



*EdelRank: Ranking for best accounting and disclosure practices (on a scale of 1-10 from best to worst): Refer Annexure-A for details*

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## Market Data

52-week range (INR): 1,188/719

Share in issue (mn): 978.6

M cap (INR bn/USD mn): 810/19,344

Avg. Daily vol. BSE ('000): 1,419.5

## Share Holding Pattern (%)

Promoters : 76.4

MFs, FIs & Banks : 6.3

FIIIs : 11.2

Others : 6.1

## Operating efficiency the key

- ROAE (adjusted) at 45.8% whereas return on net operating assets (RNOA) at 52.9% (refer ROE analyser for details).
- Revenues for FY08 jumped to INR 228.6 bn from INR 186.8 bn in FY07 (Y-o-Y growth of 22.3%) whereas PAT increased from INR 42.1 bn to INR 50.3 bn.
- Share of revenue from offshore business in FY08 increased to 41.9% (FY07 40.5%).
- Manpower utilization, including trainees improved from 74.7% in FY07 to 75.8% in FY08.

## Proactive hedging mitigated impact of INR appreciation

- Tata Consultancy Services (TCS) enters into various forward and option contracts to manage its exposure to exchange rates, which has helped to mitigate the impact of INR appreciation. Hedging contribution to PBT was at INR 5.3 bn, which is 9% of PBT, compared to INR 0.6 bn during the previous year, which was at 1.3% of PBT.

## Accounting policy and financial highlights

- EBIT margin dropped from 26.1% in FY07 to 25.1% in FY08 and NP margins dropped from 22.3% in FY07 to 21.5% in FY08, mainly on account of INR appreciation, higher employee cost, and higher depreciation charge.
- TCS has opted for early adoption of AS 30 with respect to derivatives accounting. The early adoption of AS 30/31 has resulted in net loss on effective cash flow hedges as on balance sheet date being parked in the reserves of INR 151.5 mn.
- Other income as a percentage of revenue and profit before tax for the current fiscal at 2.1% and 8.3%, respectively, is nearly double in comparison to previous year, which was at 1.2% and 4.6%, respectively.
- Promoters (Tata Sons) have brought in additional funds of INR 1 bn by subscribing 1 bn redeemable preference shares of INR 1 each. The share will be redeemable at par at the end of sixth year and will carry a fixed cumulative dividend of 1% p.a. and variable non cumulative dividend at 1% of the difference between the rate of dividend declared during the year on equity shares and the average rate of dividend declared on equity shares for three years preceding the year of issue of the redeemable preference shares. The annualised dividend yield for the current year works out to 7%.
- Investments have increased by more than 100% from INR 12.6 bn in FY07 to INR 26.1 bn in FY08. As a percentage to net worth, investments increased from 14.2% in FY07 to 21.2% in FY08.

## Higher proportion of SEZ revenue likely to combat impact of STP sunset clause

- For the current year 67% revenues were generated from STP operations and **23% from SEZ operations**. The benefits of tax exemption on profits generated from STP operations will expire in FY10, leading to increase in the company's tax burden. However, TCS has proactively embarked on a plan to build/lease new capacity in special economic zones to shift approximately 50% of the revenue to SEZ operations by 2010.

## Macro economic factors pose worries

- During the year appreciation of INR against major foreign currencies had adversely affected TCS revenues and profitability. Revenues in foreign currencies constituted 90.3% in 2008, whereas expenditure in foreign currencies constituted 49.4% of the total expenditure—providing a relatively narrow natural hedge to the exchange rate risk in the business. Revenues in USD were 57.5% of total revenues.

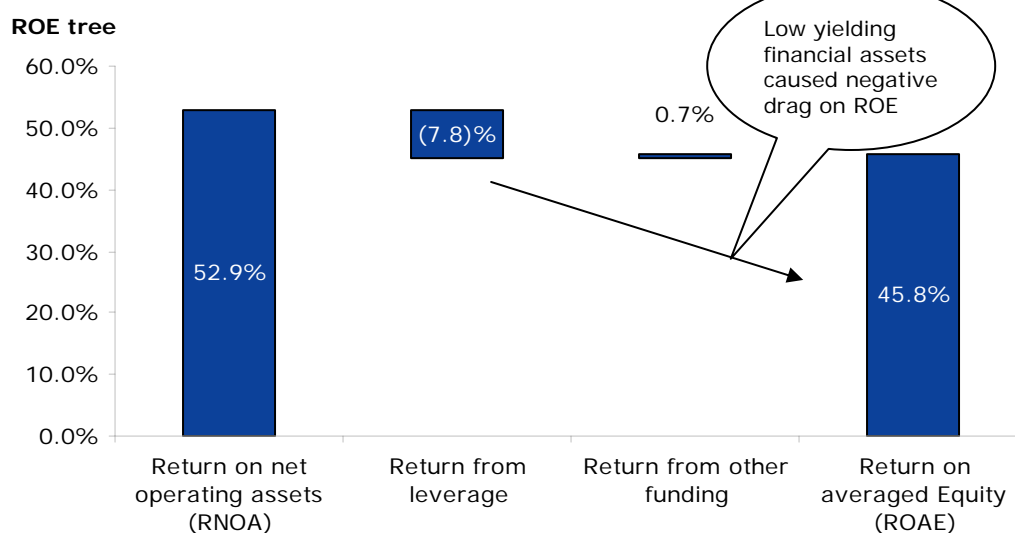
### Profitability analysis (ROE analyser)

ROE analyser analyses the profitability on the scale of operating efficiency and capital allocation efficiency (detailed concept explained in Annexure B).

We have analysed the profitability of TCS for 2007-08 and the results and key findings are given below:

(INR mn)		
ROE analyser	FY 08	FY 08
<b>A. Return on net operating assets (RNOA) (OPATO x NOPAT margin) (%)</b>		<b>52.9</b>
OPATO (Operating asset turnover) (x)	2.5	
NOPAT (Net operating profit after tax) margin (%)	21.3	
<b>B. Return from leverage (FLEV x spread) (%)</b>		<b>(7.8)</b>
FLEV (Financial leverage) (x)	(0.2)	
NFI (Net financing income) (%)	7.0	
Net financial spread (RNOA - NFI) (%)	45.9	
<b>C. Return from other funding (%)</b>		<b>0.7</b>
<b>ROAE derived (A+B+C) (%)</b>		<b>45.8</b>

Source: Company annual report, Edelweiss research



Source: Company annual report, Edelweiss research

*Surplus cash and low yield on financial assets reduces the benefits of high RNOA*

#### RNOA: Major contributor to ROAE

- Healthy NOPAT margins of 21.3%.
- Operating asset efficiency depicted by operating asset turnover at 2.5x.

#### Low returns on financing assets creates a negative drag

- Multiplier effect of negative financial leverage and high financial spread (RNOA much higher than yield on investments).

### Cash flow analysis

Cash flow analyser (Refer Annexure B for details)		(INR mn)
ROE analyser	FY08	FY08
<b>A. Return on net operating assets (RNOA)</b>		<b>52.9</b>
<b>(OPATO x NOPAT margin) (%)</b>		
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<b>ROAE derived (A+B+C) (%)</b>		<b>45.8</b>

Source: Company annual report, Edelweiss research

Note: # Adjusted for direct debit/credit to reserves

- Cash from operating activities:** Cash generated from operations less cash deployed in net operating assets (includes operating cash).
- Cash from financing activities:** Sum of income on non-strategic investments and incremental investments parked in non-strategic investments (includes surplus cash).
- Cash from equity financing:** Represents dividend payment to share holders including tax.

Analysis of shareholders equity		(INR mn)
Particulars	FY08	FY08
<b>Opening shareholders' fund</b>		<b>88,501</b>
<b>Add:</b>		<b>51,573</b>
Profit for the year	50,260	
Preference shares allotted	1,000	
Adjustment on account of adoption of revised AS 15	313	
<b>Less:</b>		<b>17,072</b>
Proposed dividend incl. tax	16,043	
Shares issue expenses	14	
Decrease in hedging reserve	889	
Adjustment in foreign currency translation reserve account	126	
<b>Closing shareholders' fund</b>		<b>123,001</b>

Source: Company annual report, Edelweiss research

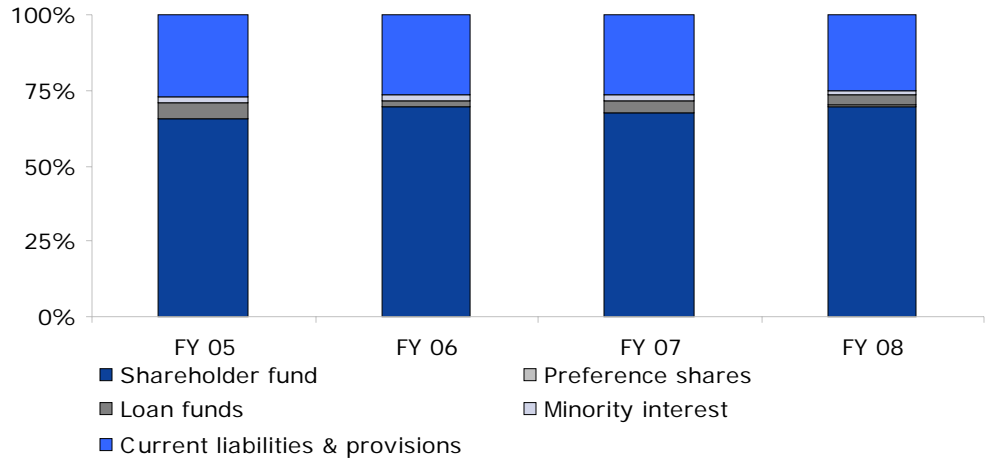
**Balance sheet analysis**

*Healthy, steady and conservative balance sheet with low debt depicts potential of leveraging up for future growth opportunities. Long-term funding by promoters through redeemable preference shares with low yields (which has been linked to equity dividends) indicates lower preference towards debt funding*

*Cash and investments as % of total assets have gone up during the year*

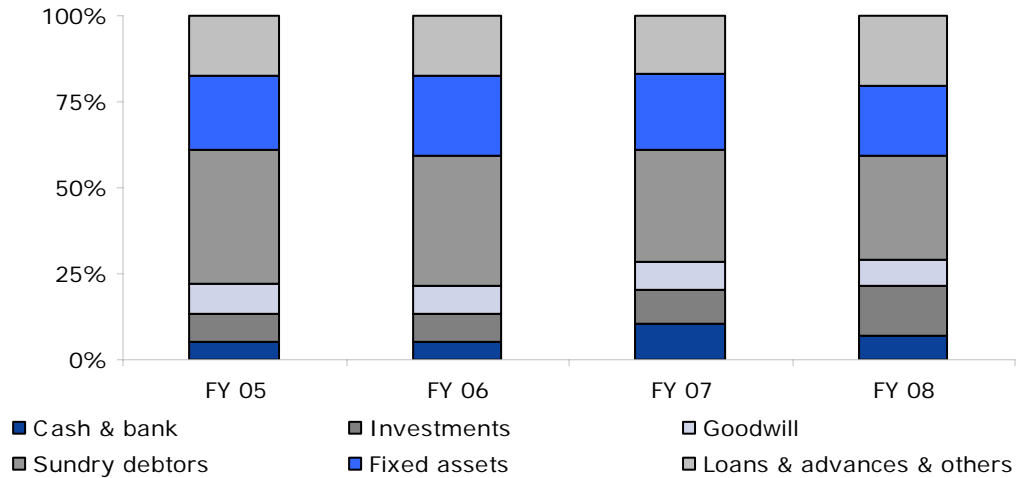
*Unbilled revenue as a percentage to total revenue is depicting an increasing trend. However, debtors as a percentage to total revenue increased exceptionally in FY06 due to substantial billings in the latter part of the fourth quarter of FY06*

**Sources of fund**



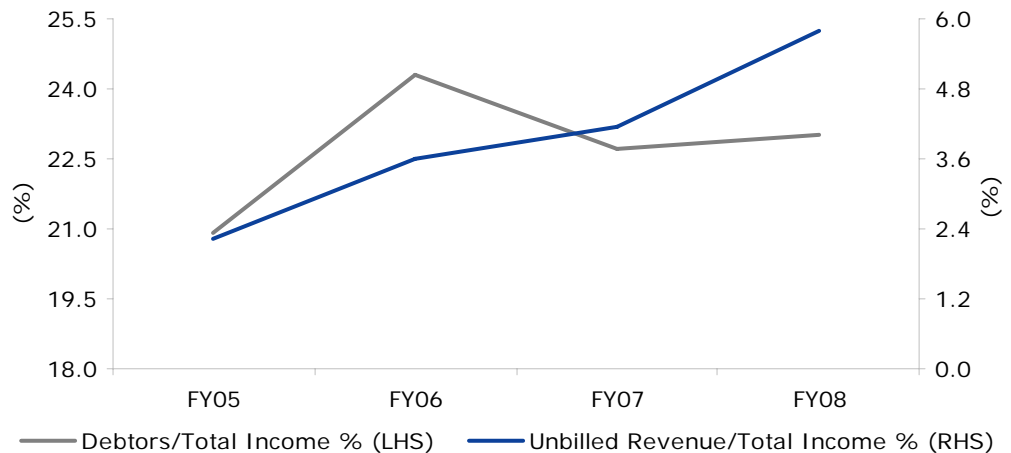
Source: Company annual report, Edelweiss research

**Application of funds**



Source: Company annual report, Edelweiss research

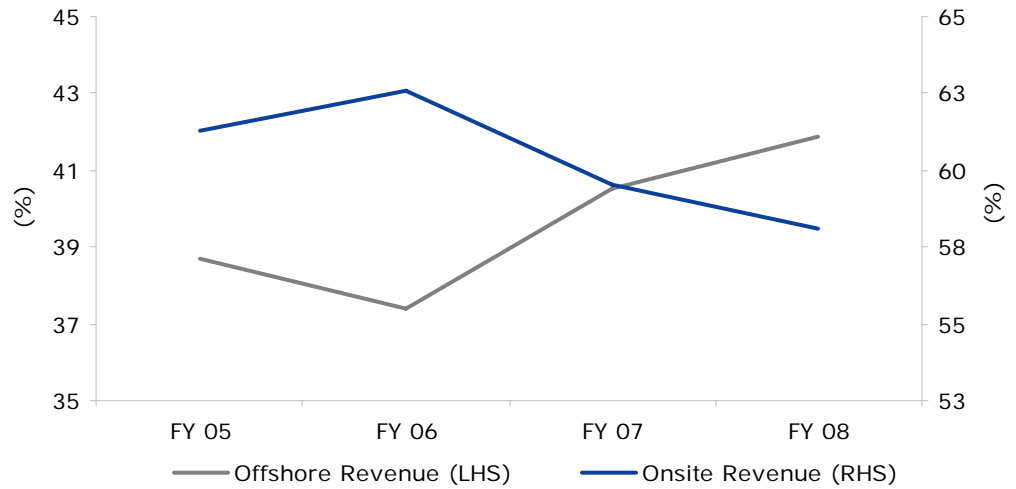
**Analysis of debtors & unbilled revenue**



Source: Company annual report, Edelweiss research

**Income statement analysis**

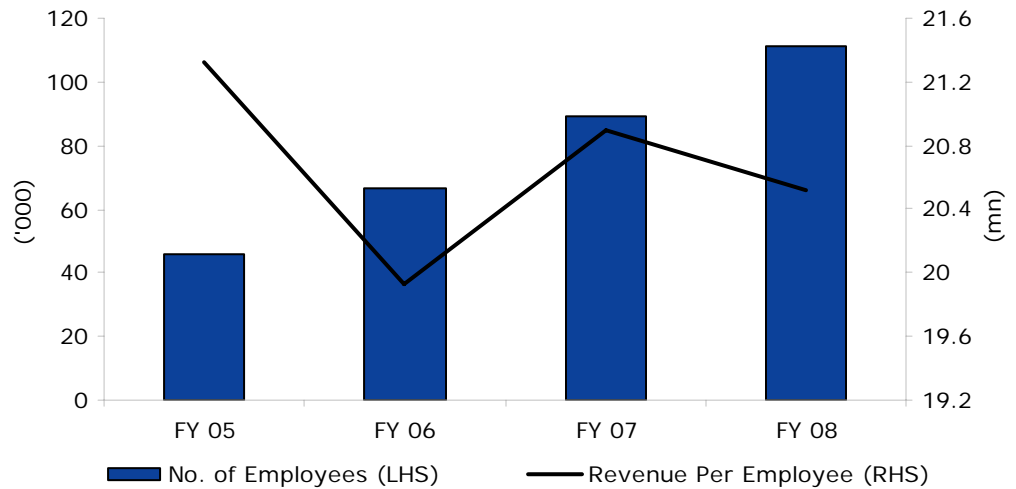
**Revenue mix**



Source: Company annual report, Edelweiss research

*The revenue mix is gradually shifting towards higher margin offshore revenues*

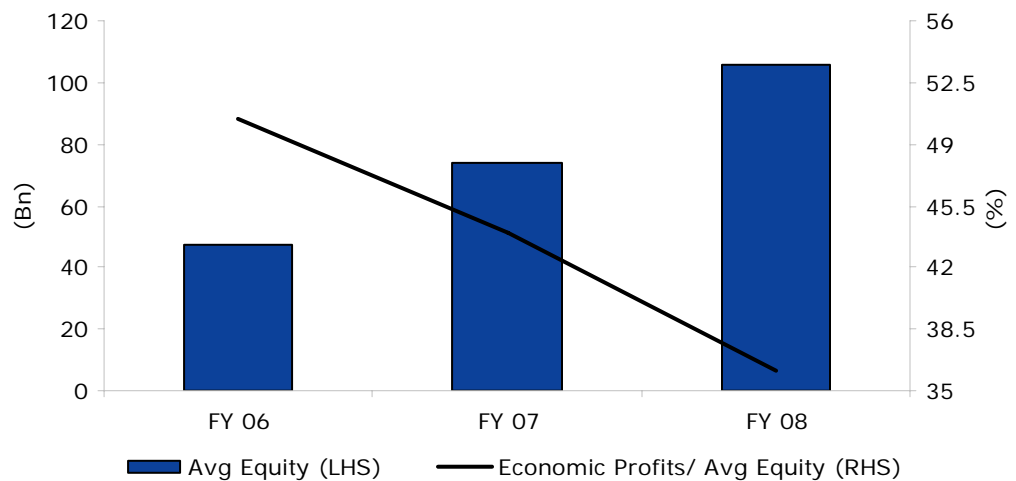
**Per employee**



Source: Company annual report, Edelweiss research

*Healthy headcount increase but revenue per employee dips*

**Economic profits**



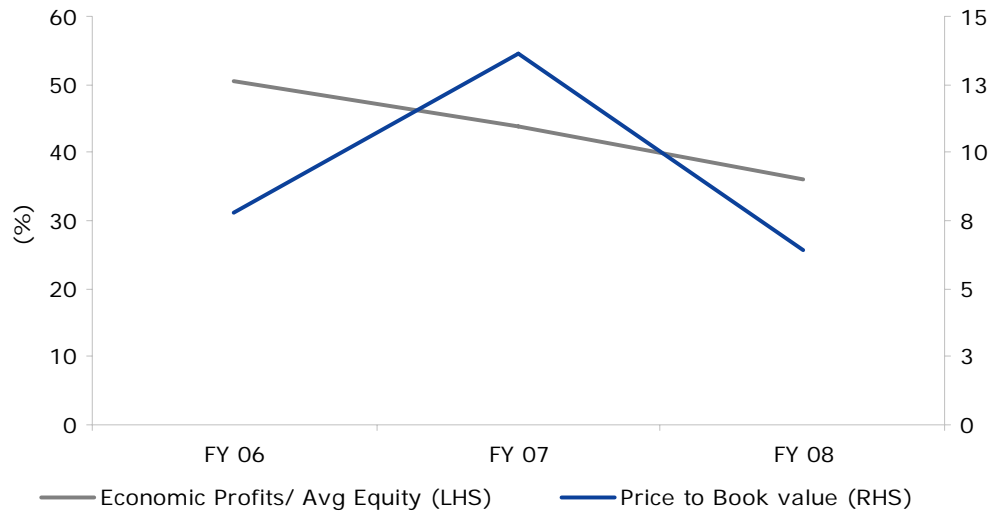
Source: Company annual report, Edelweiss research

Economic profits = NOPAT - opportunity cost of capital

*ROE and hence economic profits depict declining trend majorly due to low yielding non-strategic investments*

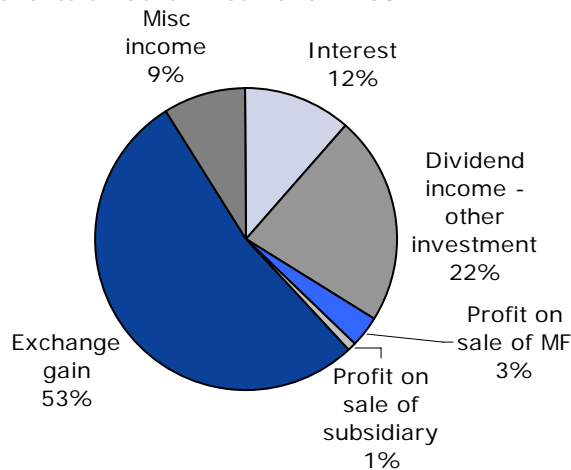
*Impact of declining economic profits is reflected by way of sharp decline in P/BV ratio*

**Economic profit / Avg. equity & P/BV**

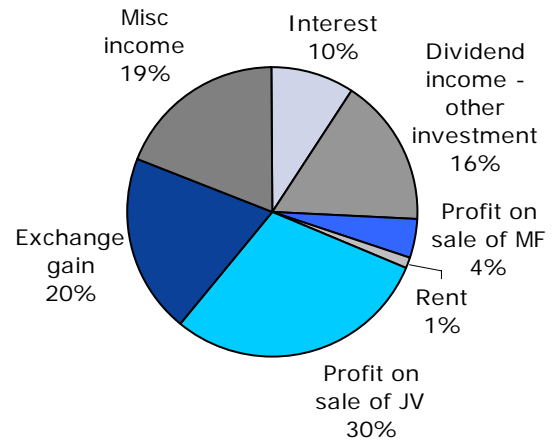


**Analysis of other income**

**Components on Other Income for FY08**



**Components of Other income for FY07**

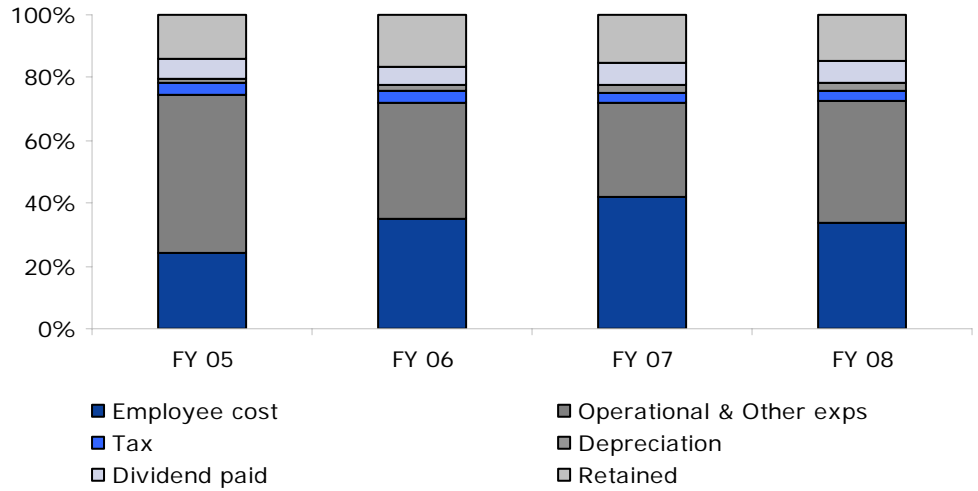


Source: Company annual report, Edelweiss research

- Hedging contributed INR 2.4 bn and INR 2.8 bn to revenue and other income, respectively, i.e. aggregate PBT impact of INR 5.3 bn compared to INR 0.6 bn during previous year. The gain arising on hedge accounting as a percentage to profit before tax was at 9 % compared to 1.3% during the previous year.
- Other income as a percentage of revenue and profit before tax for the current fiscal at 2.1% and 8.3%, respectively, is nearly double in comparison to previous year, which was at 1.2% and 4.6%, respectively. The increase in other income is mainly contributed by following factors:
  - (a) Exchange gain of INR 2,566.2 mn (4.4% of PBT) in the current fiscal (INR 460.9 mn (0.9% of PBT) in previous fiscal) as a result of successful implementation of foreign exchange hedging strategy in a volatile currency environment.
  - (b) Dividend income of INR 1,079.8 mn (1.9% of PBT) in 2008 (INR 382.2 mn (0.8% of PBT) in 2007) arising out of deployment of surplus funds primarily in mutual funds.
  - (c) Interest income of INR 569.9 mn (1% of PBT) compared to INR 217.1 mn (0.4% of PBT) in 2007.
  - (d) Profit on sale of mutual funds and other current investments at INR 158.9 mn (INR 100.7 mn in 2007).

*High retained earnings to fund for future expansions*

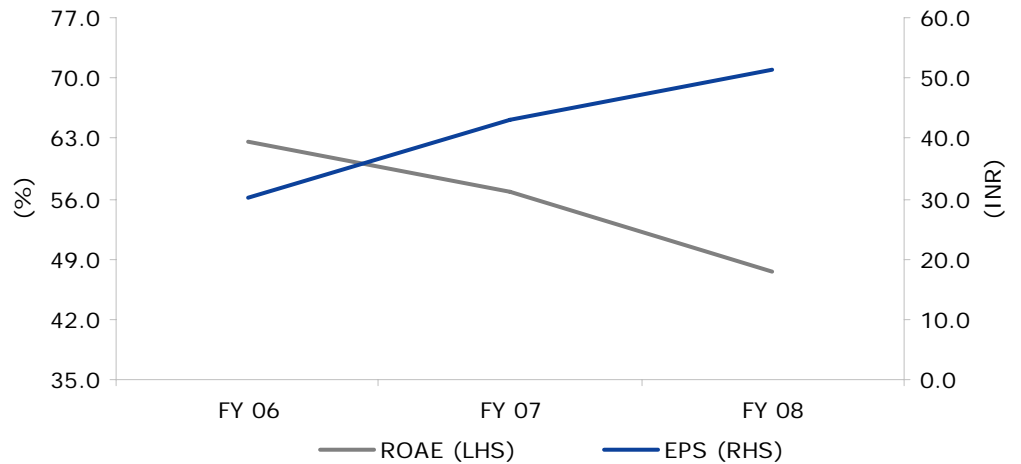
**Utilisation of revenue**



Source: Company annual report, Edelweiss research

*Declining ROAE despite of increasing EPS trend indicates lower return on incremental investments*

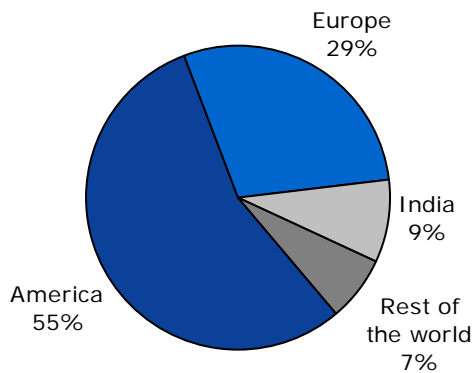
**ROAE & EPS**



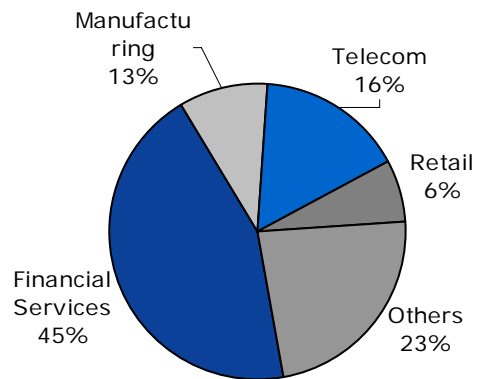
Source: Company annual report, Edelweiss research

**Segmental performance**

**Geographic segmentation of revenues**

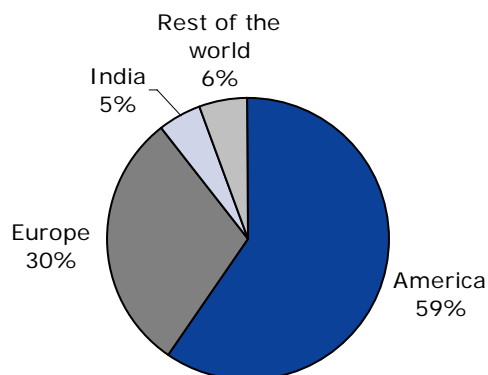


**Industry wise segmentation of revenues**

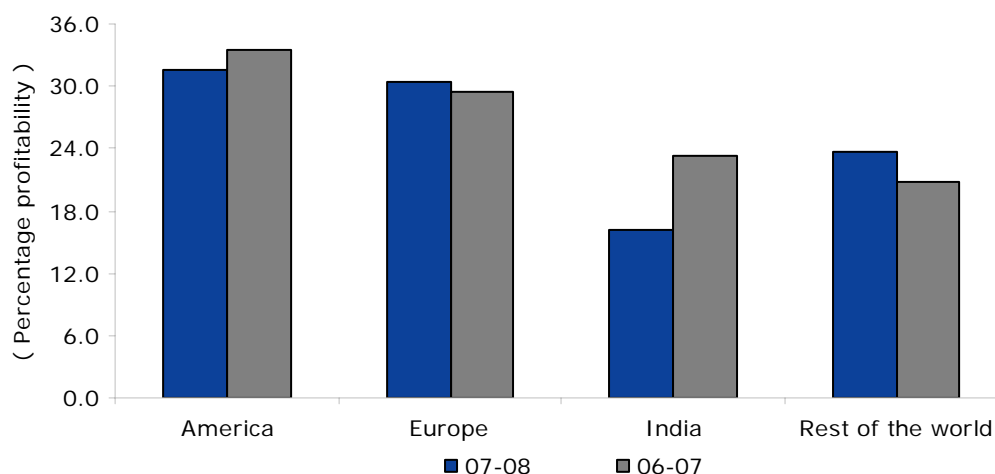


*Financial services segment amongst industries was highest contributor to revenues whereas under geographical segmentation USA continued to be the highest contributor to revenues and operating profit*

### Segmental EBIT



### Segmental Profitability



Source: Company annual report, Edelweiss research

### Accounting policy analysis

ICAI has issued a concept paper on convergence of accounting standards with IFRS and has indicated full adoption of IFRS from the financial year commencing 1.4.2011.

We have calculated the impact on reported financials of TCS in light of more logical globally accepted practices (refer Annexure C for details).

### Impact of adoption of more reasonable accounting

Sl. No.	Particulars of the Issue	Reason	Impact on PAT	Impact on net worth	(INR mn) Impact on EPS
1	Provident fund scheme with guaranteed rate of return classified as Defined Contribution Plan	AS 15 not complied	Note 1	Note 1	Note 1
2	Investment valuation done at historical cost or lower of historical cost and market price	IFRS/AS 30/31 more logical	(3)	(3)	---
3	Goodwill recognised under business combination - definite life intangibles not recognised results in higher goodwill & lower amortisation expenses	US GAAP more logical	(18)	(18)	(0.02)
<b>Total</b>		<b>(A)</b>	<b>(21)</b>	<b>(21)</b>	<b>(0.02)</b>
	Reported consolidated PAT, net worth and basic EPS	(B)	50,260	123,001	51.36
	Revised consolidated PAT, net worth and basic EPS		50,240	122,981	51.34
	% impact	(A)/(B)	(0.04)	(0.02)	(0.04)

Source: Company annual report, Edelweiss research

Note: INR in mn except for calculation for EPS

Note 1 – Due to unavailability of sufficient information the impact is not quantifiable



**Consolidating business for future growth (key extracts from MD&A)**

- On May 25, 2007, TCS, through its wholly owned subsidiary, Tata Consultancy Services Do Brasil Desenvolvimento De Servicos, acquired 100% equity interest in a Brazil-based company, GT Participacoes S.A. Consequently, TCS' interest in Tata Consultancy Services Do Brasil S.A. has increased to 100%.
- On June 21, 2007, the company subscribed 100% share capital of Tata Consultancy Services Morocco SARL AU, a company formed for providing a range of computer-enabled services in Morocco.
- On July 13, 2007, the company, through its wholly owned subsidiary, Tata America International Corporation, acquired 100% voting power in TCS Financial Management LLC.
- On October 23, 2007, the company subscribed to 60% of share capital of Tata Consultancy Services (Africa) (PTY), a company formed for providing IT services and investing in IT companies in South Africa. Tata Consultancy Services (Africa) (PTY) holds 100% share capital of Tata Consultancy Services (South Africa) (PTY), which has been incorporated on October 31, 2007.

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## **ANNEXURES**

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## Annexure A: EdelRank

**EdelRank** is a framework which ranks companies objectively for compliance with accounting standards and disclosure requirements. The ranking is based on percentage scoring achieved by the company for adhering to accounting standard and disclosure norms, out of a predefined score card.

### EdelRank scorecard

AS No.	Accounting Standards	% Score obtained
AS-1	Disclosure of accounting policies	100.0
AS-2	Valuation of inventories	100.0
AS-3	Cash flow statements	100.0
AS-6	Depreciation accounting	100.0
AS-9	Revenue recognition	100.0
AS-10	Accounting for fixed assets	100.0
AS-11	The effects of changes in foreign exchange rates	100.0
AS-13	Accounting for investments	100.0
AS-15	Employee benefits	100.0
AS-17	Segment reporting	100.0
AS-18	Related party disclosures	100.0
AS-19	Leases	100.0
AS-20	Earnings per share (1)	86.7
AS-21	Consolidated financial statements	100.0
AS-22	Accounting for taxes on income	100.0
AS-23	Accounting for investments in associates in CFS (2)	57.1
AS-26	Intangible assets	100.0
AS-29	Provisions, contingent liabilities and contingent assets	100.0
Total		97.3

Source: Company annual report, Edelweiss research

1. Nominal value of shares not given with EPS.
2. Goodwill/capital reserve arising on the acquisition of an associate is not disclosed separately.

## Annexure B: ROE and Cash Flow Analyzer

ROE analyser analyses the profitability on the scale of operating efficiency and capital allocation efficiency. While operating efficiency is a measure of how efficiently the company is making use of operating assets, capital efficiency is the measure of balance sheet efficiency.

### The above analysis involves:

1. Dissection of profitability along two major drivers:
  - a. Return from operating activities (RNOA: return on net operating assets).
  - b. Return from financing activities (leveraging effect on ROE).

ROE = Return from operating activities (RNOA) + Return from leverage

Or

ROE = Operating margin x Operating assets turnover + Leverage spread x Leverage multiplier

Whereas:

- $RNOA = NOPAT / \text{Average operating assets}$
  - $\text{Operating margin} = NOPAT / \text{Operating revenue}$
  - $\text{Operating assets turnover} = \text{Operating revenue} / \text{Average operating assets}$
  - $\text{Leverage spread} = RNOA - \text{Net borrowing cost}$
  - $\text{Leverage multiplier} = \text{Average net financial obligation} / \text{Average common shareholders' equity}$
2. Reformulation of balance sheet wherein we have regrouped assets and liabilities into operating and financing categories (against traditional current and non current categorization).
  3. Reformulation of income statement wherein we have regrouped income and expenses into operating and financing activities.

### Cash flow analyser

Unlike traditional cash flow, reformulated cash flow clearly distinguishes cash generation/usage into three broad buckets:

1. **Cash from operating activities:** Cash generated from operations less cash deployed into net operating assets.
2. **Cash from financing activities:** Sum of net cash from debt financing and financial assets.
3. **Cash from equity financing:** Sum of 1 & 2 represents net cash flow from/to shareholders (represents dividend/share buyback/share issuances).

## Annexure C: Accounting Policy Analysis

ICAI has issued a concept paper on convergence of accounting standards with IFRS and has indicated full adoption of IFRS from the financial year commencing 1.4.2011. IASB and FASB are finalising a joint conceptual framework to make accounting more logical by adopting better practices either from IFRS or US GAAP.

We have recomputed the financials by:

- (a) Applying more reasonable accounting treatment to the transaction where no authoritative accounting standard is issued for that transaction.
- (b) Applying the logical accounting standard in case where a transaction is accounted by the company under any legal and regulatory requirement and not as per existing accounting standards.
- (c) Applying accounting principles prescribed by IFRS/US GAAP, where the accounting principles significantly differ from that of Indian Accounting Standards and the treatment prescribed by IFRS/US GAAP is more logical. However, please note that these do not represent conversion of the financial statements in compliance with IFRS.

### Investment valuation

#### ■ Existing provision

In accordance with AS 13 "Accounting for investments" issued by ICAI, investments can be classified as current or long term. Current investments are carried at lower of cost and fair value determined on an individual investment basis. Long-term investments are carried at cost; however, provision for diminution in value, other than temporary, is made.

#### ■ Logical accounting treatment as per IFRS/New AS 30/31

According to IFRS and recently issued AS 30/31 "Financial Instrument–Recognition and measurement"/ "Financial Instrument–Presentation" issued by ICAI, investment should be classified under three categories as fair value through profit or loss (FVTPL) (held for trading), available for sale (AFS), and held to maturity (HTM).

At each balance sheet date investments are revalued.

1. **FVTPL and AFS:** At fair value.
2. **HTM:** At amortised cost using effective rate of interest.

Gains or loss at revaluation should be accounted in the financial statement as per guidelines given below:

1. **FVTPL:** Recognised in statement of profit and loss.
2. **HTM:** Amortisation of interest to be recognised in statement of profit and loss.
3. **AFS:** Accumulated in a separate equity account. The accumulated balance of equity account to be adjusted in statement of profit and loss in the year in which the investment is disposed of.

### Accounting for foreign exchange derivatives held for hedging

#### ■ Existing provision

As per AS 11, "The effect of changes in foreign exchange rates", the spot exchange difference at the date of inception and the rate on the last date of reporting period arising on forward exchange contracts to hedge the foreign currency risk of an underlying asset or liability are recognised in the profit and loss account of the period.

The premium or discount on such contracts is amortised as expense/income over the life of contract.

- **More logical accounting treatment as prescribed by IFRS / New AS 30/31**

Both IFRS and the new AS 30/31 "Financial Instrument –Recognition and measurement" /"Financial Instrument – Presentation" issued by ICAI prescribe hedge accounting for the accounting treatment of derivatives designated as hedge. Hedge accounting recognises the offsetting effects on profit or loss of changes in fair values of the hedging instrument and the hedged item.

There are different accounting treatments for the three types of hedge relationships:

- (a) **Fair Value Hedge:** The gain or loss from remeasuring the hedging instrument at fair value and on the hedged item attributable to the hedged risk is to be recognised in statement of profit and loss.
- (b) **Cash Flow Hedge:** The hedge of the exposure to variability in cash flows of recognised asset or liability or a highly probable forecast transaction that is attributable to a particular risk and could affect profit or loss. The portion of gain or loss on the hedging instrument that is determined to be an effective hedge should be recognised directly in an appropriate equity account and that determined to be an ineffective hedge should be recognised in statement of profit and loss. The effective portion of the hedge is one in which the change in cash flow of hedged item that are attributable to the hedged risk are offset by the changes in cash flow of hedging instrument.
- (c) **Hedge of net investment in foreign operations:** The accounting prescribed for this is same as for cash flow hedge.

#### Measurement of provisions of long term nature

- **Existing provision**

AS 29–Provisions, Contingent Liabilities and Contingent Assets, requires that the amount of a provision should not be discounted to its present value.

- **Logical treatment as per IFRS/ USGAAP**

The amount recognised as a provision shall be the best estimate of the expenditure required to settle the present obligation at the balance sheet date. Where the effect of the time value of money is material, the amount of a provision shall be the present value of the expenditures expected to be required to settle the obligation.

IFRS requires that an entity should, in measuring a provision discount the provisions, where the effect of the time value of money is material, using a pre-tax discount rate (or rates) that reflect(s) current market assessments of the time value of money and those risks specific to the liability that have not been reflected in the best estimate of the expenditure. Where discounting is used, the increase in the provision due to the passage of time is recognised as an interest expense.

**NOTES:**

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#### Recent research

Date	Title
6-Aug-08	<b>Tata Motors</b> – Annual Report Analysis
04-Aug-08	<b>Hindustan Unilever</b> – Annual Report Analysis
23-Jul-08	<b>Infosys Technologies</b> – Annual Report Analysis
21-Jul-08	<b>Reliance Industries</b> – Annual Report Analysis
09-Jul-08	<b>GSK Pharma</b> – Annual Report Analysis
08-Jul-08	<b>Ranbaxy</b> – Annual Report Analysis
05-May-08	<b>FCCB</b> – Real debt; optional equity

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