



INDIA

INFO IN Outperform

Stock price
As of 3 Nov 09 Rs2,139.35

12-month target Rs 2,350.00
Upside/Downside % 9.8
Valuation Rs 2,350.00

- PER
GICS sector software & services
Market cap Rsbn 1,227
30-day avg turnover US\$m 72.3
Market cap US\$m 26,115
Number shares on issue m 573.3

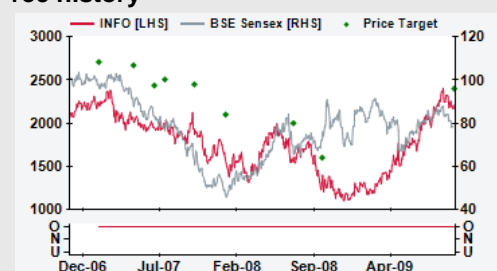
Investment fundamentals

Year end 31 Mar		2009A	2010E	2011E	2012E
Total revenue	bn	216.9	224.6	256.2	310.2
EBITDA	bn	72.0	75.1	83.9	99.9
EBITDA growth	%	37.4	4.4	11.8	19.0
EBIT	bn	64.3	65.8	73.2	87.3
EBIT growth	%	38.7	2.3	11.3	19.2
Adjusted profit	bn	59.9	61.1	64.9	75.8

EPS adj	Rs	104.46	106.48	112.90	131.55
EPS adj growth	%	28.5	1.9	6.0	16.5
PER adj	x	20.5	20.1	18.9	16.3

ROA	%	32.1	27.1	25.3	25.5
ROE	%	37.4	30.2	26.7	26.2
EV/EBITDA	x	15.8	15.2	13.6	11.4
Net debt/equity	%	-53.1	-61.4	-63.5	-67.8
P/BV	x	6.7	5.5	4.7	3.9

INFO IN rel BSE Sensex performance, & rec history



Note: Recommendation timeline - if not a continuous line, then there was no Macquarie coverage at the time or there was an embargo period.

Source: FactSet, Macquarie Research, October 2009

(all figures in INR unless noted)

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5 November 2009

Infosys Technologies

Room for upside; tax rate key drag

Event

- We reassess our investment view of the Indian IT services sector, believing we see early signs of a recovery in global IT spending. We still see value despite a recent sharp rally in IT services stock prices.
- We rate Infosys OP with a TP of Rs2,350 (vs. Rs1,600 earlier) implying 9.8% upside from here. TCS is our top sector pick ahead of Infosys and Wipro.

Impact

- **Forecast USD denominated top-line growth of 26.6% in FY11E.** We expect Infosys to deliver two year (FY10-12E) USD denominated revenue growth of 26.2% (vs 26.5% for TCS and 19% for Wipro). A sharp rebound in top-line growth is based on our expectation of a revival in the global economy and rise in global IT spend.
- **Pricing decline has bottomed out in 2Q.** Infosys reported a marginal 0.2% QoQ decline in pricing on a constant currency basis. Based on our interaction with management, we do not expect a further decline in onsite pricing from these levels. Though management remains conservative on a potential rise in pricing in FY11E, we expect Infosys to deliver 2–3% QoQ growth in pricing based on economic recovery in the North American market in 2H10E.
- **BPO likely to remain fastest growing vertical; expected to contribute 7% to total revenues by FY11E.** We forecast BPO revenues to grow at FY10–12E CAGR of 27.7%, reaching Rs23.5bn by FY12E. According to the NASSCOM worldwide BPO market is expected to grow at FY08-12E CAGR of 11.9%, outpacing the IT outsourcing industry revenue growth of 6.9%.
- **Leverage in cost structure to provide margin cushion from forex headwind.** We expect EBITDA margins to dip by 60bp to 32.8% in FY11 from 33.4% in FY10 despite 4% appreciation in INR vs US\$ over the same period. We believe that low utilisation rate provides Infosys with a cost lever to manage margins despite appreciating INR.

Earnings and target price revision

- We are decreasing our FY10E, FY11E and FY12E EPS to Rs106, Rs113 and Rs132 from Rs118, Rs129, and Rs148 respectively. We are increasing our target price to Rs2,350 from Rs1,600.

Price catalyst

- 12-month price target: Rs2,350.00 based on a PER methodology.
- Catalyst: Finalisation of CY10 client IT budgets in Nov-Dec 2009.

Action and recommendation

- **Maintain Outperform; prefer TCS over Infosys and Wipro.** TCS emerges as the No. 1 player on US\$ revenue, EBIT and EPS FY10–12E CAGR among the three (see Figure 1) and offers maximum upside to our target price.
- Our target price of Rs2,350 is based on 22x FY11E PER (same as TCS and Wipro), 1.87x PEG and implies 9.8% upside to current stock price.

Financials – revenue growth in line with peers; industry leading margins

- **Expect Infosys to deliver US\$ denominated revenue growth of 26% plus for FY11E and FY12E.** Our robust top-line growth forecast is predicated on recovery in global IT spend following recovery in the global economy. At EBIT level, we expect Infosys to deliver EBIT CAGR of 15.2% in FY10-12E. Our EBIT growth forecast for Infosys is lower than our US dollar top-line growth forecast since we expect wage inflation and FX headwinds to result in margin erosion.

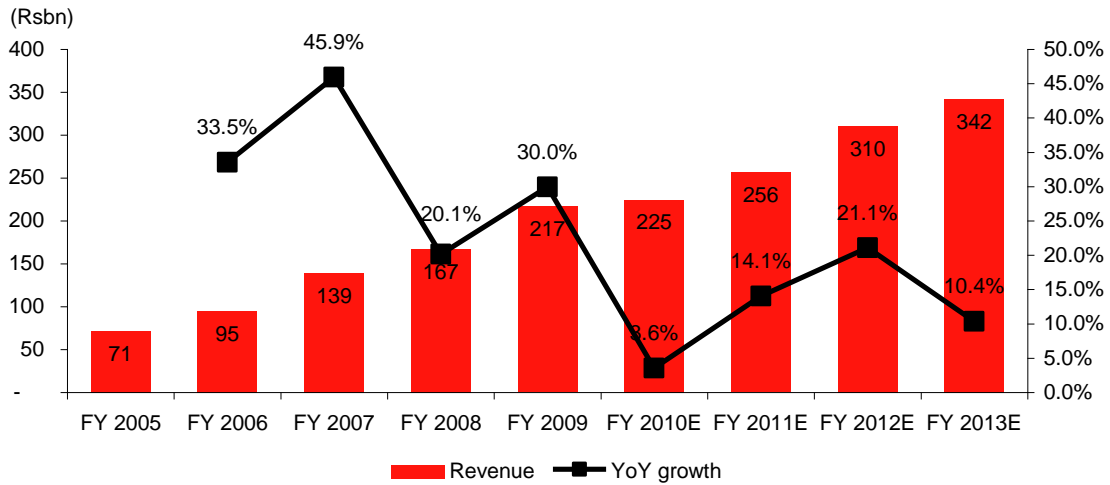
Fig 1 Key financial parameters

YoY growth in US\$ revs (%)	FY09	FY10	FY11	FY12	FY13
Infosys	11.7%	1.9%	26.6%	25.9%	19.1%
TCS	5.8%	5.9%	26.8%	26.2%	18.5%
Wipro	18.5%	1.0%	16.2%	21.9%	20.0%
YoY growth in INR revs (%)	FY09	FY10	FY11	FY12	FY13
Infosys	30.0%	3.6%	14.1%	21.1%	10.4%
TCS	23.0%	7.7%	14.3%	21.3%	10.0%
Wipro	30.3%	4.5%	6.1%	15.5%	10.4%
EBIT Margin (%)	FY09	FY10	FY11	FY12	FY13
Infosys	29.7%	29.3%	28.6%	28.1%	28.1%
TCS	23.7%	24.5%	23.4%	23.8%	23.9%
Wipro	20.3%	22.4%	21.2%	21.2%	21.5%
YoY growth in EBIT (%)	FY09	FY10	FY11	FY12	FY13
Infosys	38.7%	2.3%	11.3%	19.2%	10.1%
TCS	28.9%	11.0%	9.4%	23.3%	10.7%
Wipro	27.3%	15.4%	3.0%	17.1%	11.3%
YoY growth in EPS (%)	FY09	FY10	FY11	FY12	FY13
Infosys	28.5%	2.0%	6.0%	16.5%	12.6%
TCS	3.0%	17.9%	11.6%	17.7%	13.0%
Wipro	19.6%	12.1%	5.9%	10.1%	11.8%

Source: Macquarie Research, November 2009

- **Steady volume growth should drive top-line performance in FY11E.** Infosys has registered 3% QoQ growth in off shore volume in 2Q FY10. We believe 2Q results mark the inflection in volume growth for the company and forecast 3–5% QoQ growth in total volume over each of the next six quarters. The company has registered 1.1% QoQ decline in constant currency pricing this quarter. However, management noted on the earnings call that it is past pricing negotiations and this should give investors confidence that the pricing would either remain stable or start improving gradually over the next 2–3 quarters.
- **Pricing decline has bottomed out in 2Q.** Infosys reported marginal 0.2% QoQ decline in pricing on a constant currency basis. Based on our interaction with the management, we do not expect further decline in onsite pricing from these levels. We are building in 1% sequential improvement in 3Q FY10E and 1.5% QoQ improvement in 4Q FY10E. Though management remains conservative on pricing improvement in FY11E, we expect Infosys to deliver 2–3% sequential growth in pricing based on economic recovery expected in the North American market in 2H 2010E.
- **Our INR revenue forecast is based on Macquarie economist forecast of 10% and 4% INR appreciation vs the USD in FY11E and FY12E, respectively.** There are upside risks to our financial estimates if the actual INR/USD rate for FY11E and FY12E is higher than the one assumed in our model (Rs42.63 in FY11E and Rs41 in FY12E).
- **Aggressive employee addition compared to peers has widened the utilisation gap.** Gross employee addition for Infosys for 1H FY10 is at 9,607, compared to 4,990 gross employee additions for TCS (ex-subsiaries) over the same period. Though, we expect full year employee gross addition for Infosys to be a bit lower at 20,000 compared to 24,500 at TCS. We highlight that employee utilisation for Infosys has fallen to 64.6% (including trainees) and 71.3% (excluding trainees) as of 2Q FY10. This compares with 73.6% (including trainees) and 79.5% (excluding trainees) for TCS. Though, the utilisation for Infosys has historically been lower vs its peers, we expect Infosys to push up its utilisation rate closer to ~75% (excluding trainees) in quarters to come. This is a key lever for margin improvement for Infosys, in our view.

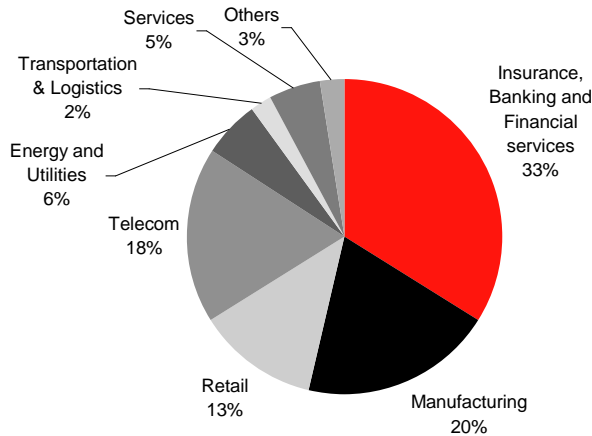
Fig 2 Volume growth is the key driver of our top-line growth forecast



Source: Company data, Macquarie Research, November 2009

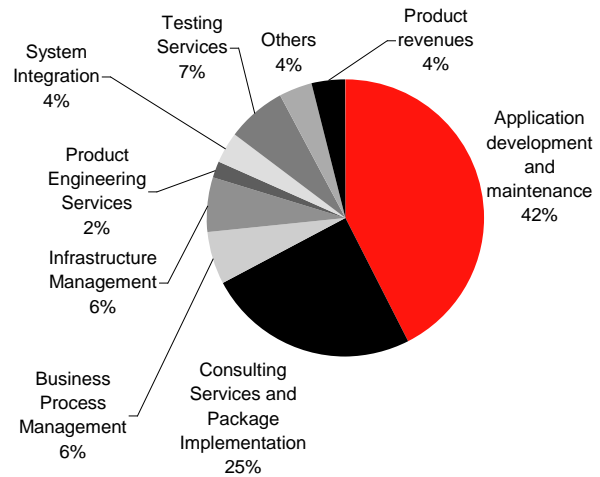
- Recovery in manufacturing and telecom key to sustained recovery.** Infosys derives 38% (based on FY09 financials) of its revenues from manufacturing and telecom verticals. Both these verticals are yet to show signs of recovery and any delay in recovery in these two verticals beyond 2H10E would be a source of downside risk to our revenue growth forecasts.

Fig 3 Manufacturing and telecom are yet to recover



Source: Company data, Macquarie Research, November 2009

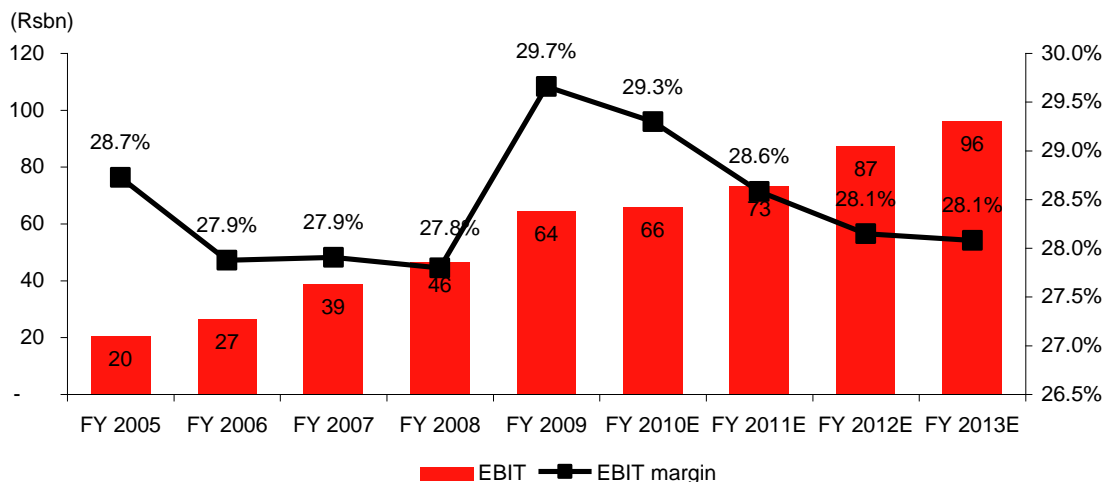
Fig 4 BPO share of revs should grow to ~8% by FY12



Source: Company data, Macquarie Research, November 2009

- Mid-year salary increment at Infosys supports our investment thesis on recovery in IT spend.** Infosys has declared an average salary hike of 2% for its onsite staff and 8% salary hike for offshore employees, effective from 1 October 2009. We believe a mid-year salary increase despite low utilisation rate signals Infosys management's confidence on the demand recovery. Infosys has delivered excellent EBIT margins for the past two quarters (30.1% in 1Q and 30.5% in 2Q), and there is enough headroom for Infosys to absorb ~200bp margin dip due to this salary hike.
- Expect Infosys to continue to enjoy industry leading margins.** The superior margin profile for Infosys is largely due to optimised processes that the company has in place for running its day-to-day operations, helping it achieve better cost structure vs its peers. We expect margins for all the key IT players to be under pressure over the next two years as appreciation of INR would weigh down margins and companies sacrifice margins for chasing top-line growth.

Fig 5 Recent salary hike would have ~200bp impact on EBITDA margins from 3Q FY10E



Source: Macquarie Research, November 2009

- **Infosys’ STPI facilities have exhausted its tax holiday, implying a higher tax rate for the company than peers.** The Indian government has been extremely supportive of Indian IT services players by offering tax incentives to IT services providers based out of India. The government has already extended the tax holiday provided to the sector twice – both in 2008 (extending tax relief update March 2010) and 2009 (extending the tax benefit until March 2011). However, the tax holiday is available only until the end of tax holiday period (as notified by the government or up to ten years from commencement of operations, whichever is earlier).

Fig 6 Infosys’ Software Technology Parks have run out of tax exemptions

Software Technology Park	Year of commencement (FY)	Tax exemption	
		claimed from	available up to
Bangalore, Electronics City	1995	1997	2004
Mangalore	1996	1999	2005
Pune	1997	1999	2006
Bhubaneswar	1997	1999	2006
Chennai	1997	1999	2006
Bangalore, Phase I, Electronics City	1999	1999	2008
Bangalore, Phase II, Electronics City	2000	2000	2009
Pune, Hinjawadi	2000	2000	2009
Mysore	2000	2000	2009
Hyderabad	2000	2000	2009
Mohali	2000	2000	2009
Chennai, Sholinganallur	2001	2001	2009
Bhubaneswar, Konark	2001	2001	2009
Mangalore, Mangala	2001	2001	2009
Thiruvananthapuram	2004	2004	2009

Source: Company data, Macquarie Research, November 2009

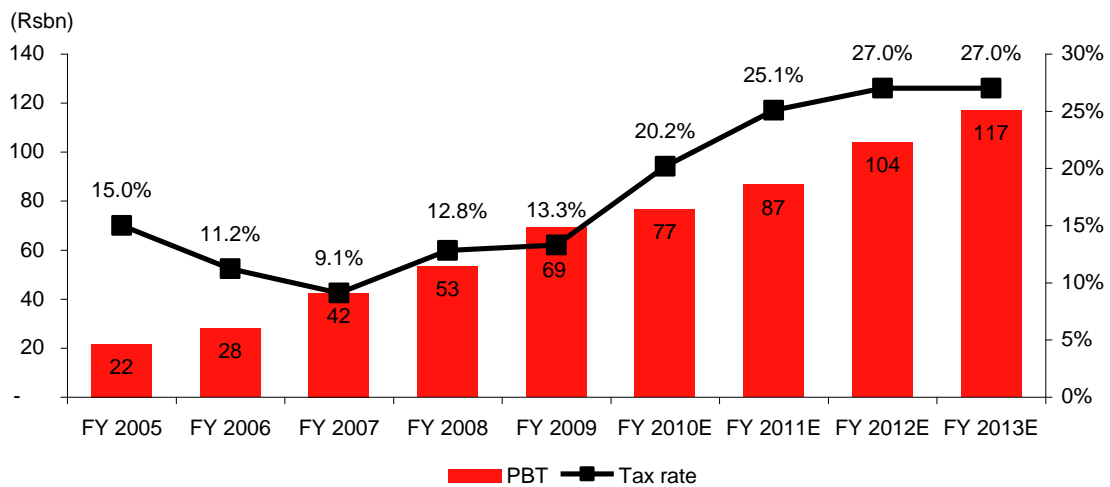
- As per the SEZ Act, the unit will be eligible for a deduction of 100% of profits or gains derived from the export of services for the first five years from commencement of provision of services and 50% of such profits or gains for a further five years. Certain tax benefits are also available for a further five years, subject to the unit meeting defined conditions.

Fig 7 SEZs still have a long tax holiday period ahead

SEZ	Year of commencement (FY)	Tax exemption	
		claimed from	available up to
Chennai, Mahindra City	2006	2006	2020
Chandigarh	2007	2007	2021
Mangalore	2008	2008	2022
Pune	2008	2008	2022

Source: Macquarie Research, November 2009

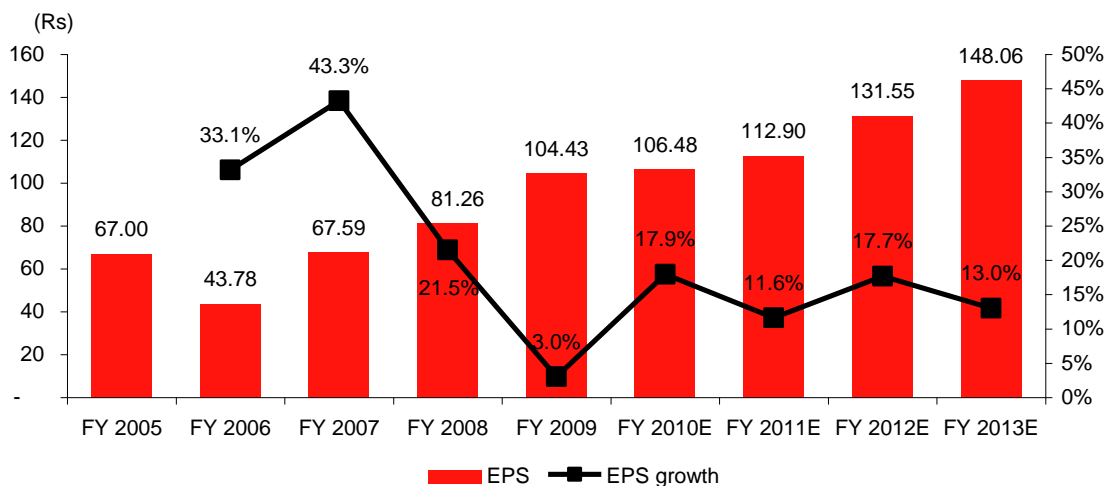
Fig 8 Infosys has a higher tax rate than peers since Infosys' STPI have exhausted its tax holiday period



Source: Company data, Macquarie Research, November 2009

- **We forecast FY10–12E EPS CAGR of 11.2% for Infosys** (vs 14.6% for TCS and 8% for Wipro). We note that our financial forecasts are based on Macquarie economist forecast of US\$/INR exchange rate of 42.63 for FY11E and 41 for FY12E. Any depreciation of INR relative to US\$ would provide meaningful upside risks to our EPS estimates.

Fig 9 Expect Infosys to consistently deliver double-digit EPS growth for next four years



Source: Macquarie Research, November 2009

Macquarie vs consensus: Above consensus on revenues below on PAT

- **Expect Infosys to beat consensus revenue estimates for each of the next three years.** Our margin assumption is 20bp below consensus in FY11E and 30bp lower in FY12E. We note that there could be upside to our margin forecast if there is any positive surprise on our assumed INR/US\$ conversion rate. In addition to the margin differential, the key contributor to the differential in our and consensus EPS is our higher tax rate assumption for Infosys, which we believe the street has yet to factor in.

Fig 10 Lower margins and higher tax rate: Key reasons for our below consensus EPS

	FY10	FY11	FY12
Revenues			
Macquarie	224,643	256,223	310,204
Consensus	222,530	252,889	296,672
Macq. Above Consensus	0.9%	1.3%	4.6%
EBITDA			
Macquarie	75,084	83,946	99,920
Consensus	74,177	83,384	96,467
Macq. Above Consensus	1.2%	0.7%	3.6%
Macquarie margins	33.4%	32.8%	32.2%
Consensus margins	33.3%	33.0%	32.5%
EPS			
Macquarie	106.5	112.9	131.5
Consensus	103.4	115.4	134.7
Macq. Above Consensus	3.0%	-2.2%	-2.3%

Source: Bloomberg, Macquarie Research, November 2009

Valuation: PER based target price implies 9.8% upside

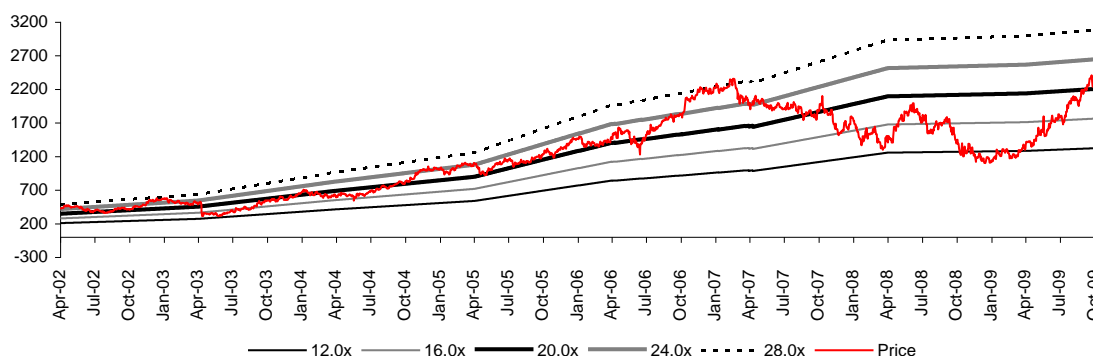
- **Our target price is based on one-year forward PER multiple.** We value Indian IT stocks on a PER methodology and assign a 22x one year forward PER multiple for Infosys. Fig11 below indicates three different scenarios for arriving at our PER based target price.

Fig 11 Our target price for Infosys is based on 22x FY11E PER

Target Price on FY11 PER	20.0x	22.0x	24.0x
Infosys	2,130	2,342	2,555
TCS	623	685	748
Wipro	594	654	713
Upside/Downside to CMP(%)			
Infosys	-0.6%	9.3%	19.2%
TCS	2.8%	13.1%	23.4%
Wipro	2.2%	12.4%	22.7%

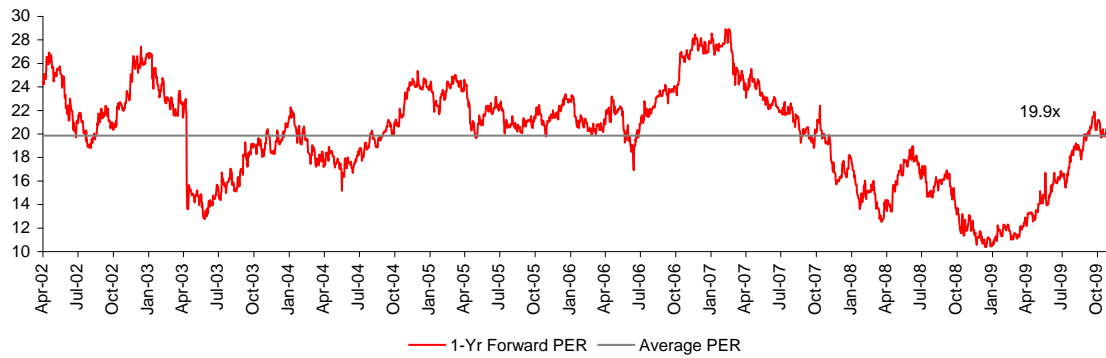
Source: Macquarie Research, November 2009

Fig 12 Infosys: One year forward rolling PER multiple



Source: Macquarie Research, November 2009

Fig 13 Infosys current one year forward PER vs its historical average forward PER



Source: Macquarie Research, November 2009

- Key risks to our investment thesis:** We are positive on the revenue and earnings growth prospect of Infosys over the next three years. The key downside risks are: 1) delay in finalisation of client IT budgets and 2) persistent downward pressure on pricing beyond the next two quarters.

Fig 14 Valuation Comp Sheet

Company name	Bloomberg Ticker	Reco	Market Cap (US\$ m)	Current Price (Icy)	Target Price (Icy)	Up/Down side(%)	EPS FY10	EPS FY11	PER (x) FY10	PER (x) FY11	RoE (FY10)	EPS CAGR (FY10-12E)	PEG
Large Cap - Indian IT Services													
Infosys	INFO IN	OP	25,912	2143	2350	9.7%	106.5	112.9	20.1	19.0	30.2	11.2%	1.70
TCS	TCS IN	OP	25,017	606	685	13.0%	31.2	34.8	19.5	17.4	33.9	14.6%	1.19
Wipro	WPRO IN	OP	17,981	581	650	11.8%	29.7	31.5	19.6	18.5	26.3	8.0%	2.32
HCL Tech	HCLT IN	NR	4,000	282	NR	NR	18.5	24.2	15.2	11.7	25.5	22.4%	0.52
Mahindra Satyam	SCS IN	NR	2,450	99	NR	NR	5.5	10.6	18.1	9.3	26.0	51.4%	0.18
Tech Mahindra	TECHM IN	NR	2,308	897	NR	NR	51.8	62.6	17.3	14.3	63.4	24.5%	0.58
International IT Services													
Accenture	ACN US	NR	28,088	38	NR	NR	2.7	3.1	14.1	12.5	58.6	13.0%	0.96
Amdocs	DOX US	NR	4,975	24	NR	NR	2.0	2.0	12.2	12.3	14.0	7.3%	1.67
Cap Gemini	CAP FP	NR	4,634	31	NR	NR	2.1	2.5	15.2	12.5	11.6	18.6%	0.67
Cognizant	CTSH US	NR	12,306	42	NR	NR	1.8	2.0	23.3	20.6	25.1	13.9%	1.49
Convergys	CVG US	NR	1,343	11	NR	NR	1.1	1.2	9.8	9.3	-7.0	5.7%	1.65
CSC	CSC US	NR	7,765	51	NR	NR	4.9	5.2	10.4	9.9	20.3	2.6%	3.77
Logica PLC	LOG LN	NR	1,842	115	NR	NR	10.3	11.5	11.1	10.0	2.1	10.7%	0.94
Paxys	PAX PM	NR	3,216	3	NR	NR	na	na	na	na	na	na	na
IBM GS	IBM US	NR	159,156	121	NR	NR	9.9	10.9	12.3	11.1	58.8	8.6%	1.29
Other IT Services													
Aptech	APTR IN	NR	163	166	NR	NR	na	na	na	na	21.7	na	na
Educomp	EDSL IN	NR	1,422	712	NR	NR	24.6	35.6	29.0	20.0	37.9	42.0%	0.48
Everonn	ESIL IN	NR	118	369	NR	NR	25.1	33.6	14.7	11.0	14.3	34.0%	0.32
Oracle Financial Services	OFSS IN	NR	3,490	1975	NR	NR	98.1	115.4	20.1	17.1	23.4	-1.3%	12.71
Mindtree	MTCL IN	NR	489	588	NR	NR	44.8	50.0	13.1	11.8	9.6	12.4%	0.95
NIIT	NIIT IN	NR	191	55	NR	NR	na	na	na	na	na	na	na
NIIT Tech	NITEC IN	NR	168	135	NR	NR	21.1	21.9	6.4	6.2	27.7	10.8%	0.57
Patni	PATNI IN	NR	1,183	437	NR	NR	34.4	38.1	12.7	11.5	15.7	3.5%	3.26
Polaris	POL IN	NR	299	144	NR	NR	14.6	18.7	9.8	7.7	18.3	10.7%	0.72
Rolta	RLTA IN	NR	506	149	NR	NR	na	na	na	na	na	na	na
BPO													
EXL Service	EXLS US	NR	402	14	NR	NR	0.3	0.6	41.5	24.4	8.3	12.2%	1.99
Firstsource	FSOL IN	NR	289	32	NR	NR	1.5	2.5	21.2	12.7	2.9	na	na
Genpact	G US	NR	2,617	12	NR	NR	0.7	0.7	18.6	16.7	12.0	-36.6%	0.46
WNS	WNS US	NR	608	14	NR	NR	1.2	1.4	12.0	10.0	3.9	-28.4%	0.35

Source: Bloomberg, Macquarie Research, November 2009, Share price data as of 3 November, 2009

Appendix 1: Key operating metrics of the three players

Fig 15 Revenue break up: Geography

	2Q FY08	3Q FY08	4Q FY08	FY 2008	1Q FY09	2Q FY09	3Q FY09	4Q FY09	FY 2009	1Q FY10	2Q FY10	
TCS												
North America	52.2%	49.5%	50.4%	50.7%	51.1%	49.7%	52.2%	52.4%	51.5%	52.3%	53.4%	
Ibero America	4.2%	4.7%	4.8%	4.4%	4.1%	4.7%	5.1%	4.8%	4.7%	4.6%	5.0%	
UK	19.9%	19.4%	19.4%	19.8%	19.5%	20.2%	18.5%	17.9%	19.0%	16.9%	16.5%	
Continental Europe	8.4%	9.8%	9.7%	9.2%	10.1%	10.5%	10.7%	10.8%	10.5%	11.0%	10.6%	
India	8.2%	9.4%	9.2%	9.0%	8.7%	7.8%	6.8%	8.2%	7.8%	9.1%	7.3%	
Asia Pacific	5.2%	5.5%	5.1%	5.2%	4.9%	5.3%	5.0%	3.9%	4.7%	4.3%	5.3%	
MEA	1.9%	1.7%	1.4%	1.7%	1.6%	1.8%	1.7%	2.0%	1.8%	1.8%	1.9%	
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	0.0%	0.0%	0.0%	
INFY												
North America	62.6%	62.3%	60.7%	62.0%	62.6%	61.5%	64.5%	64.6%	63.2%	64.7%	65.9%	
Europe	27.4%	28.6%	29.3%	28.1%	27.3%	28.1%	25.5%	24.3%	26.4%	24.7%	23.2%	
India	1.0%	1.2%	1.3%	1.3%	1.3%	1.3%	1.2%	1.6%	1.3%	0.9%	1.2%	
ROW	9.0%	7.9%	8.7%	8.6%	8.8%	9.1%	8.8%	9.5%	9.1%	9.7%	9.7%	
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
WPRO												
US	58.2%	60.2%	59.4%	59.5%	59.8%	59.4%	60.0%	60.5%	59.9%	59.7%	58.4%	
Europe	29.0%	27.0%	27.1%	27.7%	26.9%	26.9%	26.1%	25.5%	26.4%	25.5%	26.5%	
Japan	3.0%	2.7%	2.6%	2.7%	2.7%	2.5%	2.4%	2.3%	2.5%	1.8%	1.6%	
India & Middle East business	6.8%	6.9%	7.5%	6.9%	7.1%	7.8%	7.5%	7.7%	7.5%	7.9%	8.1%	
Other Emerging Markets	3.0%	3.2%	3.4%	3.2%	3.5%	3.4%	4.0%	4.0%	3.7%	5.1%	5.4%	

Source: Company data, Macquarie Research, November 2009

Fig 16 Revenue break up: Vertical

	2Q FY08	3Q FY08	4Q FY08	FY 2008	1Q FY09	2Q FY09	3Q FY09	4Q FY09	FY 2009	1Q FY10	2Q FY10	
TCS												
BFSI	43%	44%	44%	44%	43%	42%	42%	43%	42%	44%	45%	
Telecom	18%	16%	17%	17%	16%	15%	14%	13%	14%	13%	12%	
Manufacturing	13%	9%	13%	13%	11%	11%	11%	10%	11%	9%	9%	
Retail & distribution	8%	7%	8%	8%	9%	9%	11%	12%	10%	12%	12%	
Hi Tech	na	7%	na	0%	na	7%	7%	6%	7%	5%	5%	
Life sciences & healthcare	6%	5%	5%	6%	5%	5%	5%	6%	5%	6%	6%	
Transportation & Logistics	4%	5%	4%	4%	4%	5%	4%	4%	4%	4%	4%	
Energy & utilities	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	
Media & Entertainment	na	1%	na	0%	na	2%	2%	2%	2%	2%	2%	
Others	6%	2%	6%	6%	10%	2%	2%	3%	2%	3%	3%	
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
INFY												
BFSI	37%	37%	34%	36%	35%	33%	35%	33%	34%	33%	34%	
Manufacturing	14%	15%	16%	15%	18%	20%	20%	21%	20%	21%	19%	
Retail	13%	12%	12%	12%	12%	12%	13%	14%	13%	13%	14%	
Telecom	21%	21%	23%	22%	20%	19%	17%	17%	18%	17%	16%	
Energy and Utilities	5%	5%	5%	5%	5%	6%	6%	6%	6%	6%	6%	
Transportation & Logistics	2%	2%	3%	3%	2%	2%	2%	2%	2%	2%	2%	
Services	8%	6%	6%	7%	6%	5%	5%	5%	5%	5%	5%	
Others	1%	2%	2%	2%	2%	3%	2%	3%	3%	4%	4%	
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
WPRO												
TMT	33%	33%	31%	33%	31%	29%	29%	27%	29%	27%	26%	
Financial Services	24%	24%	25%	24%	25%	26%	26%	26%	26%	26%	26%	
Manufacturing	18%	19%	20%	18%	14%	15%	15%	16%	15%	16%	16%	
Healthcare Services					8%	8%	7%	7%	8%	8%	8%	
Retail & Transportation	16%	16%	15%	16%	13%	14%	15%	16%	14%	15%	15%	
Energy & Utilities	9%	9%	9%	9%	9%	8%	8%	8%	8%	8%	9%	
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	

Source: Macquarie Research, November 2009

Fig 17 Revenue break up: Service offerings

	2Q FY08	3Q FY08	4Q FY08	FY 2008	1Q FY09	2Q FY09	3Q FY09	4Q FY09	FY 2009	1Q FY10	2Q FY10
TCS											
IT Solutions and Services											
- ADM	48.6%	47.7%	46.2%	48.3%	46.9%	49.2%	49.0%	48.6%	48.5%	48.7%	49.6%
- Business Intelligence	9.7%	9.6%	9.7%	9.7%	9.0%	8.6%	8.1%	6.8%	8.1%	6.1%	5.7%
- Enterprise solutions	12.8%	13.2%	13.7%	13.1%	13.0%	12.5%	12.6%	11.8%	12.6%	10.9%	10.3%
- Assurance services	3.8%	4.0%	4.2%	3.8%	4.5%	4.4%	4.2%	3.8%	4.3%	4.4%	4.8%
Engineering & Ind. services	5.3%	5.3%	5.3%	5.4%	5.6%	6.0%	6.3%	5.8%	6.0%	5.2%	5.0%
Infrastructure services	6.9%	6.7%	6.7%	6.5%	7.7%	7.5%	8.3%	8.3%	8.0%	9.3%	8.0%
Global consulting	3.3%	3.7%	3.6%	3.4%	3.7%	2.9%	2.5%	1.7%	2.7%	1.4%	1.6%
Products business	3.4%	3.3%	4.3%	3.6%	3.5%	3.1%	3.2%	2.1%	2.9%	2.6%	3.2%
BPO	6.2%	6.5%	6.3%	6.2%	6.1%	5.8%	5.8%	11.1%	6.9%	11.4%	11.8%
Total services	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
INFY											
ADM	44.2%	46.3%	45.2%	45.4%	43.4%	42.7%	42.5%	40.9%	42.4%	42.5%	40.8%
- Application development	21.8%	21.5%	21.8%	21.7%	21.4%	20.6%	20.8%	19.2%	20.5%	19.3%	18.1%
- Application maintenance	22.4%	24.8%	23.4%	23.7%	22.0%	22.1%	21.7%	21.7%	21.9%	23.2%	22.7%
BPO	5.2%	5.9%	6.0%	5.7%	6.3%	6.0%	5.7%	6.0%	6.0%	6.1%	6.2%
Consulting Services and Package Implementation	23.6%	24.0%	24.1%	23.8%	23.7%	25.3%	25.1%	25.4%	24.9%	24.4%	23.8%
Infrastructure Management	5.5%	4.5%	4.6%	4.9%	5.7%	5.9%	6.5%	7.0%	6.3%	6.6%	7.8%
Product Engineering Services	1.6%	1.7%	1.8%	1.6%	2.2%	2.1%	2.1%	2.6%	2.2%	2.4%	2.3%
System Integration	2.8%	2.7%	3.0%	2.8%	3.1%	3.5%	4.0%	3.7%	3.6%	3.8%	4.4%
Testing Services	7.8%	7.4%	7.2%	7.5%	7.4%	7.0%	6.5%	6.3%	6.8%	6.2%	6.2%
Others	5.6%	3.8%	4.4%	4.7%	4.3%	3.9%	3.4%	4.1%	3.9%	4.0%	4.4%
Total services	96.3%	96.3%	96.3%	96.4%	96.1%	96.4%	95.8%	96.0%	96.1%	96.0%	95.9%
Product revenues	3.7%	3.7%	3.7%	3.6%	3.9%	3.6%	4.2%	4.0%	3.9%	4.0%	4.1%
Total services	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
WPRO											
Technology Infrastructure Services	15.3%	18.2%	19.7%	17.2%	18.6%	19.5%	19.4%	20.9%	19.6%	20.9%	20.6%
Testing Services	10.8%	10.4%	10.5%	10.5%	10.8%	11.1%	11.5%	11.9%	11.3%	12.1%	12.0%
Package Implementation	12.0%	11.7%	10.9%	11.6%	11.0%	11.2%	11.7%	12.8%	11.7%	13.4%	13.3%
BPO	8.3%	8.7%	8.6%	8.4%	8.6%	8.5%	8.5%	9.1%	8.7%	10.1%	10.5%
Product Engineering	6.7%	6.0%	5.6%	6.3%	5.7%	6.0%	5.8%	5.2%	5.7%	4.6%	3.9%
ADM	46.9%	45.0%	44.7%	46.0%	45.3%	43.7%	43.1%	40.1%	43.0%	38.9%	39.7%
Consulting	2.3%	2.3%	2.3%	2.3%	2.3%	2.5%	2.3%	2.1%	2.3%	2.0%	2.3%

Source: Macquarie Research, November 2009

Fig 18 Employee base and attrition

	2Q FY08	3Q FY08	4Q FY08	FY 2008	1Q FY09	2Q FY09	3Q FY09	4Q FY09	FY 2009	1Q FY10	2Q FY10
TCS											
Total	104,347	108,229	111,407	111,407	116,308	121,610	130,343	143,761	143,761	141,642	141,962
Net addition	9,445	3,882	3,178	21,988	4,901	5,302	8,733	13,418	32,354	-2,119	320
Attrition (Excl. subsidiaries)	11.5%	12.2%	12.6%	12.6%	12.8%	13.2%	11.9%	11.4%	11.4%	11.5%	11.4%
Infosys											
Total	80,501	88,601	91,187	91,187	94,379	100,306	103,078	104,850	104,850	103,905	105,453
Net addition	4,530	8,100	2,586	18,946	3,192	5,927	2,772	1,772	13,663	-945	1,548
Attrition (Standalone)	14.2%	13.7%	13.4%	13.4%	13.6%	12.8%	11.8%	11.1%	11.1%	11.1%	10.9%
Wipro											
Total	88,661	91,756	95,567	95,567	95,675	97,562	96,965	97,810	97,810	98,521	97,891
Net addition	6,096	3,095	3,811	18,227	108	1,877	-587	845	2,243	711	-630
Attrition (Global IT Services)	16.6%	15.8%	15.1%	16.3%	15.2%	13.5%	13.9%	10.5%	13.2%	10.3%	13.6%

Source: Company data, Macquarie Research, November 2009

Fig 19 Utilisation rate

	2Q FY08	3Q FY08	4Q FY08	FY 2008	1Q FY09	2Q FY09	3Q FY09	4Q FY09	FY 2009	1Q FY10	2Q FY10
TCS											
Including trainees	73.7%	77.7%	75.8%	75.8%	74.6%	74.7%	71.8%	69.4%	69.4%	71.3%	73.6%
Excluding trainees	78.9%	72.6%	79.1%	79.1%	78.3%	81.1%	79.9%	79.7%	79.7%	79.2%	79.5%
Infosys											
Including trainees	71.2%	70.1%	70.2%	70.7%	69.8%	70.7%	68.5%	66.9%	68.9%	66.2%	64.6%
Excluding trainees	79.5%	77.4%	75.7%	76.9%	72.3%	74.1%	74.8%	74.3%	73.9%	70.1%	71.3%
Wipro											
Including trainees	74.6%	73.6%	73.9%	74.2%	74.4%	77.0%	76.6%	75.4%	75.8%	77.1%	78.2%
Excluding trainees	79.0%	78.2%	78.1%	77.7%	78.3%	79.3%	79.4%	76.8%	78.5%	78.2%	80.5%

Source: Company data, Macquarie Research, November 2009

Fig 20 Onshore–Offshore effort mix

	2Q FY08	3Q FY08	4Q FY08	FY 2008	1Q FY09	2Q FY09	3Q FY09	4Q FY09	FY 2009	1Q FY10	2Q FY10
TCS											
Onsite	na	na	na	na	na	na	na	na	na	na	na
Offshore	na	na	na	na	na	na	na	na	na	na	na
Infosys											
Onsite	31.7%	31.3%	31.2%	31.7%	31.4%	30.7%	29.8%	29.8%	30.4%	29.5%	29.0%
Offshore	68.3%	68.7%	68.8%	68.3%	68.6%	69.3%	70.2%	70.2%	69.6%	70.5%	71.0%
Wipro											
Onsite	30.8%	30.7%	30.8%	31.0%	30.4%	31.1%	30.3%	28.4%	29.9%	26.4%	26.4%
Offshore	69.2%	69.3%	69.2%	69.0%	69.6%	68.9%	69.7%	71.6%	70.1%	73.6%	73.6%

Source: Macquarie Research, November 2009

Fig 21 Contract type revenue mix

	2Q FY08	3Q FY08	4Q FY08	FY 2008	1Q FY09	2Q FY09	3Q FY09	4Q FY09	FY 2009	1Q FY10	2Q FY10
TCS											
Time and Material	56.3%	54.6%	55.8%	55.9%	57.2%	56.6%	54.5%	52.9%	55.2%	52.6%	52.8%
Fixed price	43.7%	45.4%	44.2%	44.1%	42.8%	43.4%	45.5%	47.1%	44.8%	47.4%	47.2%
INFY											
Time and Material	68.5%	65.1%	64.6%	67.1%	64.8%	63.8%	61.6%	59.5%	62.5%	59.3%	59.6%
Fixed price	31.5%	34.9%	35.4%	32.9%	35.2%	36.2%	38.4%	40.5%	37.5%	40.7%	40.4%
WPRO											
Time and Material	73.4%	71.4%	70.8%	72.3%	69.4%	68.4%	64.0%	61.9%	66.0%	61.6%	59.7%
Fixed price	26.6%	28.6%	29.2%	27.7%	30.6%	31.6%	36.0%	38.1%	34.0%	38.4%	40.3%

Source: Company data, Macquarie Research, November 2009

Fig 22 Effort person month billed (volume)

	2Q FY08	3Q FY08	4Q FY08	FY 2008	1Q FY09	2Q FY09	3Q FY09	4Q FY09	FY 2009	1Q FY10	2Q FY10
TCS											
Onsite	na	na	na	na	na	na	na	na	na	na	na
Offshore	na	na	na	na	na	na	na	na	na	na	na
Billed	na	na	na	na	na	na	na	na	na	na	na
INFY											
Onsite	40,740	41,974	43,999	165,595	44,477	46,314	45,850	45,169	181,811	44,231	44,231
Offshore	87,717	92,234	96,805	357,196	96,969	104,354	107,828	106,399	415,550	105,730	105,730
Billed	128,457	134,207	140,804	522,790	141,446	150,669	153,678	151,568	597,361	149,961	149,961
WPRO											
Onsite	33,379	35,343	37,510	138,108	37,833	39,449	38,912	34,296	149,490	32,876	32,876
Offshore	74,856	79,813	84,148	307,461	86,548	87,423	89,706	86,277	349,954	91,454	91,454
Billed	108,235	115,156	121,658	445,569	124,381	126,872	128,618	120,573	499,444	124,330	124,330

Source: Company data, Macquarie Research, November 2009

Fig 23 Per capita productivity (pricing)

(Amount in US\$)	2Q FY08	3Q FY08	4Q FY08	FY 2008	1Q FY09	2Q FY09	3Q FY09	4Q FY09	FY 2009	1Q FY10	2Q FY10
TCS											
Onsite	na	na	na	na	na	na	na	na	na	na	na
Offshore	na	na	na	na	na	na	na	na	na	na	na
Billed	na	na	na	na	na	na	na	na	na	na	na
INFY											
Onsite	145,985	147,540	147,466	145,792	147,497	148,444	139,784	137,033	143,193	140,612	140,612
Offshore	59,633	60,432	60,752	59,798	60,722	60,762	57,958	55,621	58,709	55,654	55,654
WPRO											
Onsite	137,145	138,726	136,093	136,559	141,360	143,988	138,408	139,584	140,868	141,444	141,444
Offshore	51,421	51,350	51,290	51,167	52,828	53,784	52,908	52,860	53,100	51,624	51,624

Source: Company data, Macquarie Research, November 2009

Stocks mentioned in this report (prices as of 3 November 2009)

- TCS: TCS IN, Rs608, OP, TP:Rs685,, upside: 12.8%
- Wipro: WIPRO IN, Rs581, OP, TP:Rs650, up:11.8%

Infosys Technologies (INFO IN, Outperform, Target Price: Rs2,350.00)

Quarterly Results					Profit & Loss						
	2Q/10A	3Q/10E	4Q/10E	1Q/11E		2009A	2010E	2011E	2012E		
Revenue	m	55,850	55,741	58,332	57,895	Revenue	m	216,930	224,643	256,223	310,204
Gross Profit	m	26,220	25,808	26,949	26,574	Gross Profit	m	99,280	104,547	118,400	143,832
Cost of Goods Sold	m	29,630	29,933	31,382	31,321	Cost of Goods Sold	m	117,650	120,095	137,823	166,372
EBITDA	m	19,330	18,116	18,958	18,816	EBITDA	m	71,950	75,084	83,946	99,920
Depreciation	m	2,320	2,323	2,408	2,498	Depreciation	m	7,610	9,270	10,714	12,603
Amortisation of Goodwill	m	0	0	0	0	Amortisation of Goodwill	m	0	0	0	0
Other Amortisation	m	0	0	0	0	Other Amortisation	m	0	0	0	0
EBIT	m	17,010	15,793	16,550	16,318	EBIT	m	64,340	65,813	73,233	87,317
Net Interest Income	m	2,360	2,761	2,953	3,077	Net Interest Income	m	4,750	10,765	13,412	16,451
Associates	m	0	0	0	0	Associates	m	0	0	0	0
Exceptionals	m	0	0	0	0	Exceptionals	m	0	0	0	0
Forex Gains / Losses	m	0	0	0	0	Forex Gains / Losses	m	0	0	0	0
Other Pre-Tax Income	m	0	0	0	0	Other Pre-Tax Income	m	0	0	0	0
Pre-Tax Profit	m	19,370	18,555	19,503	19,395	Pre-Tax Profit	m	69,090	76,578	86,644	103,768
Tax Expense	m	-3,970	-3,711	-3,901	-4,461	Tax Expense	m	-9,190	-15,462	-21,736	-28,017
Net Profit	m	15,400	14,844	15,603	14,934	Net Profit	m	59,900	61,116	64,908	75,751
Minority Interests	m	0	0	0	0	Minority Interests	m	0	0	0	0
Reported Earnings	m	15,400	14,844	15,603	14,934	Reported Earnings	m	59,900	61,116	64,908	75,751
Adjusted Earnings	m	15,400	14,844	15,603	14,934	Adjusted Earnings	m	59,900	61,116	64,908	75,751
EPS (rep)		26.83	25.86	27.17	25.99	EPS (rep)		104.46	106.48	112.90	131.55
EPS (adj)		26.83	25.86	27.17	25.99	EPS (adj)		104.46	106.48	112.90	131.55
EPS Growth yoy (adj)	%	7.5	-9.8	-3.4	-2.4	EPS Growth (adj)	%	28.5	1.9	6.0	16.5
						PE (rep)	x	20.5	20.1	18.9	16.3
						PE (adj)	x	20.5	20.1	18.9	16.3
EBITDA Margin	%	34.6	32.5	32.5	32.5	Total DPS		23.49	23.50	26.50	29.50
EBIT Margin	%	30.5	28.3	28.4	28.2	Total Div Yield	%	1.1	1.1	1.2	1.4
Earnings Split	%	25.2	24.3	25.5	23.0	Weighted Average Shares	m	573	574	575	576
Revenue Growth	%	3.1	-3.7	3.5	5.8	Period End Shares	m	573	574	575	576
EBIT Growth	%	5.2	-14.4	-0.5	-0.9						
Profit and Loss Ratios					Cashflow Analysis						
	2009A	2010E	2011E	2012E		2009A	2010E	2011E	2012E		
Revenue Growth	%	30.0	3.6	14.1	21.1	EBITDA	m	71,950	75,084	83,946	99,920
EBITDA Growth	%	37.4	4.4	11.8	19.0	Tax Paid	m	-9,020	-15,562	-21,736	-28,017
EBIT Growth	%	38.7	2.3	11.3	19.2	Chgs in Working Cap	m	-4,600	-4,130	-11,323	-6,868
Gross Profit Margin	%	45.8	46.5	46.2	46.4	Net Interest Paid	m	-8,760	-10,255	-13,412	-16,451
EBITDA Margin	%	33.2	33.4	32.8	32.2	Other	m	3,680	11,925	13,412	16,451
EBIT Margin	%	29.7	29.3	28.6	28.1	Operating Cashflow	m	53,250	57,062	50,887	65,034
Net Profit Margin	%	27.6	27.2	25.3	24.4	Acquisitions	m	-160	-10	0	0
Payout Ratio	%	22.5	22.1	23.5	22.4	Capex	m	-13,270	-10,184	-14,686	-13,408
EV/EBITDA	x	15.8	15.2	13.6	11.4	Asset Sales	m	20	0	0	0
EV/EBIT	x	17.7	17.3	15.6	13.1	Other	m	11,280	-1,435	-13,412	-16,451
						Investing Cashflow	m	-2,130	-11,629	-28,098	-29,859
Balance Sheet Ratios					Dividend (Ordinary)	m	-24,940	-15,733	-17,785	-18,486	
ROE	%	37.4	30.2	26.7	26.2	Equity Raised	m	640	791	782	782
ROA	%	32.1	27.1	25.3	25.5	Debt Movements	m	0	0	0	0
ROIC	%	81.5	61.4	63.9	66.1	Other	m	0	0	0	0
Net Debt/Equity	%	-53.1	-61.4	-63.5	-67.8	Financing Cashflow	m	-24,300	-14,942	-17,003	-17,704
Interest Cover	x	nmf	nmf	nmf	nmf	Net Chg in Cash/Debt	m	27,580	29,990	5,785	17,471
Price/Book	x	6.7	5.5	4.7	3.9	Free Cashflow	m	39,980	46,878	36,200	51,627
Book Value per Share		318.4	387.7	459.0	543.5						
					Balance Sheet						
	2009A	2010E	2011E	2012E		2009A	2010E	2011E	2012E		
Cash	m	96,950	136,758	167,590	212,241	Cash	m	96,950	136,758	167,590	212,241
Receivables	m	36,720	38,011	45,872	50,802	Receivables	m	36,720	38,011	45,872	50,802
Inventories	m	0	0	0	0	Inventories	m	0	0	0	0
Investments	m	0	0	0	0	Investments	m	0	0	0	0
Fixed Assets	m	53,540	54,454	58,426	59,231	Fixed Assets	m	53,540	54,454	58,426	59,231
Intangibles	m	0	0	0	0	Intangibles	m	0	0	0	0
Other Assets	m	34,050	35,763	42,782	47,185	Other Assets	m	34,050	35,763	42,782	47,185
Total Assets	m	221,260	264,986	314,670	369,459	Total Assets	m	221,260	264,986	314,670	369,459
Payables	m	3,310	3,426	4,135	4,579	Payables	m	3,310	3,426	4,135	4,579
Short Term Debt	m	0	0	0	0	Short Term Debt	m	0	0	0	0
Long Term Debt	m	0	0	0	0	Long Term Debt	m	0	0	0	0
Provisions	m	18,680	19,645	23,532	26,217	Provisions	m	18,680	19,645	23,532	26,217
Other Liabilities	m	16,730	19,266	22,955	25,503	Other Liabilities	m	16,730	19,266	22,955	25,503
Total Liabilities	m	38,720	42,337	50,622	56,299	Total Liabilities	m	38,720	42,337	50,622	56,299
Shareholders' Funds	m	182,540	222,649	264,049	313,160	Shareholders' Funds	m	182,540	222,649	264,049	313,160
Minority Interests	m	0	0	0	0	Minority Interests	m	0	0	0	0
Other	m	0	0	0	0	Other	m	0	0	0	0
Total S/H Equity	m	182,540	222,649	264,049	313,160	Total S/H Equity	m	182,540	222,649	264,049	313,160
Total Liab & S/H Funds	m	221,260	264,986	314,670	369,459	Total Liab & S/H Funds	m	221,260	264,986	314,670	369,459

All figures in INR unless noted.

Source: Company data, Macquarie Research, October 2009

Important disclosures:

Recommendation definitions

Macquarie - Australia/New Zealand

Outperform – return >5% in excess of benchmark return
Neutral – return within 5% of benchmark return
Underperform – return >5% below benchmark return

Macquarie – Asia/Europe

Outperform – expected return >+10%
Neutral – expected return from -10% to +10%
Underperform – expected return <-10%

Macquarie First South - South Africa

Outperform – expected return >+10%
Neutral – expected return from -10% to +10%
Underperform – expected return <-10%

Macquarie - Canada

Outperform – return >5% in excess of benchmark return
Neutral – return within 5% of benchmark return
Underperform – return >5% below benchmark return

Macquarie - USA

Outperform (Buy) – return >5% in excess of Russell 3000 index return
Neutral (Hold) – return within 5% of Russell 3000 index return
Underperform (Sell) – return >5% below Russell 3000 index return

Recommendations – 12 months

Note: Quant recommendations may differ from Fundamental Analyst recommendations

Volatility index definition*

This is calculated from the volatility of historical price movements.

Very high-highest risk – Stock should be expected to move up or down 60–100% in a year – investors should be aware this stock is highly speculative.

High – stock should be expected to move up or down at least 40–60% in a year – investors should be aware this stock could be speculative.

Medium – stock should be expected to move up or down at least 30–40% in a year.

Low-medium – stock should be expected to move up or down at least 25–30% in a year.

Low – stock should be expected to move up or down at least 15–25% in a year.

* Applicable to Australian/NZ/Canada stocks only

Financial definitions

All "Adjusted" data items have had the following adjustments made:

Added back: goodwill amortisation, provision for catastrophe reserves, IFRS derivatives & hedging, IFRS impairments & IFRS interest expense
Excluded: non recurring items, asset revals, property revals, appraisal value uplift, preference dividends & minority interests

EPS = adjusted net profit / epowa*

ROA = adjusted ebit / average total assets

ROA Banks/Insurance = adjusted net profit / average total assets

ROE = adjusted net profit / average shareholders funds

Gross cashflow = adjusted net profit + depreciation

*equivalent fully paid ordinary weighted average number of shares

All Reported numbers for Australian/NZ listed stocks are modelled under IFRS (International Financial Reporting Standards).

Recommendation proportions – For quarter ending 30 September 2009

	AU/NZ	Asia	RSA	USA	CA	EUR	
Outperform	45.08%	54.02%	40.00%	42.31%	62.86%	43.61%	(for US coverage by MCUSA, 0.35% of stocks covered are investment banking clients)
Neutral	39.77%	19.10%	45.00%	43.36%	31.90%	39.85%	(for US coverage by MCUSA, 0.35% of stocks covered are investment banking clients)
Underperform	15.15%	26.88%	15.00%	14.34%	5.24%	16.54%	(for US coverage by MCUSA, 0.00% of stocks covered are investment banking clients)

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