



INDIA

WPRO IN **Outperform**

Stock price
As of 3 Nov 09 **Rs581.15**

12-month target	Rs	650.00
Upside/Downside	%	11.8
Valuation	Rs	650.00
- PER		
GICS sector	software & services	
Market cap	Rsm	852,218
30-day avg turnover	US\$m	14.8
Market cap	US\$m	18,146
Number shares on issue	m	1,466

Investment fundamentals

Year end 31 Mar		2009A	2010E	2011E	2012E
Total revenue	bn	256.9	275.6	309.4	356.4
EBITDA	bn	50.4	58.3	62.9	73.1
EBITDA growth	%	26.7	15.6	8.0	16.2
EBIT	bn	43.4	50.0	53.6	62.4
EBIT growth	%	28.9	15.2	7.2	16.3
Adjusted profit	bn	38.8	43.7	46.5	51.5
EPS adj	Rs	26.54	29.72	31.47	34.65
EPS adj growth	%	19.7	12.0	5.9	10.1
PER adj	x	21.9	19.6	18.5	16.8
ROA	%	16.9	16.6	16.0	16.1
ROE	%	27.7	26.3	23.1	21.1
EV/EBITDA	x	16.1	14.1	13.1	11.3
Net debt/equity	%	-5.6	-27.5	-37.6	-45.3
P/BV	x	5.7	4.7	3.9	3.3

WPRO 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

Wipro

Late cycle recovery; room for upside

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 increase our TP in Wipro to Rs650 from Rs300 and maintain our Outperform rating. TCS is our top sector pick ahead of Infosys and Wipro.

Impact

- **We forecast US dollar denominated top-line growth of 16.2% in FY11E** (vs. 26.6% for Infosys and 26.8% for TCS). The sharp rebound in top-line growth is based on our expectation of a revival in the global economy and associated rise in Global IT spend.
- **Forecast pricing improvement in-line with peers.** We expect Wipro to deliver 1–2% QoQ improvement in pricing for the next six quarters. This is broadly in-line with our assumption for Infosys and TCS. Based on our conversations with the management of the top three IT vendors we are convinced that the worst in terms of pricing pressure is behind us and we should see positive sequential growth in pricing in quarters to come.
- **But expect volume growth to be slightly lower.** Our financial forecasts for Wipro are building in 1–2% QoQ volume growth in FY11E, lower than our forecast for Infosys and TCS, which are both in the 3–5% QoQ range. This is due to what we see as limited headroom Wipro has on improving utilisation from current levels. We note that 2Q FY10 employee utilisation (including trainees) stand at 78.2% for Wipro, 73.6% for TCS and 64.6% for Infosys.
- **Margins likely to peak in FY10E and to fall thereafter.** We expect all three industry players to show margin expansion in FY10E due to the shift in offshore revenue contribution and the higher share of revenues from fixed price contracts. However, we expect rupee appreciation, wage inflation and increased spend on sales and marketing to hurt margins for all the industry players (including Wipro) in FY11E and FY12E.

Earnings and target price revision

- We are increasing our FY10 EPS estimate to Rs29.7 from Rs27.1 but our FY11 estimate remains unchanged at Rs31.5 and our FY12 forecast falls to Rs34.7 from Rs36.2. We are increasing our target price to Rs650 from Rs300.

Price catalyst

- 12-month price target: Rs650.00 based on a PER methodology.
- Catalyst: Finalisation of CY10 client IT budgets in Nov. – Dec. 2009.

Action and recommendation

- **Maintain Outperform but see more value in TCS.** Recovery for TCS is front loaded whereas for Wipro we expect late cycle recovery in volume and top-line. This thesis underpins TCS (TCS IN, Rs608.5, OP, TP: Rs685, potential upside 12.8%) as our top pick.
- Our revised TP of Rs650 is based on 22x FY11E PER, and 2.59x PEG.

Financials – revenue growth predicated on recovery in global economy

- **We forecast Wipro to have 16% US dollar denominated top-line growth in FY11.** We expect a recovery in global IT spend to help Wipro deliver 16% YoY growth in US dollar denominated IT services revenues in FY11E and about 20% growth over the next two years. However, this is lower than top-line growth that we expect Infosys and TCS to deliver in FY11 and FY12. At the EBIT level, we expect the IT segment EBIT growth for Wipro to be a CAGR of 9.8% in FY10–12E due to margin compression following wage inflation and adverse impact of currency movement,

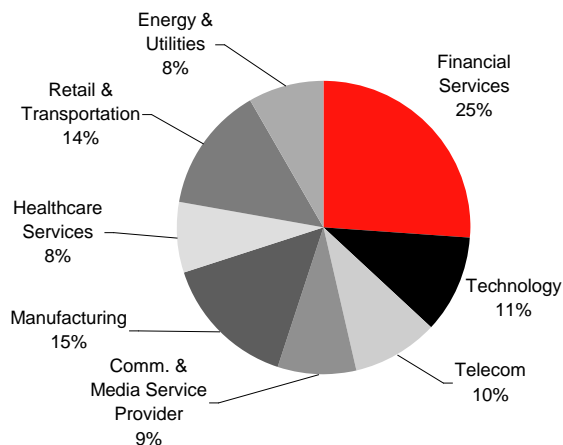
Fig 1 Key financial parameters

YoY growth in US\$ revs (%)	FY09	FY10E	FY11E	FY12E	FY13E
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 (%)					
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 (%)					
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 (%)					
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 (%)					
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

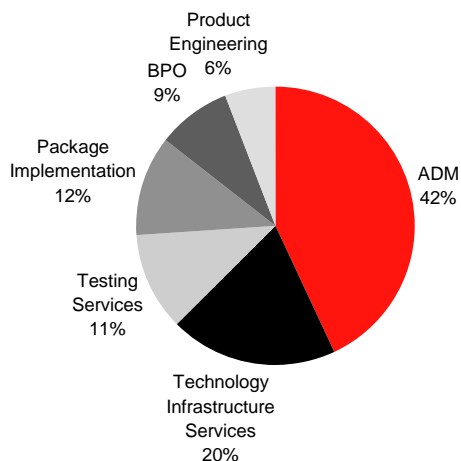
- **Strength in BPO services will help Wipro to boost top-line growth.** Wipro's acquisition of US-based hosting and managed services company Infocrossing in September 2007 has given it access to BPO Platforms catering to the healthcare payer segment and tax collection for state governments in the US. We expect Indian IT vendors to benefit from the strong growth in the BPO vertical and expect BPO revenues for Wipro to constitute 13% of its total IT revenues by FY13, up from 9% in FY09.
- **Volume growth expected to be back on track in 2H FY10.** Onsite volume growth for Wipro has remained negative for three consecutive quarters and should improve in 2H FY10 as clients finalise their full-year CY10 IT budget. We are building in 1–2% QoQ volume growth for Wipro in FY11E, lower than our forecast for Infosys and TCS, which are both in the 3–5% QoQ range. Our lower volume growth forecast for Wipro is due to what we see as the limited headroom Wipro has on improving utilisation from current levels. As of 2Q FY10, employee utilisation, including trainees is 78.2% for Wipro, 73.6% for TCS and 64.6% for Infosys.
- **Pricing improvement beginning to show but we do not expect pricing to fall.** Wipro delivered 4.7% QoQ improvement in onsite pricing and 3.4% QoQ improvement in offshore pricing for the July–September 2009 quarter. This was in contrast to the trends seen at peers Infosys (onsite pricing flat QoQ and offshore pricing down 1% QoQ) and TCS (blended pricing down 1.4% QoQ) in the quarter. Based on our interaction with the management of the three IT vendors we are convinced that the worst in terms of pricing pressure is behind us and we should see positive sequential growth in pricing in the coming quarters.
- **Expect net employee addition to turn back to positive territory in 3Q.** Wipro reported negative net employee addition in 2Q FY10. This was largely due to high involuntary churn (3.1%) in the quarter. Management noted on the earnings conference call that hiring momentum should pick up from here and we are unlikely to see negative net additions in the coming quarters. Wipro does not provide any guidance on expected employee additions for the current fiscal year.

Fig 2 Exposure to BFSI segment is lower than peers



Source: Macquarie Research, November 2009

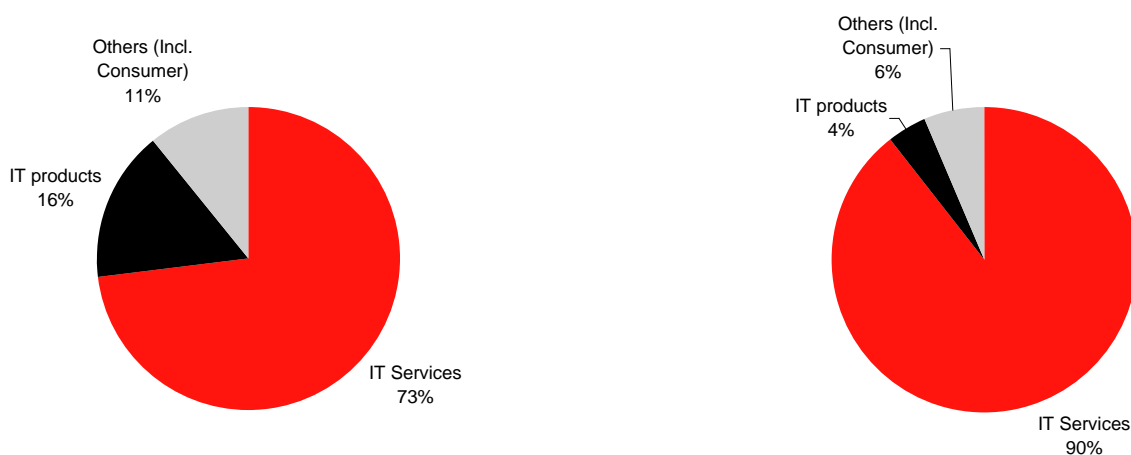
Fig 3 ADM services have highest share of revenues



Source: Macquarie Research, November 2009

- IT Services contributes 76% of revenues and 92% of consolidated profit for Wipro.** IT Services continues to be the dominant revenue contributor to Wipro’s total top-line. The other two key business segments for Wipro includes IT Products and Consumer business. We expect revenue growth for the IT products segment to remain strong and expect Wipro to deliver FY10–12E IT products revenue CAGR of 27.5%. We note that IT products is a low margin business with EBIT margin for the segment ranging between 3–4%. We are assuming low to mid double-digit growth in revenues from the consumer division over the next three years and expect segment EBIT margin of 15–17%.

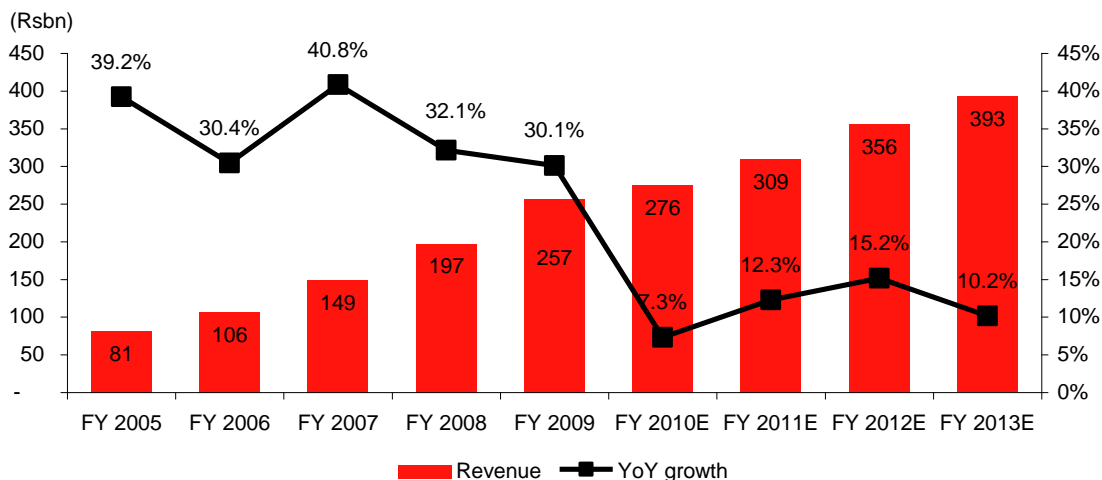
Fig 4 IT services contributes 73% of total revenues and 90% of total operating income (FY10E financials)



Source: Macquarie Research, November 2009

- We forecast two-year (FY10–12E) consolidated top-line CAGR of 13.7%.** Our double-digit growth forecast in the top-line is based on a recovery in global IT spend. We expect clients of Indian IT service providers to firm up their 2010 IT budgets in the November-December 2009 period while a faster-than-expected recovery in developed market economies could pose upside risks to our assumptions.

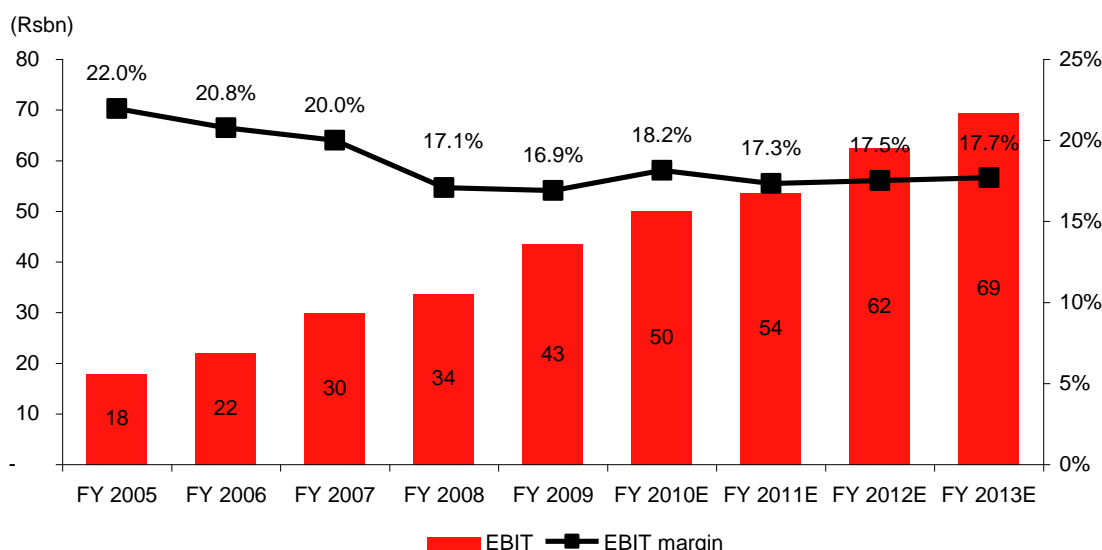
Fig 5 Revenue growth to return to double digits in FY11E



Source: Macquarie Research, November 2009

- Despite investment in top-line growth, we expect Wipro to hold on to margins.** Wipro has the lowest operating margins among the top three IT services players. As shown in Fig6, we forecast FY11E EBIT margin at 21.2% for Wipro (vs. 28.6% for Infosys and 23.4% for TCS). Our FY11E forecasts have built in 70bp margin decline for Infosys and 100bp margin decline for TCS as we expect them to invest in growth at the cost of margins. Similarly for Wipro we are building 120bp margin decline in FY11E to 21.2% from 22.4% in FY10E, leading to lower consolidated EBIT margin in FY11E. We also expect Wipro to register the sharpest expansion in IT services EBIT margin in FY10 of 200bp (vs. 73bp EBIT margin expansion for TCS and 36bp margin decline for Infosys in FY10E).

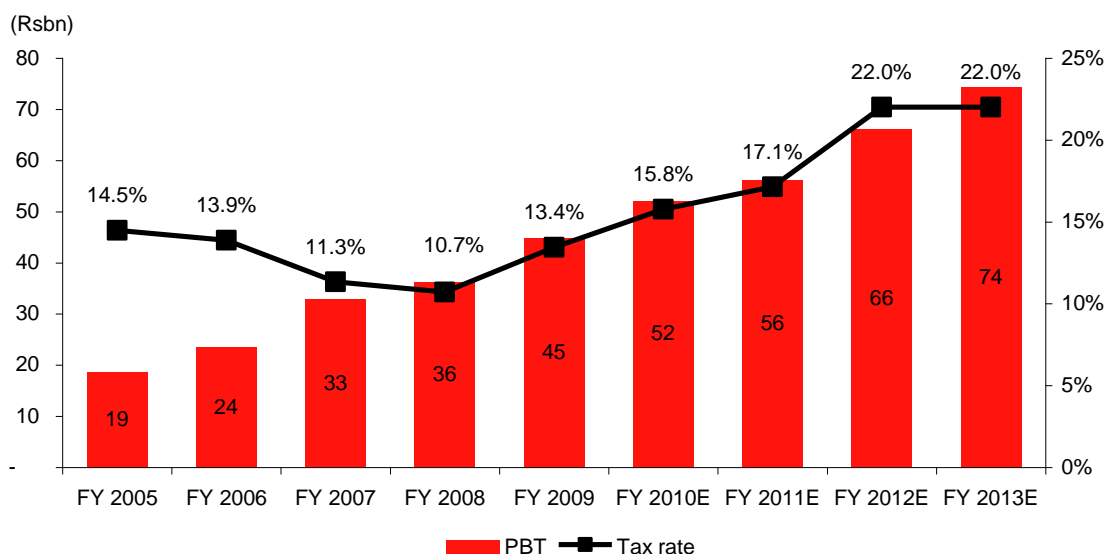
Fig 6 EBIT margins should peak in FY10E and decline from those levels due to wage inflation and FX headwinds



Source: Macquarie Research, November 2009

- Tax holiday for the sector unlikely to be extended beyond FY11E.** 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 – in 2008 (extending the tax benefit until March 2010) and 2009 (extending the tax benefit until March 2011). We believe it is unlikely that sector would see another tax holiday exemption and effective tax rate for IT companies would rise in FY12E.

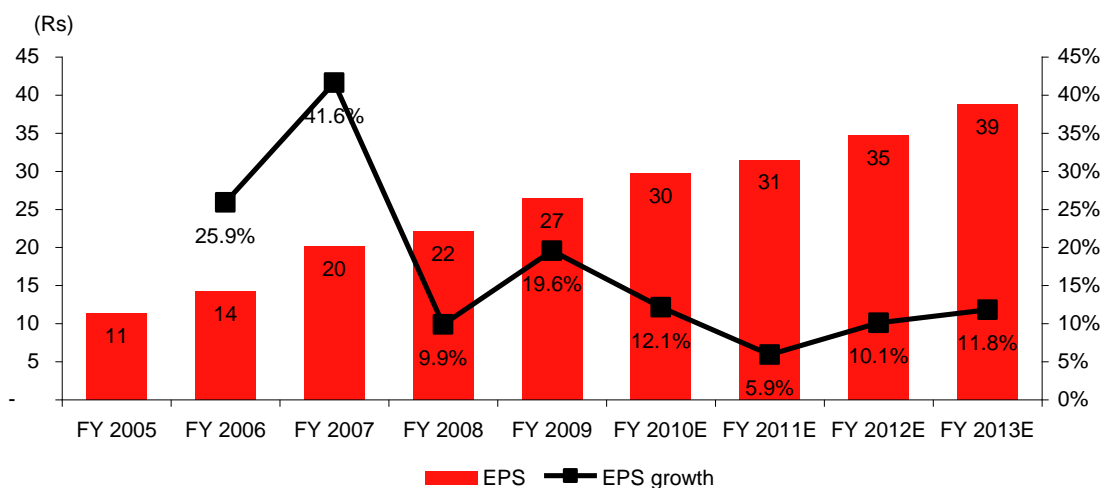
Fig 7 Tax holiday for the sector should expire in March 2011



Source: Macquarie Research, November 2009

- We expect Wipro to deliver FY10–12E EPS growth of 8%, below peers Infosys and TCS.** Based on the financial assumptions outlined above we forecast Wipro to deliver FY10–12E EPS CAGR of 8%. We highlight that management commentary had turned significantly positive on the 2Q earnings conference call and any positive surprise in the finalisation of client IT budgets in November –December 2009 could result in upside risks to our current EPS forecasts for FY11E.

Fig 8 Expect TCS and Infosys to have better EPS growth profile over next two years



Source: Bloomberg, Macquarie Research, November 2009

Macq. vs consensus: Consensus EPS upgrades already in the price

- Above consensus on revenues but below consensus on EPS.** Our top-line forecast for Wipro for FY11E and FY12E is ahead of street estimates. However, we are below consensus on margins since we expect wage inflation, a ramp up in employee addition (we expect Wipro to add around 40,000 employees for each of the next two years) and FX headwinds to drive down margin. Our below consensus EPS is largely due to our higher tax rate assumption for Indian IT vendors once they run out of tax holiday in FY11.

Fig 9 We are above consensus on all financial metrics for the next three years

	FY10	FY11	FY12
Revenues			
Macquarie	275,632	309,430	356,357
Consensus	265,630	298,936	348,683
Macq. Above Consensus	3.8%	3.5%	2.2%
EBITDA			
Macquarie	58,274	62,922	73,097
Consensus	55,975	61,947	72,294
Macq. Above Consensus	4.1%	1.6%	1.1%
Macquarie margins	21.1%	20.3%	20.5%
Consensus margins	21.1%	20.7%	20.7%
EPS			
Macquarie	29.72	31.47	34.65
Consensus	28.65	31.68	36.04
Macq. Above Consensus	3.7%	-0.7%	-3.9%

Source: Bloomberg, Macquarie Research, November 2009

Valuation: PER based target price implies 12% upside

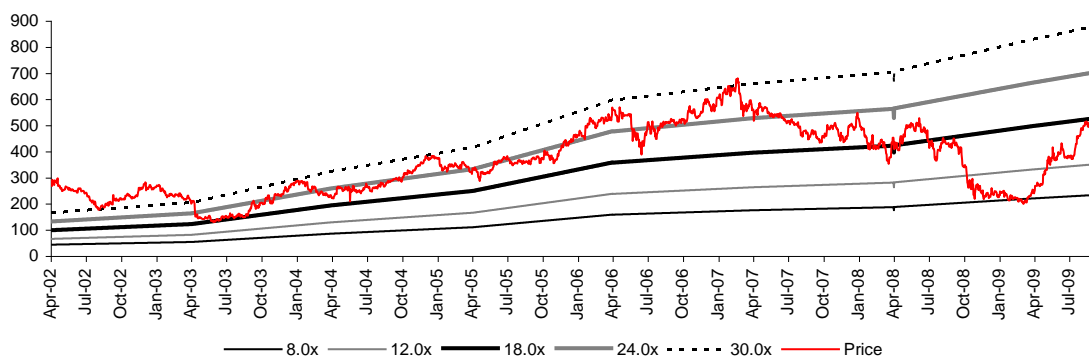
- Our target price of Rs650 is based on one year forward PER multiple of 22x. We arrive at our target price for Wipro by using a multiple-based valuation methodology. Our target PER multiple for Wipro is 22x FY11E PER, in-line with our target PER multiple for Infosys and TCS.

Fig 10 Our target price for Wipro 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(%)	20.0x	22.0x	24.0x
Infosys	-0.6%	9.3%	19.2%
TCS	2.8%	13.1%	23.4%
Wipro	2.2%	12.4%	22.7%

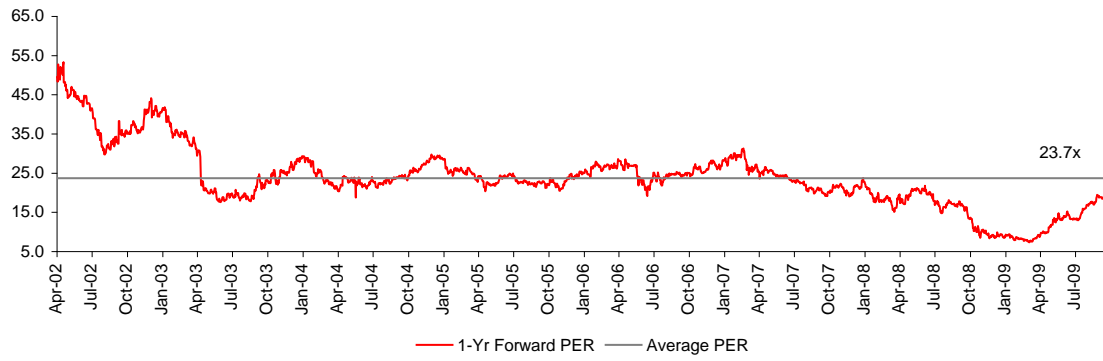
Source: Macquarie Research, November 2009

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

Fig 11 Wipro one year forward PER multiple

Source: Macquarie Research, November 2009

Fig 12 Wipro is still trading below its average long-term, one-year forward PER



Source: Bloomberg, Macquarie Research, November 2009

Fig 13 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	0.46
Genpact	G US	NR	2,617	12	NR	NR	0.7	0.7	18.6	16.7	12.0	-36.6%	-
WNS	WNS US	NR	608	14	NR	NR	1.2	1.4	12.0	10.0	3.9	-28.4%	-

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

Appendix 1: Key operating metrics of the three players

Fig 14 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 15 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 16 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 17 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 18 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 19 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 20 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 21 Revenue contribution from Consulting and Package Implementation

	2Q FY08	3Q FY08	4Q FY08	FY 2008	1Q FY09	2Q FY09	3Q FY09	4Q FY09	FY 2009	1Q FY10	2Q FY10
TCS											
Consulting	3.3%	3.7%	3.6%	3.4%	3.7%	2.9%	2.5%	1.7%	2.7%	1.4%	1.6%
INFY											
Consulting 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%
WPRO											
Consulting and Package Implementation	14.3%	14.0%	13.2%	13.9%	13.3%	13.7%	14.0%	14.9%	14.0%	15.4%	15.6%

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)

- Infosys: INFO IN, Rs2,143, OP, TP:Rs2,350, upside: 9.8%
- TCS: TCS IN, Rs608.5, OP, TP:Rs685, upside: 12.8%

Wipro (WPRO IN, Outperform, Target Price: Rs650.00)

Quarterly Results					Profit & Loss						
	2Q/10A	3Q/10E	4Q/10E	1Q/11E		2009A	2010E	2011E	2012E		
Revenue	m	68,937	69,640	73,187	73,240	Revenue	m	256,892	275,632	309,430	356,357
Gross Profit	m	21,415	21,676	21,820	21,236	Gross Profit	m	76,711	85,532	88,100	98,846
Cost of Goods Sold	m	47,522	47,964	51,367	52,005	Cost of Goods Sold	m	180,180	190,100	221,330	257,511
EBITDA	m	15,275	14,642	15,059	14,989	EBITDA	m	50,394	58,274	62,922	73,097
Depreciation	m	2,086	2,089	2,196	2,197	Depreciation	m	6,948	8,244	9,283	10,691
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	13,189	12,553	12,864	12,792	EBIT	m	43,446	50,030	53,639	62,406
Net Interest Income	m	681	234	355	383	Net Interest Income	m	1,086	1,624	1,975	3,015
Associates	m	112	118	123	130	Associates	m	362	467	547	645
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	13,982	12,904	13,342	13,305	Pre-Tax Profit	m	44,894	52,121	56,161	66,067
Tax Expense	m	-2,217	-2,065	-2,201	-2,235	Tax Expense	m	-6,035	-8,223	-9,630	-14,535
Net Profit	m	11,765	10,840	11,140	11,069	Net Profit	m	38,859	43,898	46,531	51,532
Minority Interests	m	-58	-61	-64	0	Minority Interests	m	-99	-232	0	0
Reported Earnings	m	11,707	10,779	11,076	11,069	Reported Earnings	m	38,760	43,666	46,531	51,532
Adjusted Earnings	m	11,707	10,779	11,076	11,069	Adjusted Earnings	m	38,760	43,666	46,531	51,532
EPS (rep)		7.97	7.33	7.52	7.50	EPS (rep)		26.54	29.72	31.48	34.65
EPS (adj)		7.97	7.33	7.52	7.50	EPS (adj)		26.54	29.72	31.47	34.65
EPS Growth yoy (adj)	%	20.0	5.8	9.8	8.9	EPS Growth (adj)	%	19.7	12.0	5.9	10.1
						PE (rep)	x	21.9	19.6	18.5	16.8
						PE (adj)	x	21.9	19.6	18.5	16.8
EBITDA Margin	%	22.2	21.0	20.6	20.5	Total DPS		0.04	0.06	0.06	0.07
EBIT Margin	%	19.1	18.0	17.6	17.5	Total Div Yield	%	0.0	0.0	0.0	0.0
Earnings Split	%	26.8	24.7	25.4	23.8	Weighted Average Shares	m	1,461	1,469	1,478	1,487
Revenue Growth	%	5.6	5.7	12.1	14.7	Period End Shares	m	1,461	1,473	1,482	1,491
EBIT Growth	%	20.5	12.9	12.8	12.0						
Profit and Loss Ratios					Cashflow Analysis						
	2009A	2010E	2011E	2012E		2009A	2010E	2011E	2012E		
Revenue Growth	%	30.1	7.3	12.3	15.2	EBITDA	m	50,394	58,274	62,922	73,097
EBITDA Growth	%	26.7	15.6	8.0	16.2	Tax Paid	m	0	0	0	0
EBIT Growth	%	28.9	15.2	7.2	16.3	Chgs in Working Cap	m	1,122	8,526	-107	-204
Gross Profit Margin	%	29.9	31.0	28.5	27.7	Net Interest Paid	m	0	0	0	0
EBITDA Margin	%	19.6	21.1	20.3	20.5	Other	m	-7,553	3,109	1,976	3,016
EBIT Margin	%	16.9	18.2	17.3	17.5	Operating Cashflow	m	43,963	69,908	64,792	75,909
Net Profit Margin	%	15.1	15.9	15.0	14.5	Acquisitions	m	-1,030	-25,987	0	0
Payout Ratio	%	0.2	0.2	0.2	0.2	Capex	m	-16,746	-10,949	-15,471	-17,818
EV/EBITDA	x	16.1	14.1	13.1	11.3	Asset Sales	m	358	180	0	0
EV/EBIT	x	18.7	16.4	15.3	13.3	Other	m	-6,765	5,980	0	0
						Investing Cashflow	m	-24,183	-30,776	-15,471	-17,818
Balance Sheet Ratios					Dividend (Ordinary)	m	-6,829	-13,678	-6,856	-6,856	
ROE	%	27.7	26.3	23.1	21.1	Equity Raised	m	78	69	0	0
ROA	%	16.9	16.6	16.0	16.1	Debt Movements	m	-460	21,940	0	0
ROIC	%	31.3	29.7	33.6	35.1	Other	m	3,952	-36,306	0	0
Net Debt/Equity	%	-5.6	-27.5	-37.6	-45.3	Financing Cashflow	m	-3,259	-27,975	-6,856	-6,856
Interest Cover	x	nmf	nmf	nmf	nmf						
Price/Book	x	5.7	4.7	3.9	3.3	Net Chg in Cash/Debt	m	17,184	10,753	42,464	51,235
Book Value per Share		102.8	123.4	149.5	178.5	Free Cashflow	m	27,217	58,959	49,320	58,091
						Balance Sheet					
							2009A	2010E	2011E	2012E	
						Cash	m	65,297	96,406	129,786	167,132
						Receivables	m	60,060	66,199	73,631	82,384
						Inventories	m	8,686	7,150	7,953	8,898
						Investments	m	338	0	0	0
						Fixed Assets	m	49,862	51,610	57,798	64,925
						Intangibles	m	49,502	54,548	54,548	54,548
						Other Assets	m	56,803	35,690	36,939	38,410
						Total Assets	m	290,548	311,603	360,655	416,297
						Payables	m	18,017	49,567	55,265	61,903
						Short Term Debt	m	37,211	23,052	23,052	23,052
						Long Term Debt	m	19,595	23,222	23,222	23,222
						Provisions	m	0	0	0	0
						Other Liabilities	m	65,308	33,390	37,069	41,396
						Total Liabilities	m	140,131	129,232	138,608	149,573
						Shareholders' Funds	m	150,182	181,785	221,460	266,137
						Minority Interests	m	235	587	587	587
						Other	m	0	0	0	0
						Total S/H Equity	m	150,417	182,372	222,047	266,724
						Total Liab & S/H Funds	m	290,548	311,603	360,655	416,297

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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