Core Financial Accounting (FADM)

Professor: Mark Finn

Kellogg School of Management Indian School of Business

i) What is accounting?

Accounting: A formal system for communicating financial information about economic entities

Constituencies for Accounting Information

- Interested users: shareholders, creditors, customers, vendors, employees, governments, communities
- Financial vs. Managerial (also Tax and Auditing)
- Entities: A spectrum from large publicly-held corporations to not-for-profits

- I-GAAP: Indian generally accepted accounting principles
- US GAAP: SEC ⇒ FASB (Financial Accounting Standards Board)
- International Accounting Standards Board (IASB): International Financial Reporting Standards (IFRS)
- Auditing and enforcement

Communicating financial information

- "the language of business" Accounting vs. Bookkeeping
- Connections among financial and non-financial and sustainability reporting

i) What is accounting?

ccounting: A formal system for communicating financial information about economic entities

India: IFRS compliant standards by 2011.

US: Fully interchangeability between IFRS and US GAAP by 2016. (US firms would be able to use IFRS accounting in lieu of US accounting in US capital markets.)

Formal System

- I-GAAP: Indian generally accepted accounting principles
 US GAAP: SEC ⇒ FASB (Financial Accounting Standards Board)
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 | Conducte Board (IASB): International Financial Accounting Standards Board)
- International Accounting Standards Board (IASB): International Financial Reporting Standards (IFRS)
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The New York Times

Sentember 6 2006

Report Estimates the Costs of a Stock Options Scandal

WASHINGTON, Sept. 5 - A new study estimates that the stock options backdating scandal may cost shareholders hundreds of millions of dollars. The study was released on the eve of two Senate committee hearings that plan to examine the scope of the widening investigation into improper options practices.

Three researchers at the University of Michigan estimated that backdating stock options between 2000 and 2004 helped sweeten the average executive's pay by more than 1.25 percent, or about \$600,000. But the fallout from the recent options investigations has caused those executives' companies to fall in market value by an average of 8 percent, or \$500 million each.

"For about \$600,000 a year to the executives, shareholders are being put at risk to the tune of \$500 million," the study concludes

\$600,000 of inappropriate compensation to senior executives

\$500,000,000 decline in market value

Information and Financial Markets

- Regular flow of information is essential to the functioning of financial markets
- · Japanese measures to stop stock market slide "financial institutions would be permitted to withhold negative financial data from the public in the hope of easing worries about the system's fundamental health" (NYTimes August 19, 1992)
- Financial markets depend on information that is timely and relevant and objective.
- Companies, investors, and regulators adopt policies to speed access to information and make the access fairer to all market participants.

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Rational Expectations: People may not have complete information about a company, but they will make intelligent forecasts of what they don't know.

speed

and

market

participants.

Information and Financial Markets

• Regular flow of information is essential to the functioning of financial markets

The Efficient Markets Hypothesis: Market efficiency is defined with respect to information. In efficient financial markets, profits come mainly from gaining access to information not possessed by other traders.

easing Times

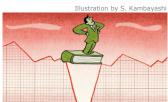
- Financial markets depend on information that is timely and relevant and objective.
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All's fair

From The Economist print edition

The crisis and fair-value accounting





SO CONTROVERSIAL has accounting become that even John McCain, a man not known for his interest in balance sheets, has an opinion. The Republican candidate for the American presidency thinks that "fair value" rules may be "exacerbating the credit crunch". His voice is part of a chorus of criticism against mark-to-market accounting, which forces banks to value assets at the estimated

price they would fetch if sold now, rather than at historic cost. Some fear that accounting dogma has caused a cycle of falling asset prices and forced sales that endangers financial stability. The fate of Lehman Brothers and American International Group will have strengthened their conviction.



washingtonpost.com

SEC Loosens Accounting Rule Banks Blame for Crisis

Firms Granted Leeway to Value Complex Mortgage-Related Investment

By Carrie Johnson Washington Post Staff Writer

Tuesday, September 30, 2008; 6:24 PM

Under intense political pressure, regulators for securities and accounting standards this afternoon issued what they called a "clarification" to provisions that have come under fire from bank executives and some lawmakers for contributing to the credit crisis.

Regulators said that the new guidance will help companies figure out the value of complex mortgage-related investments at a time when there are few trading partners willing to purchase them.

Under an accounting standard that took effect last November, businesses are required to employ "fair value" accounting, in which they put a price tag on their assets even if they do not intend to sell them right away.







ii) Financial statement components: Dr. Reddy's 2007-08 Annual Report

• Balance Sheet - "Consolidated Balance Sheets"

Assets = Liabilities + Shareholders' Equity

• Income Statement - "Consolidated Statements of Operation"

Revenues - Expenses = Net Income

Consolidated Statements of Cash Flows

Activities: Operating, Investing, Financing

- Auditor's and Management's reports
 Management Discussion and Analysis
 Footnotes

	DR. REDDY'S LABORATORIES LIMITED AND SUBSIDIARIES CONSOLIDATED BALANCE SHEETS		
(in thousands, except share and per share	data)		
	2007	As of March 31 2008	
ASSETS			
Current assets:			
Cash and cash equivalents	Rs.17,981,447		
Investment securities	15,325		
Restricted cash	606,159		
Accounts receivable, net of allowances	7,518,878		
Inventories	7,545,580		
Deferred income taxes and deferred charges	557,792		
Due from related parties	145,086		
Other current assets	3,096,129		
Total current assets	37,466,396		
Property, plant and equipment, net	12,427,798		
Due from related parties	4,856		
Investment securities	1,089,950		
Investment in affiliates	225,905	237,05	
Goodwill	15,540,688	16,978,91	
Intangible assets, net	18,888,413	16,622,63	
Other assets	275,097	213,810	
Total assets	Rs.85.919.103	Rs.85,445,056	

LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Borrowings from banks	Rs. 3,212,676	Rs 4,862,709
Current portion of long-term debt	3,670,266	1,814,806
Trade accounts payable	4,754,978	
Due to related parties	871	
Accrued expenses	3,958,539	4,155,252
Other current liabilities	2,936,103	
Total current liabilities	18,533,433	19,392,264
Long-term debt, excluding current portion	17,870,983	12,864,163
Deferred income taxes	7,556,228	5,642,412
Other liabilities	369,758	479,633
Total liabilities	Rs.44,330,402	Rs 38,378,472
Minority interest	10,473	_
Stockholders' equity:		
Equity shares at Rs.5 par value; 200,000,000 shares authorized; Issued and outstandin 167,912,180 shares and 168,172,746 shares as of March 31, 2007 and March 31,	g;	
2008, respectively	Rs. 839,561	
Additional paid-in capital	19,908,837	20,036,473
Equity options outstanding	564,937	
Retained earnings	20,091,135	24,031,890
Treasury shares held by a consolidated trust: 82,800 shares	(4,882)	
Accumulated other comprehensive income	178,640	
Total stockholders' equity	41,578,228	47,066,584
Total liabilities and stockholders' equity	Rs.85,919,103	Rs.85,445,056
Total stockholders' equity Total liabilities and stockholders' equity	41,578,228 Rs.85,919,103	

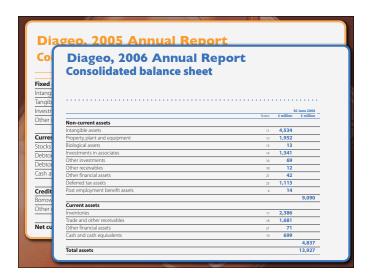
		ONS	
(in thousands, except share and	per snare data)		nded March 31.
	2006	2007	2008
Revenues:			
Product sales, net of allowances for sales returns (includes excise duties of Rs.1,153,273, Rs.779,390 and Rs. 558,308 for the years			
ended March 31, 2006, 2007 and 2008, respectively)		Rs. 64,185,378	
Service Income	142,317	882,172	740,23
License fees	47,521	27,542	
	24,267,047	65,095,092	50,005,62
Cost of revenues	12,417,413	34,219,539	24,597,58
Gross profit	11,849,634	30,875,553	25,408,03
Operating expenses:			
Selling, general and administrative expenses	8,028,884	14,051,137	
Research and development expenses, net	2,152,950	2,462,660	
Amortization expenses	419,867	1,570,894	
Write-down of intangible assets	_	1,770,221	
Impairment of goodwill	_	_	90,43
Foreign exchange (gain)/loss, net	126,342	(136,753)	
Other operating (income)/expenses, net	(327,688)		
Total operating expenses:	10,400,355	19,544,101	22,050,33
Operating income	1,449,279	11,331,452	3,357,70
Equity in (loss) / income of affiliates, net	(88,235)		
Other income/(expense), net	526,279		
Income before income taxes and minority interest	1,887,323	10,500,275	3,438,14
Income taxes (expense)/benefit	(258,390)		
Minority interest	(76)	3,499	10,47
Net income	Rs. 1.628.857	Rs. 9.326.838	Rs. 4.678.04

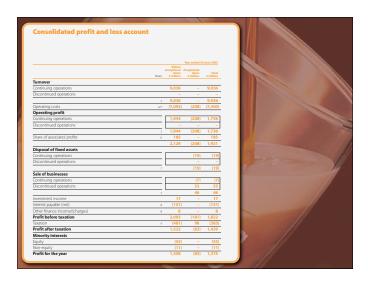
(IN THOUSA)	NDS)			
	Fiscal Year ended March 31,			
	_	2006	2007	2008
Cash flows from operating activities:				
Net income	Rs	1,628,857	Rs. 9,326,838	Rs. 4,678,04
Adjustments to reconcile net income to net cash from operating activities:				
Deferred tax benefit		(55,157)	(1.103.598)	(2,351,12)
(Gain)/loss on sale of available for sale securities, net		3,924	(869)	(110.26)
Depreciation and amortization		1.567,090	3,010,192	3,388,30
Write-down of intangible assets			1,770,221	2,488,51
Impairment of goodwill		_	_	90.43
Loss/(gain) on sale of property, plant and equipment		(320,361)	(67,039)	7.62
Provision for doubtful accounts receivable		33,629	151,620	226,93
Allowance for sales returns		239,462	1,325,981	164,29
Inventory write-downs		100,783	306,235	327,99
Equity in loss/(income) of affiliates, net		88,235	62,676	(1,78
Unrealized foreign exchange (gain)/loss, net		67,650	(97,232)	225,89
Stock based compensation		162,249	175,380	257,78
Minority interest		76	(3,499)	(10,47
Changes in operating assets and liabilities:				
Accounts receivable		(781,607)	(3,032,373)	608,25
Inventories		(1,851,724)	(995,342)	(3,908,73
Other assets		(1,123,076)	(371,099)	1,654,00
Due to/from related parties, net		15,223	(48,206)	88,72
Trade accounts payable		1,564,454	1,045,753	1,076,15
Accrued expenses		243,625	825,207	134,84
Other liabilities		113,201	(320,250)	(2,902,57
Net cash provided by operating activities		1.696.533	11.960.596	6,122,62

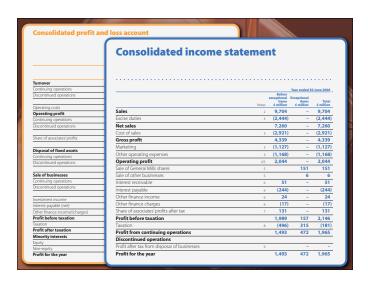
R REDDY'S LARORATORIES LIMITED	-		Dropauc
III NEDO I O ENDONALONIES ENVILED		/ I) R	K EDDY'S
Cash flows from investing activities:			
Restricted cash	(6,017,219)	5,468,926	583,003
Expenditure on property, plant and equipment	(1,873,268)	(4,477,049)	(6,348,085)
Proceeds from sale of property, plant and equipment	691,273	84,061	55,032
Investment in affiliates	(100,800)	(158,474)	_
Purchase of investment securities	(5,074,184)	(331,000)	(15,859,878)
Proceeds from sale of investment securities	5,274,899	331,869	12,477,799
Expenditure on intangible assets	(41,517)	(259,198)	(421,503)
Cash paid towards contingent consideration	(114,244)	(66,677)	(86,319)
Cash paid for acquisition, net of cash acquired	(27,322,762)	(156,076)	_
Net cash provided by/(used in) investing activities	(34,577,822)	436,382	(9,599,951)
		,	
Cash flows from financing activities:			
Proceeds from issuance of equity shares	73,639	10,029,571	15,220
Proceeds from minority interest shareholder	_	10,473	_
Proceeds from bank borrowings	6,322,206	2,212,983	3,554,417
Repayment of bank borrowings	_	(8,083,745)	(1,941,458)
Proceeds from long-term debt	21,598,301	_	_
Repayment of long-term debt	(6,577)	(1,888,540)	(7,718,506)
Debt issuance costs	(340,243)	(89,565)	_
Dividends	(436,368)	(437,497)	(737,287)
Net cash provided by/(used in) financing activities	27,210,958	1,753,680	(6,827,614
Net increase/(decrease) in cash and cash equivalents during the year	(5,670,331)	14,150,658	(10,304,938)
	(0,010,001)	- 1,100,000	(10,001,700,
Effect of exchange rate changes on cash and cash equivalents, net	95,104	118,152	(278,224
Cash and cash equivalents at the beginning of the year	9,287,864	3,712,637	17,981,447
Cash and cash equivalents at the end of the year	Rs. 3.712.637	Rs.17,981,447	Rs. 7,398,285
cash and cash equivalents at the end of the year	250. 5,712,057	140.17,201,777	1,370,203











Date: July 14, 2008

Topical Course Schedule

Session	Subject	Text Readings	Suggested Problems
1	Introduction to Financial Reporting; the Balance Sheet	Ch. 1; Begin Ch. 3	1-26, 1-29, 1-38, 1-42, 2-50
2	The Income Statement	Ch. 2; Finish Ch.3	2-32, 2-54, 3-18, 3-32, 3-33, 3-36, 3-45
3	The Income Statement: Adjusting Entries, Geography	Ch. 4; Ch.12, pp.557-559	4-22, 4-24, 4-31, 4-35, 12-35, 12-36, 12-41
4	Statement of Cash Flows, incl. transitional topics	Ch. 8, pp.350-355, Ch.10 pp.462-465 Begin Ch.5	8-49, 8-50,10-41, 10-60, 10-64, 5-40
5	Finish Stmt. of Cash Flows; Revenue Recognition	Finish Ch. 5	5-45, 5-52, 5-59, 8-52
6	Accounts Receivable and Allowances	Ch. 6	6-35, 6-45, 6-51, 6-56, 6-66, 9-33
7	Mfg. Inventory Liabilities: Bonds	Ch. 7 Appendix Begin Ch. 9	7.85, 9-40, 9-42, 9-43, 9-61, 9-62
8	Liabilities: Leases, Deferred Taxes, Contingent Liabilities	Finish Ch. 9	9-37, 9.65, 9.66, 9.68, 9-70, 9-71
9	Begin Investments	Begin Ch. 11	11-27, 11-28, 11-31, 11-32, 11-53
10	Finish Investments; Shareholders' Equity – Share- based compensation	Ch. 11 Ch.10, pp.452-454	11-43, 11-44, 11-46, 11-48, 10-67, 10-56, 10-72

Course Requirements and Grading

Midterm - 25% of grade Final Examination – 40% of grade On-line (Blackboard) Quizzes - 10% of grade Group Assignment – 25% of grade (May 30th)

Materials

Horngren, Sundem, Elliott, and Philbrick. Introduction to Financial Accounting. 9th Edition. Prentice Hall, 2006

Handouts and overheads

Supplement

Narayanaswamy, R. H. Accounting: A Managerial Perspective. 2nd Edition. Prentice Hall of India, 2005

Help with Problems

Solutions Manual TA Help Sessions - TBA E-mail Professor's Office Hours

Classroom Organization

Lecture format Preparation and participation Attendance & Punctuality No laptops; cell phones off

Common Questions from ISB Students

Pace and level of difficulty Comparisons between Kellogg and the ISB Indian vs. non-Indian content:

Special Option for Chartered Accountants

Small group project on advanced topic Due date of final exam Non-CAs must have CA-level background

Common Questions from ISB Students

Pace and level of difficulty Comparisons between Kellogg and the ISB Indian vs. non-Indian content:

CA Grade Distribution in the Past:

A grades: 9% greater with CA option A- grades: 10% less with CA option B or below: 1% greater with CA option

Course Requirements and Grading

Midterm - 25% of grade Final Examination – 40% of grade On-line (Blackboard) Quizzes - 10% of grade Group Assignment – 25% of grade (May 29th)

Materials

Horngren, Sundem, Elliott, and Philbrick. Introduction to Financial Accounting. 9th Edition. Prentice Hall, 2006

Handouts and overheads

Supplement

Narayanaswamy, R. H. Accounting: A Managerial Perspective. 2nd Edition. Prentice Hall of India, 2005

I) The Balance Sheet Equation

Assets = Liabilities + Shareholders' Equity

Assets: Resources providing future economic benefits - generating future cash inflows or reducing future cash outflows.

Examples from Dr. Reddy's Laboratories:

- Cash and cash equivalents
- Accounts receivable
- Inventories
- Property, plant, and equipment
- · Trademarks
- Core technology rights
- Marketing know-how
- Goodwill

Liabilities: Probable future sacrifice of economic benefits. Often, obligations to pay definite amounts at particular points in time.

Examples from Dr. Reddy's Laboratories:

- Trade accounts payable
- Borrowings from banks
- Gratuity benefits (defined benefit pension plan)

II) Asset Valuation and Recognition

Replacement Cost Acquisition (Historical) Cost vs. Market Value Net Realizable Value

Replacement Cost - What you can buy the asset for at current prices...

- Diageo (UK): Guinness brewery in Dublin
- Sinopec (China): oil refineries
- China Eastern (China): aircraft

Net Realizable Value - What you sell the asset for at current prices

- GMM Grammy (Thailand music company): tapes, CDs, magazines, books Louis Vuitton Moët Hennessy (France): vines for champagnes, cognacs, and
- other wines

Valuation Modeling:

- Morgan Stanley (US): derivative securities
- Infosys (India): corporate brand and human resources

II) Asset Valuation and Recognition (cont'd.)

Asset recognition under acquisition cost:

- Past transaction or exchange
- Ability to quantify future benefits
- Examples of assets often failing to meet the accountant's test:
 - Research and development **\lambda**
 - Brand names
 - Other comparative advantages developed "in house"

Questioning the relevance of acquisition costs: Brand and human resource accounting in India

- Infosys, Satyam Computers, Bharat Heavy Electricals Limited (BHEL)
- Infosys uses Interbrand, a brand equity valuation specialist
- Does not need an explicit link to past transactions

Questioning the *reliability* of fair value accounting

- Enron: market value accounting for energy contracts
- Royal Dutch Shell: overestimated the fair value of oil reserves in 2003.
- New Century Financial Corporation (first prominent collapse of the subprime crisis): Due complexities of bankruptcy accounting and fair value accounting for impaired assets, "it is unlikely that the Company will ever be able to file its financial statements." SEC Form 12b-25, Notification of Late Filing.

Intangible assets that could be acquired or home grown...

Market-related intangible assets:

- Trademarks, tradenames
 Service marks, collective marks, certification marks Trade dress (unique color, shape or package design)
 Wewspaper mastheads
- 5. Internet domain names
- 6. Noncompetition agreements

Customer-related intangible assets:

- Customer lists
- Order or production backlog
- 3. Customer contracts and related customer
- relationships
 4. Noncontractual customer relationships

Artistic-related intangible assets:

- Plays, operas and ballets
- Books, magazines, newspapers, literary works
 Musical works such as compositions, song lyrics, advertising jingles
- Pictures and photographs
 Video and audiovisual material, including motion pictures, music videos, and television programs

ontract-based intangible assets:

- . Licensing, royalty, standstill agreements
- Advertising, construction, management, service, or supply contracts
 Lease agreements
- Construction permits 5. Franchise agreements
- Operating and broadcast rights
 Use rights such as landing, drilling, water, mineral,
- timber cutting and route authorities 8. Servicing contracts, such as mortgage servicing
- contracts

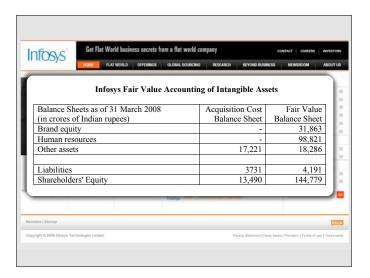
 9. Employment contracts

- Technology-based intangible assets:
 1. Patented technology
 2. Computer software and mask works
- 3. Unpatented technology
- 4. Databases, including title plants
- 5. Trade secrets, including secret formulas, processes,

Two Fundamental Arguments **Against Acquisition Cost Accounting**

- Acquisition costs do not depict current economic value.
- Because acquisition costs require a past transaction or exchange, they tend to ignore homegrown intangible assets

Traditional defense: Companies are assumed to be "going concerns" that will be in business long enough to realize increases in asset values as higher profits.



The dichotomy in accounting between human and non-human capital is fundam in the books and reported in the financial statements, whereas the former is igno inevitably leads to the recognition of human capital as one of the several forms	red by accountants. The definition of wealth as a so	ource of incor
We have used the Lev & Schwartz model to compute the value of human resound of employees and on the following assumptions: a) employee compensation i abroad, b) the incremental earnings based on group / age have been considere capital of 13.32% (previous year – 14.97%).	tes. The evaluation is based on the present value of includes all direct and indirect benefits earned bot d, and c) the future earnings have been discounte	future earnin th in India a
	in Rs. crore, uni	less stated otherw
Employees (No.)		
Software professionals	85,013	68,15
Support	6,174	4,08
Total	91,187	72,24
Value of human resources		
Software professionals	92,331	53,59
Support	6,490	3,86
Total	98,821	57,45
Total income	16,692	13,89
Total employee cost	8,878	7,11
Value-added	14,820	11,87
Net profits excluding exceptional items	4,659	3,86
Ratios		
Value of human resources per employee	1.08	0.8
Total income / human resources value (ratio)	0.17	0.2
Employee cost / human resources value (%)	9.0	12.
Value-added / human resources value (ratio)	0.15	0.2
Return on human resources value (%)	4.7	6

The Economic Times Online
Printed from economictimes.indiatimes.com > News By Industry > Infotech> Software Hey Infosys guys! Together you are worth \$6.4 bn R SUBFAMANYAM

TIMES NEWS NETWORK[SUNDAY, MAY 15, 2005 01:58 05, AM]

Sign in to earn Indiatimes points

BANGALORE: After brand valuations, it is the valuation of the workforce that is catching on. People, after all, are as important an asset as the brand. The 36,750 employees of the leading software firm <u>Infosys Technologies</u> have been valued at Rs 28,334 crore (\$6.4-billion). In its annual report for 2004-05, the company has reported a <u>software</u> delivery staff of 34,747 valued at Rs 26,550 crore and 2003 support staff value at Rs 1,784 crore. In the previous year, Infosys had valued its human capital at Rs 21,139 crore. It then had 25,634 employees, comprising of 24,110 software staff and 1,524 support personnel. Infosys revenue from software in 2005 was Rs 7129.65 crore, while its total employee cost was Rs 3539.11 crore.

Infosys has adopted the Lev & Schwartz model to compute the value of human resources. In knowledge-based industry such as the software industry, human capital is the most vital asset.

There are other models to value human resources. The Lev & Schwartz model is more monetary-centric and is based on the likely future earnings of an employee till his retirement.

Get Flat World business secrets from a flat world company Infosys Brand valuation Profit before interest and tax Less Non-brand income Adjusted profit before tax Inflation factor Present value of brand profits Weightage factor Weighted average profits Remuneration of capital Brand-related profits Tax 1.000 4,006 2,529 1.156 2,924 1,065 Brand earning Brand multiple Brand value ALLE

The Economic Times Online Printed from economictimes.indiatimes.com > News By Industry > Infotech> Software

Infosys marketcap & brand value double in '05 fiscal

TIMES NEWS NETWORK[MONDAY, MAY 16, 2005 01:34:39 AM]

TIMES NEWS NETWORK[MONDAY, MAY 14, 2000 0134:39 AM]

Sign In to earn indiatimes points

BANGALORE: Infosys saw its brand value and market capitalisation close to double during the recently
concluded fiscal. Brand value was placed at Rs 14,153 crore(\$3.24 billion) for the year ended March 31,
2005 compared to Rs 8,185 crore(\$1.81 billion) for FY '04 and Rs 7,488 crore (\$1.71 billion) for FY '03,
according to the company's annual report for FY 2004-05.

The company's market capitalisation (after the liberal 3:1 bonus) saw this figure stand at Rs 61,073 crore(over \$14 billion) against Rs 32,909 crore(\$7.54 billion) representing a year on year growth of 85,58%. Market capitalisation in FY '03 stood at Rs 26,847 crore(\$6.15 billion). Interestingly enough, the m-cap in Feb 1993(year when Infosys listed) stood at Rs 31.84 crore!

The central theme of the FY '05 annual report is "Scale" as compared to "New games, new rules" in FY '04. On the theme, the annual report has this to say." For companies scaling up is vital for longevity and prosperity. Employees need the growth to expand their horizons and career. In the IT industry scale is non-negotiable. The question is how best and how quickly we can scale."

The report speaking of the company's several multi-million dollar clients says: "Large accounts have been our engines of growth. But they have not happened. Deliberate action and concerted action have made them possible."