrant III recorded the least returns at 12.2% p.a.

### Conclusion

Stocks bought at high PEG but with declining RoE do not provide good returns.

## Some thoughts for the future

Though the past is a guide to the future, an investor's quest is to identify future wealth creators. A few companies that can emerge as future wealth creators have been modelled as per the PEG/RoE matrix presented earlier.

	High	PEG	Low
	QII		QI
	Wipro (2.8, 36%) HLL (1.6, 56%) Infosys (2.6, 26%)		Asian Paints (0.7, 27%) Hero Honda (0.4, 40%) Mico (0.7, 24%) Electrosteel (0.3, 35%)
RoE			
	QIII		QIV
Low			

Figures in brackets represent estimated 1 year forward PEG, RoE respectively.  
RoE of Infosys computed without adjustments for cash holdings.

Hence, look for stocks with:

1. Earnings growth >25% p.a.
2. RoE / RoCE >25%.
3. PEG well below 1.0.

Some trends in the future which could very significantly influence business performance and their valuations are outlined below.

- The age and income profile of the Indian population and its irreversible nature, can trigger a huge revolution in the consumer goods sector. Businesses built upon a strong consumer franchise could hence flourish.
- The New Economy businesses such as IT, multimedia and entertainment are likely to display very high growth rates. Such high rates of growth are likely to redefine business valuations. However, the one caveat, we would like to offer is the sustainability of the present valuations is questionable.
- Market capitalisation has become the barometer of wealth creation. Corporates engaged in traditional businesses too, would increasingly orient their actions to enhance market capitalisation.
- Information technology, as a business, would drive the efficiency of other businesses. But, in the process, it is likely to become an engine of growth.
- Valuation of stocks in the domestic market will be impacted by global valuations.

## 'MOST-Inquire 100' ~ Wealth Creators

## Appendix I

Inquire Rank	Company Name	DUPONT 1999			DUPONT 1994			CAGR (94-99)%	
		NP/ Sales	Sales/ Assets	Asset / Equity	NP/ Sales	Sales/ Assets	Asset / Equity	Wealth Created	Earnings
1	Satyam Computer	19.3	1.0	2.2	37.5	0.3	1.0	136.9	91.5
2	Wipro	6.3	2.5	1.7	2.9	2.2	2.7	122.8	75.9
3	BFL Software	25.4	1.9	1.0	13.4	0.2	1.0	117.1	186.4
4	Infosys Tech.	26.6	0.9	1.0	27.9	1.1	0.9	101.8	75.6
5	Information Tech.	29.6	1.1	1.1	23.8	1.1	1.0	100.0	44.5
6	Fujitsu ICIM	10.1	0.8	1.7	0.8	2.4	2.1	88.8	25.1
7	NIIT	23.7	1.3	1.2	21.9	1.2	1.2	80.5	51.6
8	Amara Raja Batteries	27.3	1.2	1.1	9.2	0.6	4.0	75.9	98.3
9	Pentafour Software	22.7	0.9	1.1	25.2	1.1	1.2	62.5	71.6
10	DSQ Software	8.8	1.2	2.2	8.8	0.4	2.2	60.3	62.5
11	Vikas WSP	25.8	0.9	1.6	18.2	0.9	0.9	59.1	85.8
12	Swaraj Engines	12.7	2.9	1.3	8.6	2.9	1.5	54.6	45.4
13	Silverline Inds.	37.4	1.5	0.5	22.8	0.8	1.0	53.8	42.6
14	Tata Infotech	11.8	2.2	1.1	11.3	2.4	1.1	49.6	28.6
15	India Nippon Elec.	12.1	2.1	1.3	11.4	1.9	1.8	49.4	34.6
16	Rolta India	36.1	0.5	1.5	31.1	0.2	1.4	48.0	46.9
17	HCL Infosystems	6.6	2.6	1.7	5.4	2.8	1.3	46.3	23.7
18	Hero Honda Motors	7.9	4.4	1.1	4.2	3.3	1.8	45.8	51.0
19	Punjab Tractors	13.2	3.2	1.0	6.5	2.6	1.3	44.7	48.9
20	Tata Elxsi	2.9	2.3	1.3	n.a.	0.4	3.2	44.2	56.7
21	Digital Equipment	22.0	2.9	1.0	1.4	1.9	1.6	43.6	99.7
22	Indian Shaving	9.3	2.0	1.3	n.a.	1.1	1.2	41.6	36.1
23	Moser Baer (I)	20.2	0.6	2.0	14.2	32.3	0.1	40.9	81.1
24	Abbott Labs (I)	0.4	2.5	2.7	4.3	3.7	1.3	40.4	(30.1)
25	Raasi Cement	5.8	1.7	1.7	0.6	1.4	5.2	39.5	75.0
26	Infar (India)	5.9	2.5	1.6	5.2	2.3	1.7	39.1	21.4
27	Monsanto Chem.	9.8	2.6	1.3	5.1	6.5	1.0	39.0	53.2
28	TVS Electronics	1.3	1.7	2.1	4.2	1.9	2.6	38.8	(11.1)
29	PSI Data System	14.3	2.8	1.3	11.9	2.0	1.8	38.2	22.4
30	Navneet Publications	15.6	1.5	1.1	5.1	2.4	2.8	37.2	58.8
31	BurroughsWellcome	13.7	1.6	1.0	3.6	2.3	1.6	35.1	35.5
32	Hindustan Inks	15.7	1.5	1.6	11.0	1.3	2.5	34.2	63.8
33	Glaxo (India)	10.9	2.4	1.0	2.0	3.0	2.0	33.0	53.0
34	Mastek	14.9	1.4	1.2	19.9	1.1	1.1	32.6	21.9
35	Balaji Indl. Corp.	0.9	1.0	4.3	3.9	3.6	1.9	31.7	10.7
36	Elect. Steel Cast.	16.2	1.3	1.6	5.6	1.1	2.2	31.2	60.8
37	Zee Telefilms	27.0	0.9	1.3	40.3	0.5	1.0	30.6	46.0
38	Cadbury India	5.9	2.1	1.1	4.8	1.9	1.3	30.1	25.3
39	Britannia Inds.	3.9	3.8	1.8	2.8	4.6	1.3	29.6	27.2
40	Carrier Aircon	8.8	3.4	1.0	6.0	1.9	1.6	29.5	55.0
41	Rhone-Poulenc (I)	14.6	2.3	1.1	1.2	1.1	5.7	29.4	87.7
42	Madras Aluminium	30.4	1.3	1.0	n.a.	0.0	(0.8)	29.1	30.2
43	Global Tele-Systems	11.8	1.0	2.0	4.1	2.8	4.5	28.6	65.6
44	Thomas Cook (I)	23.9	0.6	1.8	24.1	0.8	1.8	27.4	19.0
45	Berger Paints	6.5	1.9	1.7	2.3	2.9	2.3	26.8	48.8
46	Pfizer	5.3	3.0	1.0	5.4	2.3	1.9	26.7	4.7
47	Novartis India	10.5	2.6	1.0	3.4	2.7	1.6	26.5	38.1
48	E Merck (India)	10.5	2.3	1.2	3.9	1.8	1.9	25.2	42.1
49	Pidilite Industries	11.3	1.5	1.6	6.2	1.2	2.3	25.1	33.0
50	Hindustan Lever	8.5	5.1	1.1	6.2	4.6	1.2	24.9	44.6

# 'MOST-Inquire 100' ~ Wealth Creators (Contd.)

# Appendix I

Inquire Rank	Company Name	DUPONT 1999			DUPONT 1994			CAGR (94-99)%	
		NP/ Sales	Sales/ Assets	Asset / Equity	NP/ Sales	Sales/ Assets	Asset / Equity	Wealth Created	Earnings
51	Smith. B. Pharma	8.9	2.8	0.9	7.6	2.3	1.0	24.5	25.6
52	Intl. Best Foods	(2.9)	0.8	3.3	4.9	1.7	1.5	24.3	(210.0)
53	TVS Suzuki	6.3	2.9	1.8	6.6	4.3	2.3	24.0	35.4
54	ITC	17.7	1.0	1.6	8.8	1.7	2.1	23.2	24.8
55	OTIS Elevator	8.5	2.8	1.0	3.6	2.2	1.0	22.8	42.7
56	Wartsila NSD	5.7	2.1	1.2	1.6	1.4	2.1	22.5	69.0
57	CRISIL	34.4	0.8	0.9	37.4	0.6	0.8	22.5	30.1
58	Munjal Showa	7.7	2.4	1.2	5.0	1.8	1.7	22.4	38.7
59	Godfrey Phillips	9.6	2.3	1.3	4.8	3.1	1.8	21.3	30.4
60	Smith. B. Consumer	14.6	2.6	0.9	11.0	2.6	1.1	21.2	31.0
61	Blue Star	3.4	2.4	1.8	2.5	3.5	1.7	21.1	21.9
62	Orchid Chemicals	10.9	0.8	2.5	13.8	0.3	2.7	20.7	119.3
63	Bausch & Lomb	16.5	1.2	1.0	n.a.	0.5	2.7	20.2	411.6
64	German Remedies	15.5	1.7	1.1	6.8	1.7	1.8	19.2	35.2
65	BHEL	8.7	2.0	1.0	4.1	1.4	2.2	17.7	31.8
66	Fulford (India)	3.2	4.7	1.6	1.6	4.5	1.9	17.3	29.9
67	Cipla	19.5	1.2	1.1	6.4	1.5	2.7	16.5	51.0
68	Nestle India	5.6	3.0	1.9	6.6	2.1	1.2	16.4	19.4
69	Henkel Spic (I)	(3.4)	0.9	7.7	n.a.	0.0	4.6	16.2	(7.1)
70	Dr. Reddy's Labs.	13.6	0.8	1.2	15.7	2.0	1.3	15.7	15.5
71	Guj. Gas Company	13.4	1.6	1.5	16.3	1.3	1.8	15.6	20.1
72	Hoechst Marion	4.2	1.9	1.7	2.8	1.6	2.3	15.2	16.7
73	Ranbaxy Labs.	11.7	0.8	1.2	11.3	1.3	2.2	14.7	19.7
74	Sundram Fasteners	9.7	1.2	1.7	5.3	1.5	2.8	13.5	29.6
75	P&G Hygiene	14.1	2.5	1.1	6.3	1.9	1.2	13.4	29.7
76	Exide Industries	6.2	1.0	2.6	4.0	1.1	2.6	13.4	38.1
77	Knoll Pharma	9.1	2.3	1.0	5.1	2.8	1.7	13.0	25.6
78	Morepen Labs.	13.7	0.7	2.1	16.1	1.3	1.2	12.5	53.4
79	Jagatjit Industries	5.0	0.9	3.3	3.8	1.2	4.5	11.5	15.3
80	Birla 3M	6.6	1.6	1.7	1.8	0.9	1.2	11.5	73.6
81	IPCL	0.9	0.6	1.9	5.3	0.6	2.4	11.2	(19.9)
82	Kodak India	1.1	2.3	1.8	2.2	4.0	2.2	10.9	11.0
83	Sundaram Clayton	9.9	1.2	1.1	5.3	1.3	1.6	10.9	28.3
84	Essel Packaging	17.2	0.5	1.3	21.8	0.7	2.5	10.4	24.3
85	Goodyear India	3.1	3.6	0.9	1.3	3.1	1.5	9.7	35.9
86	Widia India	13.9	1.1	1.2	6.4	1.3	2.0	9.7	34.1
87	Parke Davis (I)	3.7	2.1	2.5	5.2	4.5	1.3	9.6	(0.4)
88	Dabur India	5.7	1.7	2.0	4.6	1.4	1.9	9.5	28.7
89	Hind Lever Chem.	4.7	4.8	1.3	1.4	14.2	2.0	9.3	68.0
90	Bajaj Auto	18.2	1.0	1.1	11.0	1.9	1.4	8.6	30.0
91	Insilco	10.0	0.6	1.4	n.a.	0.3	3.1	7.5	36.2
92	Wyeth Lederle	12.0	2.0	1.0	7.4	2.9	1.2	7.3	23.0
93	Vesuvius India	20.9	0.9	1.1	n.a.	0.0	0.1	6.9	119.1
94	Castrol India	19.1	2.1	1.0	10.1	2.0	1.3	6.5	34.6
95	Nicholas Piramal	11.5	0.9	1.4	15.9	0.5	1.4	6.0	21.8
96	ICI (India)	7.8	1.8	1.5	5.4	2.6	1.6	5.7	11.7
97	Bata India	3.5	2.0	2.1	4.3	3.0	1.6	5.3	4.0
98	Cummins India	11.5	1.5	1.0	8.4	1.9	1.5	4.9	16.9
99	Reckitt & Colman	7.7	2.8	1.1	7.5	2.1	1.0	4.9	19.1
100	Mahindra & Mahindra	6.8	1.2	1.9	4.8	1.5	1.9	4.0	27.5

# 'MOST-Inquire 100' ~ Wealth Creators (Alphabetically listed)

## Appendix II

Inquire Rank	Company Name	Wealth Created		P/E		PE/G *	RoE		Latest P/E (02.02.2000)
		Amount Rs.Cr.	CAGR %	1999	1994	1994	1999	1994	
24	Abbott Labs (I)	319.1	40.4	n.a.	32.6	(1.1)	2.7	20.4	526.3
8	Amara Raja Batteries	254.9	75.9	6.7	10.2	0.1	35.6	22.0	4.6
65	BHEL	3962.2	17.7	10.7	13.5	0.4	17.7	12.0	8.6
90	Bajaj Auto	3036.4	8.6	13.6	27.6	0.9	20.0	29.8	8.2
35	Balaji Indl. Corp	225.2	31.7	52.8	7.6	0.7	4.2	26.5	52.0
97	Bata India	632.0	5.3	59.5	36.9	9.2	14.2	20.7	31.5
63	Bausch & Lomb	199.4	20.2	25.6	(14.1)	0.1	20.9	(55.0)	11.7
45	Berger Paints	122.5	26.8	7.4	7.1	0.1	21.0	15.6	11.8
3	BFL Software	1030.6	117.1	42.7	103.9	0.6	46.9	2.3	42.1
80	Birla 3M	143.5	11.5	41.8	372.2	5.1	17.8	2.1	90.2
61	Blue Star	159.0	21.1	13.9	9.8	0.4	15.4	15.1	34.5
39	Britannia Inds.	1955.2	29.6	68.6	63.8	2.3	26.5	16.2	53.3
31	BurroughsWellcome	716.8	35.1	36.5	30.2	0.9	22.6	13.4	19.6
57	CRISIL	186.3	22.5	23.9	33.5	1.1	24.7	17.5	33.7
38	Cadbury India	1077.0	30.1	60.2	47.1	1.9	13.7	11.4	75.2
40	Carrier Aircon	365.0	29.5	16.9	38.5	0.7	28.5	18.3	10.6
94	Castrol India	3481.8	6.5	29.2	43.7	1.3	40.3	26.1	24.8
67	Cipla	1703.2	16.5	24.3	68.8	1.3	25.5	25.7	67.5
98	Cummins India	300.6	4.9	18.8	32.1	1.9	17.9	24.5	33.6
88	Dabur India	736.9	9.5	37.1	79.0	2.7	19.2	12.0	87.1
21	Digital Equipments	1108.6	43.6	23.4	86.8	0.9	63.9	4.3	95.1
70	Dr. Reddy's Labs.	1339.8	15.7	44.1	30.9	2.0	13.5	42.8	78.0
10	DSQ Software	771.0	60.3	43.3	49.5	0.8	22.5	7.8	71.2
48	E Merck (India)	802.6	25.2	45.2	89.8	2.1	28.4	13.3	37.5
36	Elect. Steel Cast.	196.5	31.2	4.3	8.2	0.1	34.8	13.9	14.5
84	Essel Packaging	163.6	10.4	15.8	17.1	0.7	12.2	40.0	36.3
76	Exide Industries	353.6	13.4	18.4	33.1	0.9	15.6	11.8	19.0
6	Fujitsu ICIM	758.1	88.8	254.8	21.1	0.8	13.8	3.9	880.9
66	Fulford (India)	130.6	17.3	57.5	88.5	3.0	23.9	13.6	42.1
64	German Remedies	366.4	19.2	23.7	46.0	1.3	30.1	20.5	27.6
33	Glaxo (India)	4631.6	33.0	63.3	85.2	1.6	26.8	11.8	45.6
43	Global Tele-Systems	603.8	28.6	12.3	5.0	0.1	22.9	51.5	89.6
59	Godfrey Phillips	508.9	21.3	17.1	23.7	0.8	29.5	26.4	11.5
85	Goodyear India	104.8	9.7	14.9	13.8	0.4	10.4	6.0	19.4
71	Guj. Gas Company	262.3	15.6	18.3	19.8	1.0	32.7	37.5	26.6
17	HCL Infosystems	1693.2	46.3	34.1	14.0	0.6	29.4	19.1	43.2
69	Henkel Spic (I)	285.0	16.2	(86.4)	(15.5)	2.2	(22.6)	(37.8)	n.a.
18	Hero Honda Motor	2952.3	45.8	28.8	35.2	0.7	40.4	25.0	35.9
89	Hind. Lever Chem.	361.2	9.3	15.8	76.5	1.1	28.8	39.2	15.5
32	Hindustan Inks	106.0	34.2	5.9	12.8	0.2	36.4	35.2	13.6
50	Hindustan Lever	34109.6	24.9	56.0	84.4	1.9	47.6	33.0	70.4
72	Hoechst Marion	821.3	15.2	73.6	73.4	4.4	13.7	10.1	112.1
81	IPCL	1178.6	11.2	93.7	13.7	(0.7)	1.0	7.8	97.9
96	ICI (India)	230.3	5.7	14.5	18.7	1.6	21.5	21.9	13.4
15	India Nippon Elec.	142.9	49.4	19.3	15.6	0.5	31.7	38.9	20.3
22	Indian Shaving	1791.1	41.6	123.6	(50.9)	0.2	24.6	(20.2)	159.7
26	Infar (India)	191.7	39.1	38.9	30.8	1.4	23.9	20.0	36.1
5	Information Tech.	880.4	100.0	24.5	2.9	0.1	37.6	26.5	160.1
4	Infosys Tech.	9145.4	101.8	71.5	26.9	0.4	23.5	28.2	362.1
91	Insilco	109.3	7.5	47.6	(13.5)	0.1	8.8	(27.5)	47.9

\* Computed using 1994 P/E & 5-year earnings CAGR between 1994 - '99.

# 'MOST-Inquire 100' ~ Wealth Creators (Contd.)

## Appendix II

Inquire Rank	Company Name	Wealth Created		P/E		PE/G *	RoE		Latest P/E (02.02.2000)
		Amount Rs.Cr.	CAGR %	1999	1994	1994	1999	1994	
52	Intl. Best Foods	117.1	24.3	(121.0)	33.0	(0.2)	(7.2)	11.9	n.a.
54	ITC	15590.6	23.2	37.9	38.6	1.6	28.8	32.0	28.7
79	Jagatjit Inds.	245.6	11.5	21.4	12.1	0.8	14.8	20.6	16.9
77	Knoll Pharma	504.6	13.0	41.9	70.0	2.7	21.0	24.6	32.7
82	Kodak India	106.6	10.9	48.4	25.3	2.3	4.4	18.9	106.0
42	Madras Aluminium	113.9	29.1	2.5	(1.7)	0.0	40.1	19.2	8.8
100	Mahindra & Mahindra	583.7	4.0	10.3	22.8	0.8	15.4	13.4	24.8
34	Mastek	213.1	32.6	34.0	19.9	0.9	24.1	25.2	420.6
27	Monsanto Chem.	233.2	39.0	25.6	33.0	0.6	32.3	33.2	20.3
78	Morepen Labs.	128.1	12.5	8.0	15.1	0.3	19.0	25.9	41.3
23	Moser Baer (I)	178.0	40.9	9.6	3.8	0.0	25.2	26.9	46.2
58	Munjal Showa	100.1	22.4	13.2	25.0	0.6	22.0	15.6	10.8
30	Navneet Publications	335.2	37.2	20.4	9.7	0.2	25.2	34.1	47.0
68	Nestle India	2883.6	16.4	64.4	76.2	3.9	31.2	15.9	48.3
95	Nicholas Piramal	703.3	6.0	25.5	25.0	1.1	14.7	10.6	39.0
7	NIFT	4422.2	80.5	44.6	30.8	0.6	37.9	29.2	73.1
47	Novartis India	2145.0	26.5	39.8	55.2	1.4	26.9	14.9	55.4
62	Orchid Chemicals	143.9	20.7	7.6	84.8	0.7	20.9	10.4	17.8
55	OTIS Elevator	329.8	22.8	24.4	50.9	1.2	24.2	8.1	25.9
75	P&G Hygiene	973.0	13.4	38.1	77.5	2.6	40.6	14.2	31.0
87	Parke Davis (I)	188.8	9.6	71.6	43.5	(117.4)	19.4	29.3	77.5
9	Pentafour Software	2133.3	62.5	21.0	10.7	0.1	21.5	35.4	53.2
46	Pfizer	1024.8	26.7	120.9	49.7	10.5	15.2	23.2	117.9
49	Pidilite Inds.	361.6	25.1	14.5	20.8	0.6	27.7	17.8	28.0
29	PSI Data System	421.1	38.2	82.3	39.3	1.8	54.0	42.5	243.4
19	Punjab Tractors	2391.8	44.7	22.4	25.6	0.5	42.1	21.7	16.7
25	Raasi Cement	354.5	39.5	21.1	34.1	0.5	16.8	4.2	68.0
73	Ranbaxy Labs.	4650.1	14.7	49.4	38.3	1.9	11.1	31.7	73.1
99	Reckitt & Colman	399.9	4.9	51.2	93.7	4.9	23.8	16.1	32.6
41	Rhone-Poulenc (I)	418.1	29.4	20.0	148.1	1.7	38.5	7.2	19.2
16	Rolta India	912.6	48.0	25.1	15.7	0.3	24.3	10.2	70.3
1	Satyam Computer	4141.5	136.9	58.0	14.8	0.2	43.6	12.1	215.1
13	Silverline Inds.	1212.4	53.8	33.3	20.8	0.5	27.7	18.7	155.7
60	Smith. B. Consumer	1955.9	21.2	38.1	53.6	1.7	35.4	30.6	28.5
51	Smith. B. Pharma	1059.2	24.5	47.2	48.1	1.9	22.4	17.4	27.2
83	Sundaram Clayton	106.9	10.9	15.1	28.9	1.0	12.5	10.6	41.1
74	Sundram Fasteners	167.4	13.5	12.4	24.5	0.8	19.9	23.1	25.8
12	Swaraj Engines	312.1	54.6	22.4	15.7	0.3	49.1	37.5	16.9
20	Tata Elxsi	332.6	44.2	145.4	(9.5)	0.1	8.8	(68.8)	250.7
14	Tata Infotech	1782.0	49.6	44.8	21.7	0.8	29.4	28.7	26.9
44	Thomas Cook (I)	906.5	27.4	72.0	46.4	2.4	24.3	35.4	37.7
28	TVS Electronics	116.8	38.8	108.8	9.9	(0.9)	4.5	21.0	296.3
53	TVS Suzuki	748.3	24.0	13.6	20.5	0.6	33.0	65.7	14.2
93	Vesuvius India	111.3	6.9	22.2	514.6	4.3	21.5	1.5	15.6
11	Vikas WSP	360.2	59.1	9.9	25.2	0.3	38.5	14.0	36.1
56	Wartsila NSD	226.6	22.5	32.1	131.1	1.9	14.0	5.0	21.9
86	Widia India	112.2	9.7	11.8	31.3	0.9	19.3	16.2	11.2
2	Wipro	18158.7	122.8	164.4	42.0	0.6	27.3	16.7	959.5
92	Wyeth Lederle	1102.6	7.3	49.2	21.4	0.9	23.9	25.2	34.5
37	Zee Telefilms	1277.4	30.6	30.7	65.0	1.4	31.9	20.9	387.6

\* Computed using 1994 P/E & 5-year earnings CAGR between 1994 - '99.

## 'MOST-Inquire 100' ~ PEG Table

## Appendix III

The table below indicates the relative PEG one can pay for stocks of companies for varying growth rates (y) leading to recovery of invested capital over a specified period of (x) years.

		PEG table							
		X							
		Years							
		1	2	3	4	5	6	7	8
Growth % Y	10	0.110	0.231	0.364	0.511	0.672	0.849	1.044	1.258
	20	0.060	0.132	0.218	0.322	0.446	0.596	0.775	0.990
	30	0.043	0.100	0.173	0.268	0.392	0.553	0.762	1.034
	40	0.035	0.084	0.153	0.249	0.383	0.571	0.835	1.204
	50	0.030	0.075	0.143	0.244	0.396	0.623	0.965	1.478
	60	0.027	0.069	0.138	0.247	0.422	0.701	1.149	1.864
	70	0.024	0.066	0.136	0.255	0.458	0.803	1.389	2.385
	80	0.023	0.063	0.136	0.267	0.503	0.928	1.694	3.071
	90	0.021	0.061	0.137	0.282	0.557	1.080	2.073	3.960
	100	0.020	0.060	0.140	0.300	0.620	1.260	2.540	5.100

### Sample calculation

Assume a stock with Re. 1 in earnings bought at a P/E ratio of 50. The initial investment outlay *i.e.* the price paid for the stock is Rs. 50.

Assume further, that the earnings for the stock compound at the rate of 50% p.a. over the next 5 years. The stock is hence purchased at a PEG of 1.0 (*i.e.* PE=50, earnings growth rate = 50%).

The cumulative value of such compounded earnings stream at the end of 5 years equates to Rs. 19.60.

Thus, the stock if purchased at Rs. 19.60 would result in capital recovery in 5 years. The PEG at which the stock should be bought is 0.396 (*i.e.* 19.6/50). Similarly, stocks which can be expected to grow at 100% p.a. can be bought upto a PEG of 0.62, for capital recovery in the same period of 5 years.

The table below indicates the 5-year forward PE for stocks bought at current PE(x) for earnings growth (y)

		PE table									
		X									
		10	20	30	40	50	60	70	80	90	100
Growth % Y	10	6.21	12.42	18.63	24.84	31.05	37.26	43.46	49.67	55.88	62.09
	20	4.02	8.04	12.06	16.08	20.09	24.11	28.13	32.15	36.17	40.19
	30	2.69	5.39	8.08	10.77	13.47	16.16	18.85	21.55	24.24	26.93
	40	1.86	3.72	5.58	7.44	9.30	11.16	13.02	14.87	16.73	18.59
	50	1.32	2.63	3.95	5.27	6.58	7.90	9.22	10.53	11.85	13.17
	60	0.95	1.91	2.86	3.81	4.77	5.72	6.68	7.63	8.58	9.54
	70	0.70	1.41	2.11	2.82	3.52	4.23	4.93	5.63	6.34	7.04
	80	0.53	1.06	1.59	2.12	2.65	3.18	3.70	4.23	4.76	5.29
	90	0.40	0.81	1.21	1.62	2.02	2.42	2.83	3.23	3.63	4.04
	100	0.31	0.63	0.94	1.25	1.56	1.88	2.19	2.50	2.81	3.13



## N O T E S

Buy : > 15%      Add : 5% to 15%      Hold : - 5% to + 5%      Reduce : - 15% to - 5%      Sell : < - 15%      (all relative to BSE Sensex)

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