7 November 2007 | 56 pages

Indian IT Services

Good Execution but No Catalysts in Sight

Surendra Goyal, CFA[1]
+91-22-6631-9870
surendra.goyal@citi.com

Hitesh Shah, CFA[1]
+91-22-6631-9872
hitesh.b.shah@citi.com

Vishal Agarwal[1]
vishal1.agarwal@citi.com

- **CY07 operationally strong, stock performance disappoints** — CY07 has been a disappointing year for Indian IT stocks due to the appreciation of the rupee (+11% YTD) and concerns over demand after the sub-prime crisis. However, tier-one IT companies' operational performance has been strong.
- **The top 5 have performed better than mid-caps** — 2Q highlighted the ability of the top 5 IT companies to manage growth/margins in a difficult environment. Even from a stock market perspective, they have outperformed the mid-caps by ~20% over the past 6 months and in our view carry better prospects.
- **No respite in sight, macro overhang persists** — The key concerns include: (1) an appreciating rupee, with our economist forecasting Rs38 and Rs36 for CY08/FY09 and CY09/FY10; and (2) the impact of US slowdown on demand. No near-term catalysts are in sight, and we are entering a seasonally weak 2H.
- **Key themes —** (1) US IT budgets – we expect 1-2% growth; (2) Pricing trends – positive (3) Non-linearity – a start but long way to go; (4) Buybacks/higher dividends – first signs; and (5) Wage hike moderation – possible in FY09.
- **Ratings, estimates and target prices revised** — We are cutting our estimates by 2-5% for tier-one players and reducing our target multiples following our new INR forecasts. TCS and Satyam are our top picks in the tier-one segment; Mphasis is our top pick among mid-caps. We also like Infosys among tier-one players.

Company	RIC	Rating		Target Price		Current Yr. Estimates		Next Yr. Estimates	
Name	Code	Old	New	Old	New	Old	New	Old	New
Infosys	INFY.BO	1L	1L	2,440	2,190	80.24	80.26	98.35	95.14
TCS	TCS.BO	1L	1L	1,460	1,290	51.55	52.73	62.65	61.40
Wipro	WIPR.BO	1L	1L	650	565	23.37	22.76	28.75	28.20
Satyam	SATY.BO	1M	1M	570	565	24.93	24.69	30.28	29.80
HCL Tech	HCLT.BO	1M	1M	400	365	18.34	18.07	21.85	21.30
I-Flex	IFLX.BO	3M	3M	2,025	1,570	49.37	38.01	68.62	58.18
Patni	PTNI.BO	1M	1H	525	475	32.29	32.93	34.96	33.77
Mphasis	MBFL.BO	1M	1M	400	360	12.21	12.30	19.04	18.02
Hexaware	HEXT.BO	1M	1M	155	122	9.04	7.91	10.36	9.40
Sasken	SKCT.BO	1M	1H	505	372	19.97	16.82	32.64	23.40
KPIT	KPIT.BO	1M	1M	154	130	7.27	7.01	10.25	9.28

Source: Citi Investment Research estimates

See Appendix A-1 for Analyst Certification and important disclosures.

[1]Citigroup Global Markets India Private Limited

Contents

Disappointing CY07; macro overhang persists

The sharp INR appreciation of ~11% YTD has been a big overhang on the price performance of stocks in the Indian IT services sector. As a rule of thumb, a 1% INR appreciation leads to a ~30-50bp decline in margins. Although companies have tried mitigating margin pressures by increasing prices, improving utilization, broadening the employee pyramid and increasing productivity, Indian IT stocks have underperformed. Moreover, worries in the US economy — a housing market slowdown and sub-prime mortgage issues — have raised investor concerns about the possible impact on the BFSI and other sectors. .

Company results show strong resilience

Most Indian IT services companies have reported healthy results (ex INR appreciation) — strong volume growth and healthy pricing uptick have led to good revenue in US$ terms despite concerns on the US housing slowdown and the sub-prime crisis.

The INR's appreciation of ~11% YTD and ~14% yoy has led to significant margin pressures on offshore firms. With ~14% yoy INR appreciation and all else remaining constant, the appreciation could have led to a ~400-500bp margin decline. For companies with operating margins in the 20-25% range, this could potentially lead to operating earnings reduction of ~20%; and for companies with operating margins in the mid-teens, earnings reduction could be as high as ~30%. However, most of the offshore IT companies seem to have managed this headwind well, with tier-one IT companies such as Infosys and TCS restricting YoY operating margin declines within 100bps.

2Q better than expectations

Indian IT services companies reported strong results for 2Q FY08. Revenue growth was driven by a combination of volume growth and pricing uptick. For top-tier companies, volume growth ranged from 8-9% and pricing uptick was 1-3% qoq. Results from tier-one companies were strong notwithstanding the INR appreciation; mid-tier companies reported mixed results.

Comparing the top 4

All the top four Indian IT services companies reported strong revenue growth in US$ terms (10-12% qoq). TCS and Satyam led in volume growth, while Infosys reported a sharp pricing increase. Growth was led by non-ADM services and non-US geographies. All four players reported 10%-plus BFSI growth.

Figure 1. Snapshot of 2Q FY08

	TCS	Infosys	Wipro	Satyam
Revenue				
Revenue growth ($ terms)				
Change qoq	10.8%	10.1%	9.7%	12.4%
Change yoy	45.1%	37.0%	35.3%	44.8%
Revenue growth (INR terms)				
Change qoq	8.4%	8.8%	10.3%	11.0%
Change yoy	25.8%	19.0%	19.4%	26.8%
Volume growth and hiring				
Volume growth (qoq)	9.0%	7.8%	7.7%	9.0%
Hiring				
Change qoq - Last Quarter	10.2%	6.0%	7.4%	8.1%
Change yoy - TTM	35.3%	22.0%	26.6%	31.1%
Campus offers made for FY09	22,300	18,000	14,000	-
Revenue per employee				
Onsite price realization				
Change qoq	-	2.9%	1.9%	2.2%
Change yoy	-	8.3%	3.2%	4.6%
Offshore price realization				
Change qoq	-	2.6%	1.6%	1.3%
Change yoy	-	6.9%	1.8%	3.7%
Margins and changes				
Gross margins (%)	44.8%	45.7%	35.8%	35.8%
Change qoq (bp)	+73	+315	-10	-370
Change yoy (bp)	-52	-122	-160	-278
EBITDA margins (%)	26.3%	31.3%	25.5%	19.8%
Change qoq (bp)	+78	+254	+61	-260
Change yoy (bp)	-115	-86	-250	-281
Revenue growth profile - QoQ (%)				
US	13.4%	10.1%	5.5%	6.2%
Europe	7.0%	12.6%	15.5%	16.9%
Non-US	7.6%	10.1%	17.2%	21.8%
ADM	7.0%	7.1%	8.1%	12.7%
Non-ADM	21.0%	13.3%	11.7%	11.8%
BFSI	12.0%	11.3%	11.5%	12.4%
Top10	5.2%	1.9%	6.1%	10.6%
Non-Top10	14.4%	14.0%	10.9%	13.0%

Source: Company Reports

Among the tier-one players, Infosys reported significant margin improvement (~250 bp qoq) on the back of pricing uptick. TCS and Wipro reported margin improvements of 60-80 bps, despite Wipro having partial wage hikes and TCS absorbing promotion-related wage increases during the quarter. Satyam reported ~260bps margin decline primarily due to wage hike impact/higher onsite proportion of revenues.

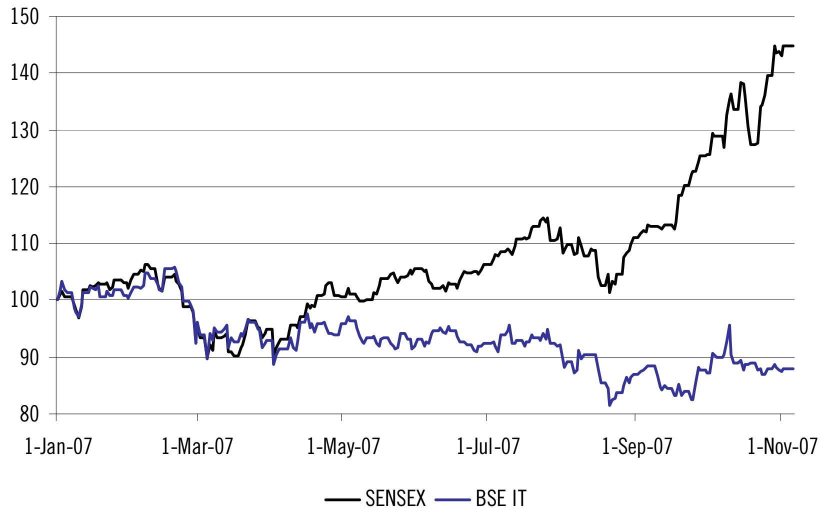
Tier-two players in difficult times

Tier-two IT services companies reported mixed results. Mphasis, KPIT Cummins and MindTree reported good sales growth, while Hexaware, Tech Mahindra and Patni posted muted sequential revenue growth. On a YoY basis, operating margins declined for all mid-tier firms (except for Mphasis) as the INR appreciation took its toll and revenue growth did not lead to any significant leverage to counter the INR's appreciation.

Significant stock price underperformance in CY07

Indian IT services stocks have significantly underperformed the Sensex in CY07.

Figure 2. Underperformance — BSEIT vs. Sensex



Source: DataStream, Company Reports and CIR Estimates

YTD, top-tier IT services stocks are down ~12% (on average) and mid-tier stocks are down on average ~27% YTD.

Figure 3. Stock Performance — Top 5 Companies vs. Mid-tier Companies

		Price	Market Cap	Performance					
		2-Nov-07	US$ m	1W	1M	3M	6M	12M	YTD
Top5 companies									
Infosys	INFY.BO	1,908	27,787	3.2%	0.8%	0.5%	-6.9%	-8.5%	-14.8%
TCS	TCS.BO	1,021	25,462	-4.6%	-1.7%	-6.8%	-19.4%	-5.5%	-16.2%
Wipro	WIPR.BO	492	18,304	-1.6%	8.4%	6.4%	-13.9%	-7.8%	-18.6%
Satyam	SATY.BO	462	7,877	-2.7%	4.3%	-0.9%	-2.3%	8.2%	-4.5%
HCL Tech	HCLT.BO	301	5,090	-2.3%	2.0%	1.1%	-10.0%	-2.2%	-7.2%
Average				**-1.6%**	**2.8%**	**0.1%**	**-10.5%**	**-3.2%**	**-12.3%**
Mid-Tier companies									
Tech Mahindra	TEML.BO	1,158	3,581	-5.2%	-11.2%	-9.3%	-27.1%	15.5%	-30.6%
I-Flex	IFLX.BO	1,529	3,263	-3.6%	-18.8%	-24.9%	-39.3%	-0.1%	-21.5%
Patni	PTNI.BO	359	1,270	-16.6%	-22.0%	-16.7%	-24.4%	-11.2%	-14.2%
Mphasis BFL	MBFL.BO	291	1,221	0.7%	4.1%	0.8%	-7.1%	33.3%	-4.0%
Hexaware	HEXT.BO	99	363	-10.8%	-19.0%	-19.4%	-41.4%	-41.8%	-50.2%
Sasken	SKCT.BO	283	206	-6.0%	-14.3%	-21.4%	-42.9%	-35.2%	-47.3%
KPIT Cummins	KPIT.BO	105	204	-6.0%	-10.9%	-12.5%	-22.8%	-15.4%	-24.3%
Average				**-6.8%**	**-13.2%**	**-14.8%**	**-29.3%**	**-7.8%**	**-27.4%**

Source: DataStream

Some points to ponder on

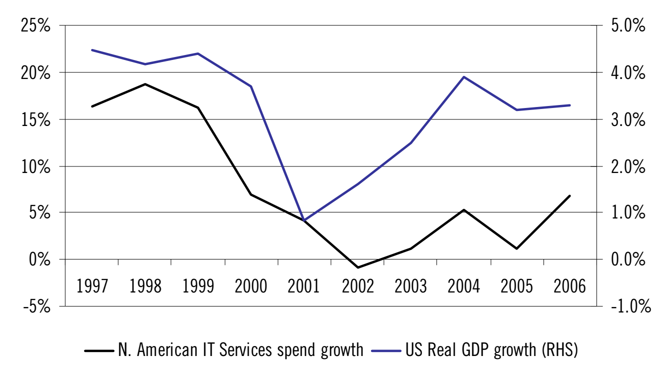
US IT budgets – how bad can they get?

Our latest Citi CIO Macro Trends Survey highlights the following points:

- Negative bias on IT spending, as expected; however, US CIOs still expect their IT spending budgets to be up 1-2% yoy.
- 80% of CIOs do not expect recent credit tightening to affect IT budgets.
- 44% of European CIOs and 90% of US CIOs who currently have an outsourcing contract up for renewal are planning to break the contract down to smaller agreements with best-of-breed providers.
- CIOs continue to point to several typically discretionary IT projects as their top priorities, including: Beefing-up IT Security, Server Consolidation, Custom Software Development, Software Testing, Application and Business Intelligence Software Deployment, and PC Upgrade.

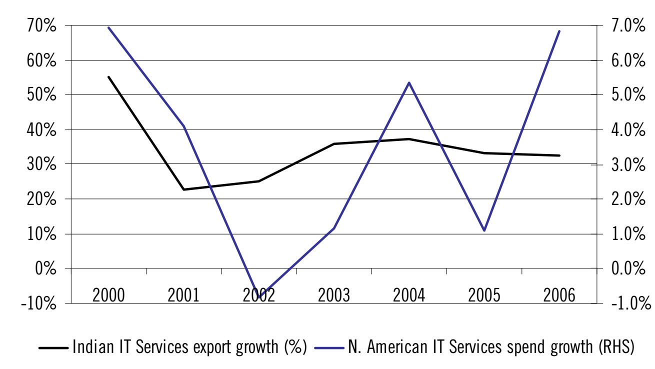
Looking at last 10 years' data, the worst decline in North American IT services spending was 0.8% yoy, in 2002 (after 0.8% US Real GDP growth in 2001). In 2002, when North American IT services spend declined 0.8% yoy and worldwide IT services spend fell 0.3% yoy (the worst in the last 10 years), Indian IT services exports grew 25%. Based on our discussions with companies, we do not expect any slowing in volumes for tier-one Indian IT services players. We continue to believe that US slowdown will drive the inevitable structural shift of IT services to offshore locations.

Figure 4. US GDP Growth vs. N. America IT Services Spend



Source: Gartner, IMF and Citi Investment Research

Figure 5. N. America IT Services Spend vs. Indian IT Services Exports



Source: Gartner, NASSCOM and Citi Investment Research

Can pricing uptick continue if US slows down?

The following are some takeaways from our discussion with our US analyst, Ashwin Shirvaikar, covering staffing companies:

- Staffing firm Robert Half has data out indicating 5-7% wage inflation for IT talent in the US. Robert Half Technology unit showed accelerating growth in its recent quarter (growth in 3Q07 was 21% yoy, against +18.6% in 2006).

- Manpower's (another large staffing firm) European IT unit, Elan, has begun to show a decent set of results; our US staffing analyst believes this is related to a talent shortage that causes clients to reach out to staff augmentation firms.

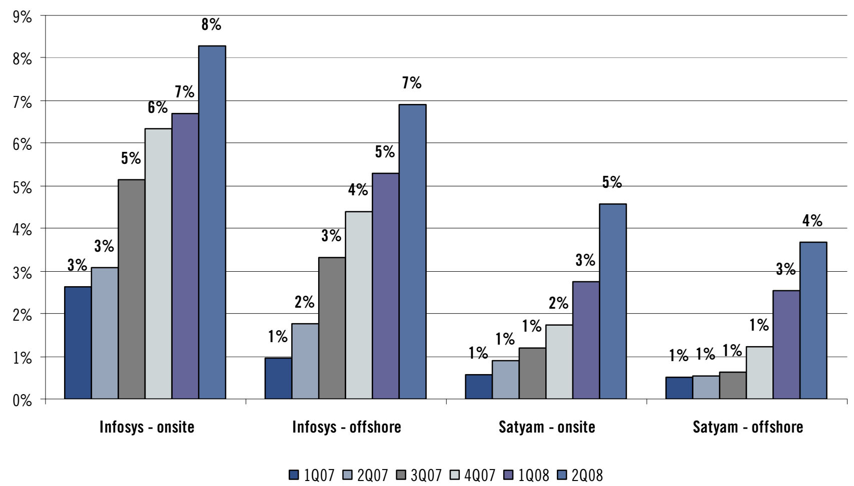
- Anecdotally, IT unemployment is very low, possibly as low as 2% in the US.

Our pricing thesis is built around talent scarcity, which is a constraint for IT companies globally. We expect modest price increases to continue. Discussions with companies indicate that renegotiations are under way for 2-5% higher pricing.

Non-linearity coming in?

Most of the Indian IT companies under our coverage have been witnessing decent increase in revenue/employee in the past few quarters. The chart below highlights the accelerating revenue per employee increase (yoy) for Infosys and Satyam.

Figure 6. YoY Changes in Onsite and Offshore Productivities for Infosys and Satyam



Source: Company Reports

Our discussions with companies indicate that pricing increases are lower than the revenue productivity improvement delivered in the last few quarters. The key reasons, in our view, are:

- Pricing increases: Our view on pricing increases was affirmed by all companies in their post 2Q earnings calls. Even, mid-cap companies such as Hexaware and KPIT Cummins talked of 3-10% pricing increases from new/existing clients.

- Focus on frameworks and solutions: Most of the tier-one companies highlighted their increased focus on frameworks and solutions to increase the revenue productivity.

- Higher value-added services — Companies are trying to move up the value chain so that they can obtain better pricing for their services.

Increase in buyback/dividends

Last month there were four interesting announcements in the sector:

- Cognizant, the US-listed offshore IT services player, announced its first buyback. The company said its board authorized a share repurchase program of up to US$100m of its common stock over the next 12 months.
- Hexaware announced that the board would meet in Nov to mull a buyback.
- Mastek, a mid-sized player, announced buyback at a price not exceeding Rs750 per share (when the stock price was ~Rs300).
- iGate, another mid-sized player, indicated that it plans to de-list their India business and remain listed only in the US. One of the reasons cited by the company was better valuation ascribed to IT services companies in the US markets.

With cash generation remaining strong, we do expect some pick-up in buyback/dividend activity in the sector. However, the restriction of buyback only up to 25% of net worth in India, will result in buyback being small — only ~2-5% of paid-up capital for tier-one players. However, instituting a regular annual buyback plan could act as a support from a stock price point of view.

M&A — more activity?

M&A in the sector can broadly be divided into (1) large Indian IT companies acquiring to add to their existing capabilities, and (2) mid-sized/small companies selling off (partially or completely) to large players.

We have not seen significant M&A activity in the sector except for Wipro's acquisition of Infocrossing. We believe that M&A activity could accelerate with the large companies having liquid/unleveraged balance sheets.

With valuations for Indian mid-caps being at historical lows we believe that acquisition activity could increase in the tier-two space. Difficult business environment could also result in Indian major shareholders being willing to sell their stakes.

Patni remains our preferred play on this theme. Recent newspaper articles suggest that the deal has been delayed. However, Patni's size and valuations make it a very attractive acquisition play, in our view. We believe it is only a matter of time before a stake sale/restructuring results in value accretion.

Can wage hikes moderate next year?

There has been a lot of debate on the topic over the past few months.

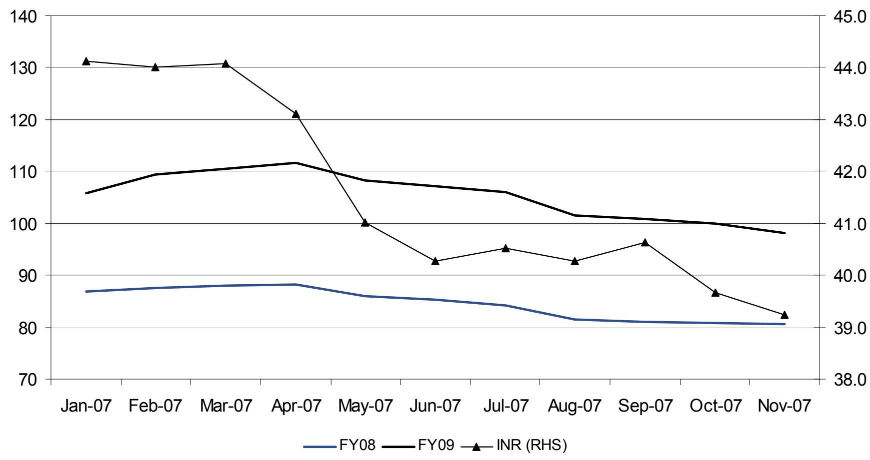
- TCS and Wipro have gone on record suggesting that they expect offshore wage hikes to moderate from the 12-15% levels over the past few years.
- However, Infosys believes that with demand remaining strong, there is no reason for moderation in wage hikes next year.
- With companies focusing on utilization (as a margin lever), hiring is expected to slow — more so, among the tier-two players. Also, the scramble for talent at any price will reduce as companies are under margin pressure.

We therefore could see some moderation in offshore wage hikes in FY09. However, clarity should emerge only in the next few months. If demand remains very strong and tier-two players accelerate hiring, then wage increases next year could mirror the past few years' trends.

Rupee, rupee and rupee

The rupee has emerged as the biggest variable for IT stocks. In our view, the rupee has been the biggest spoilsport for IT stocks and remains the biggest overhang.

Figure 7. Changes in Infosys IBES Estimates and INR Spot Rate (Last 11 months)



Source: DataStream, I/B/E/S

Worth highlighting is that Infosys (and other tier-ones) could have seen meaningful upgrades had it not been for the INR's appreciation.

Valuations close to historical lows

Valuations of most India IT services stocks (in terms of P/E) are close to historical lows.

Figure 8. Infosys 12M Forward Dynamic PER Chart

Source: DataStream, Company reports and Citi Investment Research estimates

Figure 9. Satyam 12M Forward Dynamic PER Chart

Source: DataStream, Company reports and Citi Investment Research estimates

Look at global comparables

Indian IT services stocks still enjoy higher valuations than global peers. However, in our view, these are justified considering better growth rates and prospects and higher return ratios.

Figure 10. Global Valuation Comparison — IT services

Company Name	RIC Code	Year end	CIR Rating	Mkt cap (US$ m)	CMP 05-Nov-07	Target price	P/E (x) FY08E	P/E (x) FY09E	EV/EBITDA (x) FY08E	EV/EBITDA (x) FY09E	P/BV (x) FY08E	P/BV (x) FY09E
Infosys	INFY.BO	31-Mar	1L	27,057	1,856	2,190	23.1	19.5	19.3	15.4	7.1	5.5
TCS	TCS.BO	31-Mar	1L	25,249	1,011	1,290	19.2	16.5	15.6	12.9	7.8	5.8
Wipro	WIPR.BO	31-Mar	1L	18,062	485	565	21.3	17.2	16.4	13.0	5.7	4.6
Satyam	SATY.BO	31-Mar	1M	7,919	464	565	18.8	15.6	15.3	12.3	4.5	3.8
HCL Tech	HCLT.BO	30-Jun	1M	5,203	307	365	17.0	14.4	12.1	9.7	3.4	2.9
Accenture*	ACN.N	31-Aug	2H	22,569	37.55	45.00	19.0	16.2	6.5	5.7	11.0	6.9
EDS*	EDS.N	31-Dec	2S	10,816	21.15	24.00	13.4	15.1	3.8	3.6	1.3	1.2
Cognizant*	CTSH.O	31-Dec	1H	11,460	39.61	57.00	35.3	25.6	24.8	16.9	5.6	4.3
Cap Gemini*	CAPP.PA	31-Dec	1H	8,716	41.61	70.00	14.0	11.2	5.4	4.3	1.5	1.4
Atos Origin*	ATOS.PA	31-Dec	2H	4,005	40.13	45.00	16.3	12.8	6.4	5.2	1.5	1.3

Source: Company Reports and Citi Investment Research estimates; Prices as of 05-Nov-07 close.

*Using FY07E and FY08E for companies with fiscal year ending 2H of calendar (e.g. 31-Aug and 31-Dec year-ending).

DCF: Reality check

We have historically used P/E multiples as the primary valuation methodology. In DCF, the problem remains that a large part of the value in such high-growth companies remains in the terminal value and any change in the terminal growth assumption results in significant changes in the value. However, we have run a DCF analysis on the top 6 companies as a reality check.

Figure 11. Key DCF Forecasts and Assumptions

	Infosys	TCS	Wipro	Satyam	HCL Tech	Patni
Key forecasts						
Revenue CAGR FY07-FY17 (US$)	24.9%	24.7%	26.5%	24.5%	22.7%	17.5%
Revenue CAGR FY07-FY17 (Rs.)	21.1%	20.9%	22.7%	20.7%	19.0%	13.9%
EBIT margin decline from FY07	-4.6%	-4.5%	-4.7%	-6.0%	-3.5%	-2.4%
Tax rate in FY2010	20.1%	20.3%	20.0%	20.5%	20.7%	19.3%
Terminal growth rate	5.0%	4.5%	4.5%	4.5%	4.0%	2.0%
Discounting Assumptions						
Cost of capital	12.5%	12.3%	13.1%	12.9%	13.6%	12.8%
Target Debt/Equity	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Cost of Equity	12.5%	12.3%	13.1%	12.9%	13.6%	12.8%
Risk free rate	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%
Equity risk premium	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%
Beta - Bloomberg	0.752	0.712	0.848	0.809	0.938	0.805
Discounted Cash Flow Value						
DCF based fair value (FY09)	2,203	1,312	543	522	340	450

Source: Bloomberg and Citi Investment Research

Valuations relative to Indian market

Infosys' one-year forward P/E multiple has gradually been coming down compared with the market. However, we believe it is largely due to improving growth prospects in other sectors. Infosys continues to deliver on earnings growth. With good prospects and superior return ratios, some premium should return.

Figure 12. Infosys Premium to Sensex Valuation on 12-Month Forward P/E

Source: DataStream, Company reports, Citi Investment Research estimates

Infosys' EPS is expected to grow 19% in FY09, compared with 18% for the Sensex (Citi estimates).

PEG: Not appropriate

Our view remains that PEG is not an appropriate (though very simple) valuation methodology to apply. If one looks at the history of Indian IT, Infosys had the lowest PEG when growth outlook was the best and vice versa – which itself contradicts the rationale of using PEG. Also PEG does not take into account the size of the company and quality of earnings.

Our target multiples

We have lowered our target multiples as EPS growth slows primarily due to our new INR estimates (Rs38/US$1 for FY09 and Rs36/US$1 for FY10).

Figure 13. Changes in CIR Rating and Target Prices

Company	RIC Code	CMP (Rs)	Mkt cap (US$ m)	Target P/E multiple Old	Target P/E multiple New	Target price Old	Target price New	CIR Rating Old	CIR Rating New
Infosys	INFY.BO	1,908	27,794	25.0x	23.0x	2,440	2,190	1L	1L
TCS	TCS.BO	1,021	25,468	23.0x	21.0x	1,460	1,290	1L	1L
Wipro	WIPR.BO	492	18,312	22.0x	20.0x	650	565	1L	1L
Satyam	SATY.BO	462	7,880	19.0x	19.0x	570	565	1M	1M
HCL Tech	HCLT.BO	301	5,092	18.0x	17.0x	400	365	1M	1M
I-Flex	IFLX.BO	1,529	3,264	30.0x	27.0x	2,025	1,570	3M	3M
Patni*	PTNI.BO	359	1,270	15.0x	14.0x	525	475	1M	1H
Mphasis	MBFL.BO	291	1,221	21.0x	20.0x	400	360	1M	1M
Hexaware*	HEXT.BO	99	363	15.0x	13.0x	155	122	1M	1M
Sasken	SKCT.BO	283	206	-	-	505	372	1M	1H
KPIT	KPIT.BO	105	205	15.0x	14.0x	154	130	1M	1M

Source: Citi Investment Research estimates

Estimate and recommendation changes

We have tweaked our estimates to incorporate 2Q FY08 results (we are particularly enthused by positive surprises on productivity/pricing) and a stronger INR. We are factoring in forex rates of Rs38/US$1 for FY09 and Rs36 for FY10, against Rs40 and Rs39 previously.

Figure 14. Earnings Revision Table

		Estimates	Net Profit (Rs m) FY08E	FY09E	FY10E	EPS (Rs.) FY08E	FY09E	FY10E	EPS Change FY08E	FY09E	FY10E	Dividend (Rs.) FY08E	FY09E	FY10E
Infosys	INFY.BO	New	46,012	54,544	61,399	80.26	95.14	107.10	0.0%	-3.3%	-5.0%	15.0	20.0	24.0
		Prev.	46,004	56,389	64,658	80.24	98.35	112.77				16.0	20.0	24.0
TCS	TCS.BO	New	51,602	60,085	66,003	52.73	61.40	67.45	2.3%	-2.0%	-4.1%	14.0	16.0	18.0
		Prev.	50,443	61,309	68,837	51.55	62.65	70.34				14.0	16.0	18.0
Wipro	WIPR.BO	New	33,171	41,101	44,482	22.76	28.20	30.52	-2.6%	-1.9%	-4.9%	7.0	8.0	10.0
		Prev.	34,068	41,920	46,771	23.37	28.75	32.08				10.0	12.0	15.0
Satyam	SATY.BO	New	16,906	20,410	22,101	24.69	29.80	32.27	-1.0%	-1.6%	-2.7%	7.0	10.0	12.0
		Prev.	17,069	20,733	22,718	24.93	30.28	33.18				8.0	10.0	12.0
HCL Tech	HCLT.BO	New	12,309	14,509	15,743	18.07	21.30	23.12	-1.4%	-2.5%	-	8.0	8.0	8.0
		Prev.	12,593	15,006	-	18.34	21.85	-				8.0	8.0	-
I-Flex	IFLX.BO	New	3,182	4,871	6,674	38.01	58.18	79.70	-23.0%	-15.2%	-14.8%	0.0	0.0	0.0
		Prev.	4,112	5,715	7,792	49.37	68.62	93.56				0.0	0.0	0.0
Patni*	PTNI.BO	New	4,609	4,726	5,064	32.93	33.77	36.18	2.0%	-3.4%	-4.6%	3.5	5.0	5.0
		Prev.	4,520	4,893	5,310	32.29	34.96	37.93				3.5	5.0	5.0
Mphasis	MBFL.BO	New	2,588	3,794	4,874	12.30	18.02	23.15	0.7%	-5.4%	-5.6%	3.0	3.0	3.0
		Prev.	2,566	4,004	5,156	12.21	19.04	24.52				3.0	3.0	3.0
Hexaware*	HEXT.BO	New	1,136	1,349	1,565	7.91	9.40	10.89	-12.4%	-9.3%	-10.5%	1.8	2.4	2.8
		Prev.	1,297	1,488	1,748	9.04	10.36	12.17				1.8	2.4	2.8
Sasken	SKCT.BO	New	485	675	891	16.82	23.40	30.86	-15.8%	-28.3%	-26.0%	5.0	10.0	10.0
		Prev.	570	931	1,189	19.97	32.64	41.69				5.0	10.0	10.0
KPIT	KPIT.BO	New	557	745	834	7.01	9.28	10.40	-3.6%	-9.5%	-11.1%	0.5	0.8	0.8
		Prev.	573	807	921	7.27	10.25	11.69				0.5	0.8	0.8

Source: Citi Investment Research estimates

With stocks trading at close to historical trough valuations, we have maintained recommendations for most of the stocks in our IT services coverage universe. We have changed our risk ratings for Sasken and Patni from Buy/Medium Risk to Buy/High Risk.

In Sasken, with a few large telecom clients going through difficult times (Nokia, Alcatel Lucent etc.) we believe that risk to the services business has gone up. Patni, in our view, has always been M&A play. Based on recent press reports, the stake sale has been deferred. Valuations look attractive but the stake sale now could take longer than earlier expectations.

Top picks

We continue to recommend tier-one IT service players in the current macro environment of INR appreciation, decent demand and a challenging supply situation. Based on current valuations and expected earnings growth, we rate TCS and Satyam as our top picks. In the tier-two space, Mphasis remains our preferred stock. We remain positive on Patni, with the stock trading at "low growth" assumptions (based on our DCF analysis), and M&A could be a stock price trigger.

TCS has shown its ability to manage margins in a difficult environment, with margins in 1H FY08 being better than in 1H FY07. TCS continues to lead the sector in terms of volume growth and geographical mix of revenues. In the recent past, TCS has underperformed due to technical reasons — additional supply of stock after the open market sale by major shareholder Tata Sons. The stock is trading at a ~16% discount to Infosys on FY09E P/E. We expect the discount to narrow going forward.

Satyam continues to lead the sector on volume/revenue growth. With wage hikes taken care of and likely margin expansion in the coming quarters, we expect the stock to do well. A discount of 20% to Infosys on FY09E PER is reasonable in our view, and sustained revenue growth momentum over the next few quarters could result in the discount narrowing.

Patni has declined sharply over the past week after management comments/press reports regarding the stake sale being called off/deferred. At current prices, Patni trades at ~6.3x EV/EBITDA, a ~50% discount to peer Satyam and any trigger — stake sale, change in management, buyback (~30% of market cap is cash) — could result in significant upside.

Mphasis should be the key beneficiary of EDS's offshore strategy. With an order book of ~US$1bn (2x sales), revenue growth momentum should continue (Mphasis has reported 6 consecutive quarters of double-digit revenue growth). We also expect the valuation multiples to be high on account of some delisting premium being built into the multiples.

Figure 15. Indian IT Services Valuation Comp Table

Company Name	RIC Code	CIR Rating	Mkt cap (US$m)	CMP (Rs)	TP (Rs)	P/E (x) FY08E	P/E (x) FY09E	EV/EBITDA (x) FY08E	EV/EBITDA (x) FY09E	EV/Sales(x) FY08E	EV/Sales(x) FY09E	P/BV (x) FY08E	P/BV (x) FY09E	Div. Yield (%) FY08E	Div. Yield (%) FY09E
Infosys	INFY.BO	1L	27,036	1,856	2,190	23.1	19.5	19.3	15.7	6.0	4.8	7.1	5.5	0.8%	1.1%
TCS	TCS.BO	1L	25,230	1,011	1,290	19.2	16.5	15.6	13.2	4.1	3.4	7.8	5.8	1.4%	1.6%
Wipro	WIPR.BO	1L	18,048	485	565	21.3	17.2	16.4	12.4	3.3	2.6	5.7	4.6	1.4%	1.6%
Satyam	SATY.BO	1M	7,913	464	565	18.8	15.6	15.3	12.5	3.3	2.6	4.5	3.8	1.5%	2.2%
HCL Tech	HCLT.BO	1M	5,199	307	365	17.0	14.4	12.1	9.9	2.4	2.0	3.4	2.9	2.6%	2.6%
I-Flex	IFLX.BO	3M	3,191	1,495	1,570	39.3	25.7	26.2	17.1	4.7	3.6	6.4	5.1	0.0%	0.0%
Tech Mahindra	TEML.BO	3H	3,548	1,147	1,330	19.5	14.6	17.3	12.3	3.6	2.7	8.4	5.3	0.2%	0.3%
Patni*	PTNI.BO	1H	1,235	349	475	10.6	10.3	6.3	6.3	1.3	1.2	1.8	1.6	1.0%	1.4%
Mphasis	MBFL.BO	1M	1,247	297	360	24.2	16.5	10.6	7.8	1.9	1.3	5.2	4.1	1.0%	1.0%
MindTree	MINT.BO	3H	437	453	487	17.9	13.7	14.1	10.7	2.2	1.7	3.3	2.7	0.6%	0.7%
Hexaware*	HEXT.BO	1M	367	100	122	12.7	10.7	8.4	7.0	1.0	0.9	1.8	1.6	1.8%	2.4%
Sasken	SKCT.BO	1H	205	281	372	16.7	12.0	15.6	10.1	1.5	1.2	1.8	1.6	1.8%	3.6%
KPIT	KPIT.BO	1M	205	105	130	15.0	11.4	9.3	7.3	1.4	1.1	3.1	2.5	0.5%	0.7%

Source: Company Reports and Citi Investment Research estimates; Prices as of 05-Nov-07 close.

Company Focus

Infosys Technologies (INFY.BO)

Buy: Breaking Revenue-Manpower Linearity

Target price change ☑
Estimate change ☑

Buy/Low Risk	1L
Price (05 Nov 07)	Rs1,856.35
Target price	Rs2,190.00
from Rs2,440.00	
Expected share price return	18.0%
Expected dividend yield	0.8%
Expected total return	**18.8%**
Market Cap	Rs1,060,366M
	US$27,036M

Price Performance (RIC: INFY.BO, BB: INFO IN)

Statistical Abstract

Year to 31 Mar	Net Profit (RsM)	Diluted EPS (Rs)	EPS growth (%)	P/E (x)	P/B (x)	ROE (%)	Yield (%)
2006A	24,599	43.82	27.5	42.4	14.7	40.4	1.2
2007A	38,560	67.76	54.6	27.4	9.3	42.3	0.6
2008E	46,012	80.26	18.4	23.1	7.1	35.1	0.8
2009E	54,544	95.14	18.5	19.5	5.5	31.9	1.1
2010E	61,399	107.10	12.6	17.3	4.4	28.4	1.3

Source: Powered by dataCentral

- **2Q demonstrated ability to manage margins** — 2Q FY08 results demonstrated Infosys management's ability to manage margins in a difficult currency scenario. Various margin levers came into play – for 1H FY08, margins were down only ~80bp yoy despite 12% INR appreciation.

- **Revenue/employee up 7-8% yoy** — Infosys revenue per employee increased ~8% yoy for onsite and ~7% yoy for offshore in 2Q FY08. In a positive pricing environment, it shows management's effort to improve productivity through better pricing, change in service mix and increasing revenue productivity.

- **Sector concerns remain; Infosys appears best positioned** — The two biggest concerns in CY07 have been INR appreciation and impact on demand from the sub-prime issue. We do not see any of the concerns abating in the near term. We continue to believe that Infosys is well positioned to deliver in this challenging environment.

- **Cutting estimates 3-5% for FY09-10** — We are cutting estimates 3-5% for FY09 and FY10 respectively. Operational upgrades after a solid 2Q (particularly on pricing) have partly offset the impact of our new currency estimates of Rs38/36 for FY09/FY10.

- **Lowering target price; maintaining Buy/Low Risk** — We lower our target price to Rs2,190 based on 23x FY09E EPS (down from 25x FY09E previously). This is primarily to adjust for lower earnings growth on account of incorporating new currency estimates.

Fiscal year end 31-Mar	2006	2007	2008E	2009E	2010E
Valuation Ratios					
P/E adjusted (x)	42.4	27.4	23.1	19.5	17.3
EV/EBITDA adjusted (x)	33.2	23.0	19.1	15.1	12.4
P/BV (x)	14.7	9.3	7.1	5.5	4.4
Dividend yield (%)	1.2	0.6	0.8	1.1	1.3
Per Share Data (Rs)					
EPS adjusted	43.82	67.76	80.26	95.14	107.10
EPS reported	43.82	67.76	80.26	95.14	107.10
BVPS	126.60	199.99	261.78	337.27	420.76
DPS	22.50	11.50	15.00	20.00	24.00
Profit & Loss (RsM)					
Net sales	95,216	138,930	168,008	207,605	248,501
Operating expenses	-68,669	-100,160	-122,236	-151,161	-181,973
EBIT	**26,547**	**38,770**	**45,772**	**56,444**	**66,528**
Net interest expense	1,396	3,720	7,454	7,764	10,310
Non-operating/exceptionals	-11	-20	0	0	0
Pre-tax profit	**27,932**	**42,470**	**53,226**	**64,208**	**76,839**
Tax	-3,132	-5,110	-7,214	-9,664	-15,439
Extraord./Min.Int./Pref.div.	-201	1,200	0	0	0
Reported net income	**24,599**	**38,560**	**46,012**	**54,544**	**61,399**
Adjusted earnings	24,599	38,560	46,012	54,544	61,399
Adjusted EBITDA	30,918	43,910	51,785	63,722	74,878
Growth Rates (%)					
Sales	33.5	45.9	20.9	23.6	19.7
EBIT adjusted	29.6	46.0	18.1	23.3	17.9
EBITDA adjusted	32.4	42.0	17.9	23.1	17.5
EPS adjusted	27.5	54.6	18.4	18.5	12.6
Cash Flow (RsM)					
Operating cash flow	**31,118**	**29,100**	**37,699**	**50,076**	**55,953**
Depreciation/amortization	4,371	5,140	6,013	7,278	8,349
Net working capital	3,549	-9,410	-6,722	-3,982	-3,485
Investing cash flow	**-10,890**	**-20,590**	**-15,111**	**-16,745**	**-16,830**
Capital expenditure	-10,890	-20,590	-15,111	-16,745	-16,830
Acquisitions/disposals	0	0	0	0	0
Financing cash flow	**-7,447**	**5,000**	**-9,031**	**-11,424**	**-13,709**
Borrowings	0	0	0	0	0
Dividends paid	-12,360	-6,432	-8,568	-11,424	-13,709
Change in cash	**12,782**	**13,510**	**13,557**	**21,907**	**25,414**
Balance Sheet (RsM)					
Total assets	**93,800**	**134,090**	**173,854**	**223,450**	**279,140**
Cash & cash equivalent	34,290	58,710	79,821	109,492	145,216
Accounts receivable	16,080	24,360	28,188	34,831	41,693
Net fixed assets	22,260	37,710	46,808	56,274	64,755
Total liabilities	**23,460**	**21,500**	**24,283**	**30,759**	**38,758**
Accounts payable	9,340	14,690	16,392	20,215	24,184
Total Debt	0	0	0	0	0
Shareholders' funds	**70,340**	**112,590**	**149,571**	**192,691**	**240,381**
Profitability/Solvency Ratios (%)					
EBITDA margin adjusted	32.5	31.6	30.8	30.7	30.1
ROE adjusted	40.4	42.3	35.1	31.9	28.4
ROIC adjusted	88.8	83.6	63.6	62.2	58.1
Net debt to equity	-48.7	-52.1	-53.4	-56.8	-60.4
Total debt to capital	0.0	0.0	0.0	0.0	0.0

For further data queries on Citigroup's full coverage universe please contact CIR Data Services Asia Pacific at CitiResearchDataServices@citigroup.com or +852-2501-2791

Powered by: dataCentral

Infosys Technologies

Company description

Infosys is the second-largest IT services company in India with more than 80,000 professionals. It is also among the fastest-growing IT services organization in the world, and is a leader in the offshore services space. Infosys provides business consulting, application development and maintenance and engineering services to more than 500 active clients across verticals such as Banking, Financial Services, Insurance, Retail, Manufacturing and Utilities in the Americas, Europe and Asia Pacific. Infosys sells a core banking application, Finacle, which is used by leading banks in India, the Middle East, Africa and Europe. Its subsidiary, Infosys BPO (formerly Progeon), which employs about 13,000 people, is a provider of BPO services. It launched a subsidiary in April 2004, Infosys Consulting, which provides high-end IT consulting services.

Investment strategy

We rate Infosys as Buy/Low Risk (1L). We are positive on the stock from a fundamental 12-month view. Offshore IT outsourcing has now become a mainstream option, and we think scale and scalability, along with an ability to move up the value chain, are key criteria for successful offshore IT vendors. In this respect, Infosys appears well positioned and continues to gain ground given its strong branding and industry-leading sales force. Infosys should see above-industry average volume growth along with modest pricing improvement. We expect Infosys to deliver revenue CAGR of 21.4% and EPS CAGR of 16.5% for FY07-10E. Unlike many other high-growth firms in other industries, Infosys continues to generate solid FCF, and its RoE of 40%+ continues to be well above its cost of capital.

Valuation

Our target price of Rs2,190 is based on 23x FY09E EPS. This is close to the midpoint of the last one-year trading band of 20-28x 1-year forward earnings and factors in some deceleration in growth. We are forecasting 16.5% earnings growth (on a high base of FY07) with some upside potential from pricing improvement and/or rupee depreciation. The 23x multiple was also derived from a P/E band analysis of Infosys' trading pattern. Our estimates continue to assume a certain P/E premium to the market; this is justified, in our view, given the strong FCF, ROIC and growth rates for Infosys vs. the overall market. We believe P/E remains the most appropriate valuation measure given Infosys' profitability record and high earnings visibility.

Risks

We rate Infosys shares as Low Risk, which is consistent with our quantitative risk-rating system that tracks historical share price volatility. The key downside risks to the shares reaching our target price include: (1) any significant appreciation of the rupee against the US Dollar/Euro/GBP; (2) pressure on billing rates (as Infosys continues to enjoy a 10-15% premium in its billing rates); (3) a sharp slowdown in the US economy; and (4) limited H1B visa quotas.

Company Focus

Tata Consultancy Services (TCS.BO)

Buy: Size Does Matter

Target price change ☑
Estimate change ☑

Buy/Low Risk	**1L**
Price (05 Nov 07)	Rs1,011.15
Target price	Rs1,290.00
from Rs1,460.00	
Expected share price return	27.6%
Expected dividend yield	1.4%
Expected total return	**29.0%**
Market Cap	Rs989,522M
	US$25,230M

Price Performance (RIC: TCS.BO, BB: TCS IN)

Statistical Abstract

Year to 31 Mar	Net Profit (RsM)	Diluted EPS (Rs)	EPS growth (%)	P/E (x)	P/B (x)	ROE (%)	Yield (%)
2006A	29,074	29.71	39.1	34.0	16.9	64.3	0.7
2007A	40,608	41.50	39.7	24.4	11.1	55.1	1.1
2008E	51,602	52.73	27.1	19.2	7.8	47.8	1.4
2009E	60,085	61.40	16.4	16.5	5.8	40.3	1.6
2010E	66,003	67.45	9.8	15.0	4.5	33.8	1.8

Source: Powered by dataCentral

- **Strong performance in 2Q** — Revenue growth was strong at 10.8% qoq (in dollar terms). Net profit growth, despite improved margins, at 5.2% qoq was lower due to much lower forex gains this time around.
- **Volume growth highest despite size** — Volume in the international business was up 9% qoq. This was one of the highest (both Infosys and Wipro reported volume growth below 8%). This becomes even more commendable given the fact that TCS is the largest Indian IT services company.
- **Managing margins well** — EBITDA margins moved up by ~80bp qoq despite TCS giving promotions to employees in 2Q. With seasonal cost escalations behind, we believe that the margins will continue to trend up over 2H and TCS should be able to manage it despite currency headwinds.
- **What we like in TCS?** — (1) Strong hiring in 2Q of ~9,300 employees and campus offers of ~22,300 for FY09, (2) Ability to win large deals (recent \$1.2b Nielsen deal, case in point), (3) Stable attrition levels at ~11.5%, and (4) Continued pricing and offshore leverage.
- **Cutting estimates to factor in new INR estimates** — We are cutting our estimates by 2-4% for FY09/FY10 respectively. Operational upgrades post a solid 2Q (particularly on pricing) have partly offset the impact of our new currency estimates of Rs38/36 for FY09/FY10.
- **Lowering target price; maintaining Buy/Low Risk** — We lower our target price to Rs1,290 based on 21x FY09E EPS (down from 23x FY09E earlier). This is primarily to adjust for lower earnings growth on account of changes in our currency estimates.

Fiscal year end 31-Mar	2006	2007	2008E	2009E	2010E
Valuation Ratios					
P/E adjusted (x)	34.0	24.4	19.2	16.5	15.0
EV/EBITDA adjusted (x)	26.6	19.2	15.3	12.7	11.0
P/BV (x)	16.9	11.1	7.8	5.8	4.5
Dividend yield (%)	0.7	1.1	1.4	1.6	1.8
Per Share Data (Rs)					
EPS adjusted	29.71	41.50	52.73	61.40	67.45
EPS reported	29.71	41.50	52.73	61.40	67.45
BVPS	59.69	90.98	129.71	175.11	224.56
DPS	6.75	11.50	14.00	16.00	18.00
Profit & Loss (RsM)					
Net sales	132,454	186,333	233,371	284,594	336,500
Operating expenses	-98,318	-139,888	-176,790	-217,433	-260,798
EBIT	**34,136**	**46,445**	**56,581**	**67,161**	**75,702**
Net interest expense	190	1,236	3,458	4,722	7,272
Non-operating/exceptionals	16	44	32	45	45
Pre-tax profit	**34,342**	**47,725**	**60,071**	**71,928**	**83,020**
Tax	-4,989	-6,700	-8,203	-11,675	-16,849
Extraord./Min.Int./Pref.div.	-279	-417	-266	-168	-168
Reported net income	**29,074**	**40,608**	**51,602**	**60,085**	**66,003**
Adjusted earnings	29,074	40,608	51,602	60,085	66,003
Adjusted EBITDA	36,946	50,629	62,039	73,107	82,354
Growth Rates (%)					
Sales	36.2	40.7	25.2	21.9	18.2
EBIT adjusted	26.9	36.1	21.8	18.7	12.7
EBITDA adjusted	29.8	37.0	22.5	17.8	12.6
EPS adjusted	39.1	39.7	27.1	16.4	9.8
Cash Flow (RsM)					
Operating cash flow	**22,978**	**41,834**	**42,824**	**37,970**	**54,028**
Depreciation/amortization	2,810	4,184	5,458	5,946	6,652
Net working capital	-8,995	-2,139	-11,044	-23,507	-11,523
Investing cash flow	**-7,012**	**-12,025**	**-11,518**	**-14,284**	**-15,292**
Capital expenditure	-7,012	-12,025	-11,518	-10,614	-12,418
Acquisitions/disposals	0	0	0	3,472	4,772
Financing cash flow	**-2,403**	**-10,641**	**-13,700**	**-15,658**	**-17,615**
Borrowings	0	0	0	0	0
Dividends paid	-6,606	-11,254	-13,700	-15,658	-17,615
Change in cash	**13,564**	**19,168**	**17,605**	**8,028**	**21,121**
Balance Sheet (RsM)					
Total assets	**85,626**	**130,880**	**170,927**	**214,500**	**269,117**
Cash & cash equivalent	3,965	22,605	43,402	59,655	90,753
Accounts receivable	32,790	42,857	51,342	59,765	70,665
Net fixed assets	15,072	22,912	28,973	33,641	39,408
Total liabilities	**25,655**	**40,234**	**42,380**	**41,525**	**47,754**
Accounts payable	0	0	0	0	0
Total Debt	979	1,184	0	0	0
Shareholders' funds	**59,972**	**90,646**	**128,547**	**172,975**	**221,363**
Profitability/Solvency Ratios (%)					
EBITDA margin adjusted	27.9	27.2	26.6	25.7	24.5
ROE adjusted	64.3	55.1	47.8	40.3	33.8
ROIC adjusted	72.4	69.3	68.2	59.7	50.9
Net debt to equity	-5.0	-23.6	-33.8	-34.5	-41.0
Total debt to capital	1.6	1.3	0.0	0.0	0.0

For further data queries on Citigroup's full coverage universe please contact CIR Data Services Asia Pacific at CitiResearchDataServices@citigroup.com or +852-2501-2791

Powered by: dataCentral

Tata Consultancy Services

Company description

TCS is India's largest and among the oldest IT companies. It is part of the diversified Tata Group, one of the largest corporate groups in Asia. It has more than 100,000 employees, including its subsidiaries, with marketing presence across 32 countries and development presence in 10 countries besides India. It provides a comprehensive range of IT services to industries such as banking and financial services, insurance, manufacturing, telecommunications, retail and transportation. It had more than 800 active clients, including six of the Fortune Top 10 companies in the US. The company started with data processing work in 1968, and was the first to provide offshore services in 1974. Over the last three decades, the company has come a long way with deep technical and project management expertise in handling complex client projects and strong offshore processes.

Investment strategy

We rate TCS as Buy/Low Risk (1L) based on a fundamental 12-month view. As India's largest and most experienced IT services firm, TCS looks well positioned to benefit from the growing demand for offshore IT services. It is a well-regarded stock among investors familiar with India and the IT-services sector. We believe TCS' margins in its international IT services business (around 95% of EBIT) are likely to trend down over the next few years. However, we expect this decline to be relatively modest, as we expect positive leverage from a better onsite-offshore mix, more hiring of fresh graduates, and improved utilization with a strong demand outlook to offset margin pressures from wage inflation. We expect revenue CAGR of 21.8% and an EPS CAGR of 16.9% in FY07-10E.

Valuation

Our target price of Rs1,290 is based on 21x FY09E EPS, derived from a small discount to our target 23x FY09E EPS for Infosys, TCS's closest peer on business model. We expect TCS to continue to trade at slightly lower multiples than Infosys due to investors' greater comfort and familiarity with Infosys and the periodic supply of additional stock by Tata Sons. Our target price assumes a one-year forward P/E of 15-20% above the average BSE Sensex multiple, which we think is justified given TCS' superior FCF, RoIC and growth rates than the overall market, and it actually implies a slightly lower premium than that for Infosys. We believe P/E remains the most appropriate valuation measure given TCS' profitable track record and strong earnings visibility.

Risks

We rate TCS as Low Risk, consistent with our quantitative stock-volatility based risk-rating system. Fundamentally also, given the stock's below-market beta, its relatively high earnings visibility, strong cash flows and balance sheet - along with our Low Risk rating for its local peers Infosys and Wipro - we believe a Low Risk rating for TCS is reasonable. The key downside risks that could impede the stock from reaching our target price include: (1) any significant appreciation of the rupee against the US Dollar/Euro/GBP; (2) a sharp slowdown in the US economy; (3) H1B visa quotas; (4) large exposure to fixed-price contracts; (5) higher onsite revenue contribution (~53% of total); and (6) acquisition-related risks, including M&A with other Tata-group IT firms.

Company Focus

Wipro (WIPR.BO)

Buy: Good Quarter; Decent Outlook

Target price change ☑
Estimate change ☑

Buy/Low Risk	**1L**
Price (05 Nov 07)	Rs484.95
Target price	Rs565.00
from Rs650.00	
Expected share price return	16.5%
Expected dividend yield	1.4%
Expected total return	**18.0%**
Market Cap	Rs707,830M
	US$18,048M

Price Performance (RIC: WIPR.BO, BB: WPRO IN)

Statistical Abstract

Year to 31 Mar	Net Profit (RsM)	Diluted EPS (Rs)	EPS growth (%)	P/E (x)	P/B (x)	ROE (%)	Yield (%)
2006A	20,270	14.08	24.3	34.4	8.7	29.9	1.0
2007A	29,130	20.18	43.3	24.0	6.8	32.3	1.2
2008E	33,171	22.76	12.8	21.3	5.7	29.5	1.4
2009E	41,101	28.20	23.9	17.2	4.6	29.8	1.6
2010E	44,482	30.52	8.2	15.9	3.8	26.5	2.1

Source: Powered by dataCentral

- **Much improved 2Q** — Global IT revenues grew ~10% qoq with ~9% of it being organic. IT Services volumes grew ~8% qoq with improved pricing (qoq: 1.9% onsite and 1.6% offshore). EBIT margins were up ~90bp qoq, despite wage hikes, primarily due to higher realization, more offshore and improving employee pyramid.
- **Infocrossing could add to deal pipeline** — The recent Infocrossing acquisition has already helped Wipro land a US$275m infrastructure services deal. We see a lot of deal activity in this space and believe that the additional capabilities of Infocrossing will open more doors for Wipro.
- **Client mining an area for improvement** — With a large client base of 681, the revenue per client for Wipro lags peers at ~US$1.2m (Infosys ~US$2.0m and TCS ~US$1.6m). We see significant room for improvement here.
- **Different strategy; risks could be higher** — TCS and Infosys continue to focus on organic growth with smaller acquisitions, if any. Wipro, on the other hand, has expressed its desire to go in for larger acquisitions (e.g. Infocrossing), which has its own risks.
- **Cutting estimates to factor in new INR estimates** — We are cutting our estimates by 3-5% for FY09-FY10 respectively. Operational upgrades post a solid 2Q (particularly on pricing) have partly offset the impact of our new currency estimates of Rs38/36 for FY09/FY10.
- **Lowering target price; maintaining Buy/Low Risk** — We lower our target price to Rs565 based on 20x FY09E EPS (down from 22x FY09E earlier). This is primarily to adjust for lower earnings growth on account of changes in our currency estimates.

Fiscal year end 31-Mar	2006	2007	2008E	2009E	2010E
Valuation Ratios					
P/E adjusted (x)	34.4	24.0	21.3	17.2	15.9
EV/EBITDA adjusted (x)	26.8	19.5	16.7	12.8	10.9
P/BV (x)	8.7	6.8	5.7	4.6	3.8
Dividend yield (%)	1.0	1.2	1.4	1.6	2.1
Per Share Data (Rs)					
EPS adjusted	14.08	20.18	22.76	28.20	30.52
EPS reported	14.08	20.18	22.76	28.20	30.52
BVPS	55.69	71.21	84.97	105.31	125.99
DPS	5.00	6.00	7.00	8.00	10.00
Profit & Loss (RsM)					
Net sales	106,107	149,431	197,803	252,463	303,829
Operating expenses	-84,135	-119,564	-163,438	-206,295	-251,049
EBIT	**21,972**	**29,868**	**34,364**	**46,168**	**52,780**
Net interest expense	1,277	2,667	2,411	1,258	2,402
Non-operating/exceptionals	288	318	318	366	420
Pre-tax profit	**23,537**	**32,852**	**37,093**	**47,791**	**55,602**
Tax	-3,265	-3,723	-3,922	-6,691	-11,120
Extraord./Min.Int./Pref.div.	-2	0	0	0	0
Reported net income	**20,270**	**29,130**	**33,171**	**41,101**	**44,482**
Adjusted earnings	20,270	29,130	33,171	41,101	44,482
Adjusted EBITDA	25,137	34,068	40,313	53,349	61,233
Growth Rates (%)					
Sales	30.4	40.8	32.4	27.6	20.3
EBIT adjusted	23.0	35.9	15.1	34.3	14.3
EBITDA adjusted	23.0	35.5	18.3	32.3	14.8
EPS adjusted	24.3	43.3	12.8	23.9	8.2
Cash Flow (RsM)					
Operating cash flow	**18,906**	**35,909**	**53,312**	**40,055**	**47,362**
Depreciation/amortization	3,165	4,200	5,949	7,181	8,453
Net working capital	-3,723	5,029	15,922	-6,969	-3,171
Investing cash flow	**-9,847**	**-18,325**	**-54,267**	**-14,149**	**-12,533**
Capital expenditure	-7,741	-12,964	-17,084	-15,406	-14,935
Acquisitions/disposals	-2,357	-7,034	-34,516	0	0
Financing cash flow	**1,501**	**-4,710**	**-6,180**	**-11,600**	**-14,500**
Borrowings	0	859	2,282	0	0
Dividends paid	-8,131	-9,786	-11,527	-13,174	-16,468
Change in cash	**10,560**	**12,874**	**-7,134**	**14,306**	**20,329**
Balance Sheet (RsM)					
Total assets	**100,266**	**146,102**	**208,063**	**246,726**	**289,035**
Cash & cash equivalent	39,186	52,060	44,927	59,233	79,562
Accounts receivable	20,593	28,467	36,851	47,034	56,604
Net fixed assets	17,777	26,541	37,677	45,902	52,384
Total liabilities	**21,502**	**44,634**	**84,766**	**93,928**	**106,256**
Accounts payable	4,146	7,060	15,824	17,672	21,268
Total Debt	705	3,781	29,204	29,204	29,204
Shareholders' funds	**78,764**	**101,468**	**123,297**	**152,798**	**182,779**
Profitability/Solvency Ratios (%)					
EBITDA margin adjusted	23.7	22.8	20.4	21.1	20.2
ROE adjusted	29.9	32.3	29.5	29.8	26.5
ROIC adjusted	55.1	56.6	37.4	33.6	32.1
Net debt to equity	-48.9	-47.6	-12.8	-19.7	-27.6
Total debt to capital	0.9	3.6	19.2	16.0	13.8

For further data queries on Citigroup's full coverage universe please contact CIR Data Services Asia Pacific at CitiResearchDataServices@citigroup.com or +852-2501-2791

Powered by: dataCentral

Wipro

Company description

Wipro is one of India's leading companies with business interests in IT and BPO services exports, domestic hardware, consumer lighting and consumer care. It has one of the widest range of services, including systems integration, IT-enabled services, package implementation, software application development and maintenance, and R&D services. Wipro is the first P CMM Level 5 and SEI CMM Level 5 certified IT services company in the world. It has close to 700 clients spanning the BFSI, Manufacturing, Retail, Utilities and Telecom verticals. Its IT services exports team has more than 57,000 employees and BPO operation has around 20,000 employees.

Investment strategy

We rate Wipro as Buy/Low Risk (1L). Being one of the top three Indian IT services firms, Wipro looks well positioned to benefit from the growing demand for offshore IT services. Apart from economies of scale in offshore delivery, one of Wipro's key strengths is its full-service model. This includes a strong position in the infrastructure/R&D services business, which offers significant long-term growth potential. It has strong exposure to the BPO segment, which should offer above-average growth in the long term. Wipro's management has actively pursued acquisitions to strengthen its service portfolio. We expect Wipro's global IT revenues to grow above the industry average rates over the next 2-3 years. We believe wage inflation will be largely offset by gains from improved employee mix, an improving offshore-onsite ratio and better utilization. We expect 26.7% revenue CAGR and 14.8% EPS CAGR over FY07-10E. For the global IT business, we expect 22.8% revenue CAGR.

Valuation

Our 12-month target price of Rs565 is based on 20x FY09E EPS, a ~15% discount to our target multiple for Infosys. Our target multiple is derived from a P/E-band analysis of Wipro's historical trading pattern and peer group valuations. Because of its small free float, strong exposure to R&D services and a model leveraged to large SI and IT outsourcing deals, Wipro has historically traded at a premium of 10-20% to Infosys. But now Wipro has started trading at a discount to Infosys due to Wipro's slower growth and RoIC/RoE in the recent past. We think Wipro will continue to trade at a marginal discount to Infosys given expected sub-par growth vs. Infosys in the coming years. We believe P/E is the most appropriate valuation measure given Wipro's profitability and earnings visibility.

Risks

We rate Wipro shares as Low Risk, which is consistent with our quantitative risk-rating system that tracks historical share price volatility. This is in line with our risk ratings for other large peer-group companies in our coverage universe. The key downside risks to our target price include: (1) high exposure to the telecom/tech sectors (~33% of total); (2) risks to earnings from a sharp US slowdown; (3) any significant appreciation of the rupee against the US Dollar/Euro/GBP; (4) a slowdown in the banking, financial services and insurance (BFSI) sector; (5) H1B visa quotas; and (6) acquisition-related risks.

Company Focus

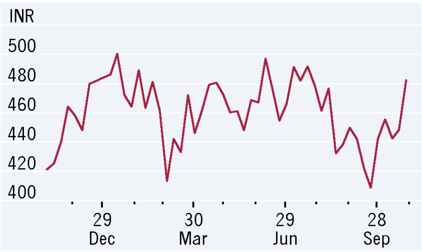
Satyam Computers Services (SATY.BO)

Buy: Speaks 'Volumes'

Target price change ☑

Buy/Medium Risk	1M
Price (05 Nov 07)	Rs463.95
Target price	Rs565.00
from Rs570.00	
Expected share price return	21.8%
Expected dividend yield	1.5%
Expected total return	**23.3%**
Market Cap	Rs310,360M
	US$7,913M

Price Performance (RIC: SATY.BO, BB: SCS IN)



Statistical Abstract

Year to 31 Mar	Net Profit (RsM)	Diluted EPS (Rs)	EPS growth (%)	P/E (x)	P/B (x)	ROE (%)	Yield (%)
2006A	9,979	15.09	36.9	30.8	7.0	26.2	0.8
2007A	14,047	20.81	38.0	22.3	5.3	27.9	0.8
2008E	16,906	24.69	18.6	18.8	4.5	26.7	1.5
2009E	20,410	29.80	20.7	15.6	3.8	27.0	2.2
2010E	22,101	32.27	8.3	14.4	3.3	24.9	2.6

Source: Powered by dataCentral

- **Good 2Q; onsite shift helped reported revenues** — Revenue growth was at a five year high for Satyam at 12.7% qoq and was the strongest among all tier-one vendors. Though, this was partly aided by an onsite shift of ~150bp, pricing improvement qoq of 2.2% onsite and 1.3% offshore was creditable.
- **Margins – still a challenge** — Satyam has guided for a margin decline of ~175bp yoy in FY08, attributable mainly to the currency. This is amongst the highest decline in margins guided by any Tier I vendor. However, lower attrition over last few quarters gives us confidence that Satyam's wage hikes in FY09 should be in line with industry.
- **Large deal strategy paying off; volume leader** — Volume growth for five consecutive quarters now has been at ~9% qoq. This is the highest among tier-one vendors. It shows that the large deal focus initiated by Satyam sometime back with the setup of a large deals team is paying off.
- **Cutting estimates to factor in new INR estimates** — We are cutting our estimates by 2-3% for FY09–10 respectively. Operational upgrades post a solid 2Q (particularly on volumes) have partly offset the impact of our new currency estimates of Rs38/36 for FY09/FY10.
- **Lowering target price; maintaining Buy/Medium Risk** — We lower our target price to Rs565 based on 19x FY09E EPS. We expect Satyam's discount to larger peers to reduce following its consistent execution over the coming quarters.

Fiscal year end 31-Mar	2006	2007	2008E	2009E	2010E
Valuation Ratios					
P/E adjusted (x)	30.8	22.3	18.8	15.6	14.4
EV/EBITDA adjusted (x)	24.3	17.9	15.1	12.1	9.9
P/BV (x)	7.0	5.3	4.5	3.8	3.3
Dividend yield (%)	0.8	0.8	1.5	2.2	2.6
Per Share Data (Rs)					
EPS adjusted	15.09	20.81	24.69	29.80	32.27
EPS reported	15.09	20.81	24.69	29.80	32.27
BVPS	66.53	87.41	103.61	122.84	142.35
DPS	3.50	3.50	7.00	10.00	12.00
Profit & Loss (RsM)					
Net sales	47,926	64,851	82,593	103,468	125,529
Operating expenses	-37,637	-50,958	-66,611	-84,121	-102,702
EBIT	**10,289**	**13,893**	**15,982**	**19,346**	**22,827**
Net interest expense	1,113	1,674	3,296	4,386	4,973
Non-operating/exceptionals	-1	0	0	0	0
Pre-tax profit	**11,401**	**15,566**	**19,278**	**23,732**	**27,800**
Tax	-1,509	-1,520	-2,372	-3,323	-5,699
Extraord./Min.Int./Pref.div.	87	1	0	0	0
Reported net income	**9,979**	**14,047**	**16,906**	**20,410**	**22,101**
Adjusted earnings	9,979	14,047	16,906	20,410	22,101
Adjusted EBITDA	11,662	15,377	17,776	21,676	25,463
Growth Rates (%)					
Sales	36.1	35.3	27.4	25.3	21.3
EBIT adjusted	36.3	35.0	15.0	21.0	18.0
EBITDA adjusted	34.3	31.9	15.6	21.9	17.5
EPS adjusted	36.9	38.0	18.6	20.7	8.3
Cash Flow (RsM)					
Operating cash flow	**7,689**	**10,541**	**12,169**	**16,191**	**17,586**
Depreciation/amortization	1,373	1,484	1,794	2,329	2,636
Net working capital	-2,685	-2,925	-3,051	-2,162	-2,178
Investing cash flow	**-1,292**	**-2,462**	**-1,287**	**-196**	**-89**
Capital expenditure	-3,167	-4,135	-4,583	-4,582	-5,062
Acquisitions/disposals	0	0	0	0	0
Financing cash flow	**1,092**	**716**	**-4,769**	**-7,555**	**-9,066**
Borrowings	838	452	433	0	0
Dividends paid	-2,562	-2,600	-5,289	-7,555	-9,066
Change in cash	**7,489**	**8,796**	**6,113**	**8,440**	**8,431**
Balance Sheet (RsM)					
Total assets	**51,371**	**68,951**	**83,228**	**99,533**	**117,038**
Cash & cash equivalent	31,117	39,914	46,027	54,467	62,897
Accounts receivable	11,684	17,432	20,365	24,662	29,921
Net fixed assets	5,573	8,223	11,012	13,265	15,691
Total liabilities	**8,157**	**11,425**	**13,999**	**17,449**	**21,919**
Accounts payable	4,370	5,745	7,433	9,312	11,298
Total Debt	1,027	1,479	1,912	1,912	1,912
Shareholders' funds	**43,214**	**57,526**	**69,229**	**82,084**	**95,119**
Profitability/Solvency Ratios (%)					
EBITDA margin adjusted	24.3	23.7	21.5	20.9	20.3
ROE adjusted	26.2	27.9	26.7	27.0	24.9
ROIC adjusted	81.0	78.0	63.1	60.0	54.9
Net debt to equity	-69.6	-66.8	-63.7	-64.0	-64.1
Total debt to capital	2.3	2.5	2.7	2.3	2.0

For further data queries on Citigroup's full coverage universe please contact CIR Data Services Asia Pacific at CitiResearchDataServices@citigroup.com or +852-2501-2791

Powered by: dataCentral

Satyam Computers Services

Company description

Satyam is the fourth-largest IT solutions provider from India and is one of the pioneers of offshore IT services delivery. The company has more than 570 clients across the globe and employs over 45,500 professionals across IT and BPO services. Satyam was an early entrant into IT consulting/package implantation work. As of 2Q FY08, ~45% of its revenue came from this service line. It has domain competencies in verticals such as Manufacturing, Banking & Financial Service and Insurance, among others.

Investment strategy

We rate Satyam as Buy/Medium Risk (1M). We believe offshore IT outsourcing is now a mainstream option and Satyam, which has achieved meaningful scale with its top-five position in India, appears well positioned to benefit from growing business volumes. Over the past several quarters, volume growth has trended at over 9% qoq. With revenue of over US$1.5bn, Satyam becomes a strong contender for winning large deals. It has won at least three large deals over the past four quarters. We expect a gradual margin decline (rather than steep), as wage inflation should be partly offset by positive leverage from a better onsite-offshore mix, hiring strategies and improved utilization. Overall, we forecast 24.6% revenue CAGR and 15.7% EPS CAGR over FY07-10E.

Valuation

Our 12-month target is Rs565, based on 19x FY09E earnings. We value Satyam on a historical P/E basis relative to its medium-term growth potential and cross-check its valuation relative to peer Infosys, which is the industry benchmark. Given that we expect Satyam's earnings to grow at a 16% CAGR over the next three years, we believe the stock should trade toward the upper end of its historical three-year trading range of 12-21x 12-month forward earnings. Satyam has traded at a 10-40% discount to Infosys in the past two years due to its slower growth rates. Our forward P/E equates to a ~17% discount to our target multiple of 23x for Infosys.

Risks

Although our quantitative risk-rating system suggests Low Risk for Satyam, we rate Satyam as Medium Risk given the similar risk ratings for other mid-sized IT peer-group companies in our coverage universe. The key downside risks that could impede the shares from reaching our target price include: (1) a slowdown in enterprise software license revenues; (2) the supply side situation becoming more difficult; (3) risks to earnings from a sharp US slowdown; (4) any significant appreciation of the rupee against the US Dollar/Euro/GBP; (5) a slowdown in the banking, financial services and insurance (BFSI) sector; and (6) limited H1B visa quotas.

Company Focus

HCL Technologies (HCLT.BO)

Buy: Steady Ship

Target price change ☑
Estimate change ☑

Buy/Medium Risk	**1M**
Price (05 Nov 07)	Rs307.20
Target price	Rs365.00
from Rs400.00	
Expected share price return	18.8%
Expected dividend yield	2.6%
Expected total return	**21.4%**
Market Cap	Rs203,912M
	US$5,199M

Price Performance (RIC: HCLT.BO, BB: HCLT IN)

Statistical Abstract

Year to 30 Jun	Net Profit (RsM)	Diluted EPS (Rs)	EPS growth (%)	P/E (x)	P/B (x)	ROE (%)	Yield (%)
2006A	7,091	10.46	9.4	29.4	4.9	18.1	2.6
2007A	12,577	18.43	76.2	16.7	4.0	27.7	2.6
2008E	12,309	18.07	-1.9	17.0	3.4	22.2	2.6
2009E	14,509	21.30	17.9	14.4	2.9	22.3	2.6
2010E	15,743	23.12	8.5	13.3	2.6	21.2	2.6

Source: Powered by dataCentral

- **In-line 1Q performance** — HCL Tech reported 1Q FY08 revenues of US$429m, up 8.4% qoq. IT Services reported 10% growth qoq with volumes increasing 9% and pricing up ~2% qoq.
- **Good margin management** — EBITDA margins declined only 30bp despite the company taking wage hikes in 1Q. The negative impact of wage hikes and lower utilization was balanced by better realizations, higher offshore and SG&A leverage.
- **BPO hiccups in 1Q** — BPO revenues grew a tepid 3% qoq. Headcount was flat QoQ after a sharp decline of ~1,200 employees in 4Q FY07. This business lost a customer (~5% of BPO and 0.6% of revenues in 1Q) due to M&A with the contract being taken in-house subsequently.
- **IMS continues to report strong growth** — Infrastructure services had another strong quarter – revenue growth of 10% qoq with flat EBITDA margins. Headcount addition at 784 (~18% of quarter ago base) remained strong giving confidence on the pipeline.
- **Cutting estimates to factor in new INR estimates** — We are cutting our estimates by ~3% for FY09 and introducing FY10 estimates. Operational upgrades post a solid 2Q have partly offset the impact of our new currency estimates of Rs38/36 for FY09/FY10.
- **Lowering target price; maintain Buy/Medium Risk** — We lower our target price to Rs365 based on 17x FY09E EPS (down from 18x FY09E earlier). This is primarily to adjust for lower earnings growth now on account of change in currency estimates.

Fiscal year end 30-Jun	2006	2007	2008E	2009E	2010E
Valuation Ratios					
P/E adjusted (x)	29.4	16.7	17.0	14.4	13.3
EV/EBITDA adjusted (x)	20.0	14.6	11.8	9.4	7.7
P/BV (x)	4.9	4.0	3.4	2.9	2.6
Dividend yield (%)	2.6	2.6	2.6	2.6	2.6
Per Share Data (Rs)					
EPS adjusted	10.46	18.43	18.07	21.30	23.12
EPS reported	10.46	18.43	18.07	21.30	23.12
BVPS	63.27	76.84	91.47	104.57	119.53
DPS	8.00	8.00	8.00	8.00	8.00
Profit & Loss (RsM)					
Net sales	44,007	60,337	75,029	91,591	109,181
Operating expenses	-36,847	-50,470	-63,079	-76,787	-91,334
EBIT	**7,161**	**9,867**	**11,949**	**14,804**	**17,848**
Net interest expense	578	4,259	2,008	2,290	2,357
Non-operating/exceptionals	-22	-64	-92	-82	-82
Pre-tax profit	**7,717**	**14,062**	**13,865**	**17,013**	**20,123**
Tax	-626	-1,485	-1,555	-2,504	-4,380
Extraord./Min.Int./Pref.div.	0	0	0	0	0
Reported net income	**7,091**	**12,577**	**12,309**	**14,509**	**15,743**
Adjusted earnings	7,091	12,577	12,309	14,509	15,743
Adjusted EBITDA	9,193	12,399	14,993	18,275	21,783
Growth Rates (%)					
Sales	30.6	37.1	24.3	22.1	19.2
EBIT adjusted	16.1	37.8	21.1	23.9	20.6
EBITDA adjusted	19.0	34.9	20.9	21.9	19.2
EPS adjusted	9.4	76.2	-1.9	17.9	8.5
Cash Flow (RsM)					
Operating cash flow	**7,423**	**7,362**	**9,325**	**15,743**	**17,463**
Depreciation/amortization	2,032	2,532	3,043	3,470	3,936
Net working capital	-1,121	-3,488	-4,020	53	141
Investing cash flow	**-3,469**	**-4,535**	**-5,629**	**-7,416**	**-8,216**
Capital expenditure	-4,179	-4,285	-5,716	-7,416	-8,216
Acquisitions/disposals	29	333	64	0	0
Financing cash flow	**-5,710**	**257**	**-721**	**-4,526**	**-4,459**
Borrowings	-1,225	-83	0	0	0
Dividends paid	-5,816	-5,816	-5,816	-5,816	-5,816
Change in cash	**-1,756**	**3,084**	**2,974**	**3,801**	**4,788**
Balance Sheet (RsM)					
Total assets	**50,445**	**63,243**	**77,880**	**90,128**	**104,293**
Cash & cash equivalent	18,799	22,851	26,830	31,631	37,419
Accounts receivable	9,628	12,278	17,045	20,547	24,644
Net fixed assets	8,742	10,495	13,168	17,113	21,394
Total liabilities	**9,780**	**12,952**	**17,004**	**20,558**	**24,797**
Accounts payable	8,952	11,660	15,876	19,430	23,669
Total Debt	83	0	0	0	0
Shareholders' funds	**40,665**	**50,295**	**60,875**	**69,569**	**79,495**
Profitability/Solvency Ratios (%)					
EBITDA margin adjusted	20.9	20.5	20.0	20.0	20.0
ROE adjusted	18.1	27.7	22.2	22.3	21.2
ROIC adjusted	33.1	35.2	35.1	35.3	34.6
Net debt to equity	-46.0	-45.4	-44.1	-45.5	-47.1
Total debt to capital	0.2	0.0	0.0	0.0	0.0

For further data queries on Citigroup's full coverage universe please contact CIR Data Services Asia Pacific at CitiResearchDataServices@citigroup.com or +852-2501-2791

Powered by: dataCentral

HCL Technologies

Company description

HCL Tech is the fifth-largest Indian IT services company. Founded in 1991, HCL Tech focused on technology and R&D outsourcing before diversifying into enterprise applications. In the infrastructure business, it has been gradually shifting focus from domestic sales to global services. In BPO, it is one of the largest offshore services provider and boasts strong ties with British Telecom and SBC. The company leverages off its extensive offshore infrastructure and its global network of 26 offices in 15 countries to deliver solutions across verticals including Banking, Insurance, Retail & Consumer, Aerospace, Automotive, Semiconductors, Telecom and Life Sciences. HCL Tech has more than 240 clients across verticals, and a workforce of more than 45,000.

Investment strategy

We rate HCL Tech as Buy/Medium (1M) Risk. Based on our analysis, offshore IT services demand will remain strong, with industry revenues forecast to grow 25-30% pa over the next four years. HCL Tech has been at the forefront of pursuing large deals. It has won at least sixteen multi-year US$50m-plus deals in the past fiscal year. Significant presence across IT services, BPO services and IMS has helped HCL Tech to qualify for multi-year outsourcing deals. Infrastructure-management services, R&D and BPO service offerings should enable it to post strong revenue growth. We forecast 22% revenue CAGR and 8% EPS CAGR (20% CAGR in EBITDA) for FY07-10E.

Valuation

Our 12-month target price is Rs365 based on 17x FY09E EPS. We value HCL Tech based on historical P/E and cross-check our valuation against Satyam's, which is similar to HCL Tech on revenue. We expect a 20% CAGR in EBITDA and 8% for EPS for the next three years, and believe the stock should trade towards the average of its historical three-year trading range of 14-23x 12-month forward earnings. HCL Tech has traded on a par with Satyam in the past two years. Our P/E target equates to an ~11% discount to our target multiple of 19x for Satyam primarily because of HCL Tech's slower growth and return ratios. We believe P/E remains the most appropriate valuation measure given HCL Tech's past profitability and future earnings visibility.

Risks

Although our quantitative risk-rating system suggests Low Risk, we rate HCL Tech as Medium Risk given the similar risk rating for Satyam. The key downside risks that could impede the stock from reaching our target price include: (1) significant QoQ volatility in growth rates; (2) any significant appreciation of the rupee against the US Dollar/Euro/GBP; (3) a sharp slowdown in the US economy; (4) a slowdown in the banking, financial services and insurance (BFSI) sector; (5) H1B visa quotas; (6) acquisition-related risks; and (7) the strategy of pursuing large deals could have negative margin implications.

Company Focus

I-Flex Solutions (IFLX.BO)

Sell: Expensive Despite Recent Underperformance

Target price change ☑
Estimate change ☑

Sell/Medium Risk	**3M**
Price (05 Nov 07)	Rs1,494.85
Target price	Rs1,570.00
from Rs2,025.00	
Expected share price return	5.0%
Expected dividend yield	0.0%
Expected total return	**5.0%**
Market Cap	Rs125,165M
	US$3,191M

Price Performance (RIC: IFLX.BO, BB: IFLEX IN)

Statistical Abstract

Year to 31 Mar	Net Profit (RsM)	Diluted EPS (Rs)	EPS growth (%)	P/E (x)	P/B (x)	ROE (%)	Yield (%)
2006A	2,190	28.89	10.2	51.7	8.3	17.6	0.1
2007A	2,756	34.22	18.4	43.7	7.4	18.4	0.0
2008E	3,182	38.01	11.1	39.3	6.4	17.7	0.0
2009E	4,871	58.18	53.0	25.7	5.1	22.2	0.0
2010E	6,674	79.70	37.0	18.8	4.0	24.1	0.0

Source: Powered by dataCentral

- **2Q FY08 below expectations** — Revenues grew by 9.8% qoq (est. 11.9%) while profits at Rs640m were much lower than our expectation of Rs912m. In a surprising move, I-Flex has decided to publish only Indian GAAP numbers from now on. In FY07, Indian GAAP net profit was ~34% higher than US GAAP net profit. Our numbers are based on US GAAP.
- **Product business doing well** — The product business showed ~35% yoy growth with PBIT margins above 20%. The tank size remains healthy at US$80m with additions of ~US$23m in 2Q alone. Flexcube has been ranked as the best selling core banking solution for five years in a row by IBS, UK.
- **Services business impacted by currency, top clients decline** — The services business has recovered with 5% qoq revenue growth (1Q: –7% qoq) but the impact of the currency is clearly evident in the single-digit PBIT margins.
- **Oracle open offer the only possible trigger** — Oracle already owns ~81% in I-flex and in the past has made two upward revisions in the open offer price. An open offer from Oracle to increase its share could be a possible upside trigger.
- **Cutting estimates by 15-23%** — We are cutting our estimates by 15-23% over FY08-10. The downgrade is on account of operational downgrades post 2Q and our new currency estimates.
- **Maintain Sell/Medium Risk** — We lower our target price to Rs1,570 based on 27x FY09E EPS (down from 30x FY09E earlier). This is primarily to adjust for slower earnings growth.

Fiscal year end 31-Mar	2006	2007	2008E	2009E	2010E
Valuation Ratios					
P/E adjusted (x)	51.7	43.7	39.3	25.7	18.8
EV/EBITDA adjusted (x)	39.8	32.7	25.8	16.7	11.6
P/BV (x)	8.3	7.4	6.4	5.1	4.0
Dividend yield (%)	0.1	0.0	0.0	0.0	0.0
Per Share Data (Rs)					
EPS adjusted	28.89	34.22	38.01	58.18	79.70
EPS reported	28.89	34.22	38.01	58.18	79.70
BVPS	179.68	203.31	233.49	291.49	371.02
DPS	1.50	0.00	0.00	0.00	0.00
Profit & Loss (RsM)					
Net sales	14,835	20,381	25,367	33,212	42,243
Operating expenses	-12,389	-17,628	-21,932	-27,560	-34,022
EBIT	**2,446**	**2,753**	**3,435**	**5,652**	**8,221**
Net interest expense	275	350	325	300	350
Non-operating/exceptionals	3	-5	-8	-12	-15
Pre-tax profit	**2,724**	**3,098**	**3,752**	**5,940**	**8,556**
Tax	-534	-342	-570	-1,069	-1,882
Extraord./Min.Int./Pref.div.	0	0	0	0	0
Reported net income	**2,190**	**2,756**	**3,182**	**4,871**	**6,674**
Adjusted earnings	2,190	2,756	3,182	4,871	6,674
Adjusted EBITDA	2,950	3,585	4,534	6,929	9,747
Growth Rates (%)					
Sales	30.1	37.4	24.5	30.9	27.2
EBIT adjusted	0.5	12.6	24.8	64.5	45.4
EBITDA adjusted	6.5	21.5	26.5	52.8	40.7
EPS adjusted	10.2	18.4	11.1	53.0	37.0
Cash Flow (RsM)					
Operating cash flow	**1,771**	**739**	**2,272**	**3,199**	**4,799**
Depreciation/amortization	504	832	1,098	1,277	1,526
Net working capital	-741	-2,387	-1,676	-2,637	-3,036
Investing cash flow	**-1,543**	**-1,157**	**-1,467**	**-1,488**	**-1,435**
Capital expenditure	-1,393	-1,500	-1,800	-1,800	-1,800
Acquisitions/disposals	78	0	0	0	0
Financing cash flow	**139**	**-5**	**-8**	**-12**	**-15**
Borrowings	-2	0	0	0	0
Dividends paid	-129	0	0	0	0
Change in cash	**366**	**-424**	**797**	**1,699**	**3,349**
Balance Sheet (RsM)					
Total assets	**17,768**	**19,669**	**22,844**	**27,703**	**34,361**
Cash & cash equivalent	6,873	6,448	7,245	8,944	12,293
Accounts receivable	5,257	6,850	8,526	11,163	14,198
Net fixed assets	2,174	2,842	3,544	4,067	4,341
Total liabilities	**4,144**	**3,297**	**3,297**	**3,297**	**3,297**
Accounts payable	140	140	140	140	140
Total Debt	30	30	30	30	30
Shareholders' funds	**13,623**	**16,373**	**19,547**	**24,406**	**31,065**
Profitability/Solvency Ratios (%)					
EBITDA margin adjusted	19.9	17.6	17.9	20.9	23.1
ROE adjusted	17.6	18.4	17.7	22.2	24.1
ROIC adjusted	39.8	33.9	29.2	36.4	40.0
Net debt to equity	-50.2	-39.2	-36.9	-36.5	-39.5
Total debt to capital	0.2	0.2	0.2	0.1	0.1

For further data queries on Citigroup's full coverage universe please contact CIR Data Services Asia Pacific at CitiResearchDataServices@citigroup.com or +852-2501-2791

Powered by: dataCentral

I-Flex Solutions

Company description

I-Flex Solutions is a leading software vendor for the banking and financial services vertical. Its core banking product suite - FLEXCUBE - has been ranked the world's No. 1 selling Core Banking Solution for five years in a row since 2002. The company has gained from its focus on a single vertical. It employs about 11,000 people serving customers in ~130 countries. I-Flex's services business has also grown rapidly in the past few years - the services business is focused on the BFSI industry. The company also offers high-end transaction processing services through its KPO subsidiary.

Investment strategy

We rate I-Flex as Sell/Medium Risk (3M) based on valuation concerns. We maintain a positive view on the overall IT services and software sector in India. Flexcube (I-Flex's flagship product) has been ranked No. 1 by IBS (in terms of the number of licenses sold) for the past 5 years. Also, we believe the Oracle acquisition of a majority stake in I-Flex would lead to better revenue growth for I-Flex because it can leverage the marketing strength of Oracle for selling its banking product to banks in developed countries. According to management, American financial companies are more receptive to I-Flex's product suite after the Oracle stake acquisition. We estimate 27.5% revenue CAGR and 32.6% EPS CAGR over FY07-10E. We expect operating margins to rebound after the sharp declines in FY06-07. We forecast EBITDA margin to increase gradually to 23.1% for FY10E on strong revenue growth and product leverage. At current valuations, however, we think the stock has largely factored in all the upside from the Oracle synergies. We believe this valuation makes the risk/reward unfavorable for investors and leaves little upside potential.

Valuation

Our 12-month target price is Rs1,570 based on a target multiple of 27x FY09E earnings. Our target multiple is based on the average of the past year valuation P/E band of 22-39x 12-month forward earnings. I-Flex has in the past few quarters started trading at a sizeable premium to the valuation of Infosys — the market leader. Since the acquisition of a majority stake by Oracle, I-Flex has continued to trade at a high premium; many investors see the stock as providing exposure to a possible delisting; historically, all the delistings in the Indian IT space have yielded attractive returns. We believe I-Flex will continue to remain the most expensive IT stock given operating leverage in the business, synergies from the Oracle ownership relationship, and a scarcity premium as the only large listed Indian product play. We believe P/E is the most appropriate given I-Flex's profitable track record and widespread investor use of this tool.

Risks

Although our quantitative risk-rating system suggests Low Risk for I-Flex Solutions shares, we rate I-Flex as Medium Risk given the high quarterly volatility of its revenue and our similar risk ratings for other mid-sized IT peer-group companies. The key upside risks to our target price include: (1) any significant depreciation of the rupee; (2) a sharp pick-up in discretionary spending by banks; (3) an exceptionally strong quarter; (4) increased deal flow; (5) the possibility of de-listing of I-Flex on the open offer from Oracle; (6) I-Flex acquiring a small- to mid-sized company at attractive valuations.

Company Focus

Patni Computer Systems (PTNI.BO)

Buy: M&A a Potential Stock Trigger; Difficult to Time

Rating change ☑
Target price change ☑
Estimate change ☑

Buy/High Risk	**1H**
from Buy/Medium Risk	
Price (06 Nov 07)	Rs350.00
Target price	Rs475.00
from Rs525.00	
Expected share price return	35.7%
Expected dividend yield	1.0%
Expected total return	**36.7%**
Market Cap	Rs48,624M
	US$1,241M

Price Performance (RIC: PTNI.BO, BB: PATNI IN)

Statistical Abstract

Year to 31 Dec	Net Profit (RsM)	Diluted EPS (Rs)	EPS growth (%)	P/E (x)	P/B (x)	ROE (%)	Yield (%)
2005A	2,678	21.03	10.3	16.6	2.2	16.1	0.7
2006A	2,654	19.05	-9.4	18.4	2.2	12.4	0.9
2007E	4,609	32.93	72.9	10.6	1.9	18.9	1.0
2008E	4,726	33.77	2.5	10.4	1.6	16.8	1.4
2009E	5,064	36.18	7.1	9.7	1.4	15.7	1.4

Source: Powered by dataCentral

- **3Q07 slightly ahead of estimates** — Revenues of US$169.5m were slightly ahead of our estimate of US$168m, whereas profits at Rs1,098m came much ahead (est. Rs894m) primarily due to high forex gains. EBITDA margins (without forex benefit) continue to trend down.
- **Guidance indicates sluggish revenue growth** — Management guided to sluggish revenue growth of 1% qoq ($ terms) in 4Q with a profit decline of ~13% (excluding forex). Despite the twin acquisitions of Logan and Taratec in 3Q, in our view, Patni seems to be struggling for revenue growth.
- **M&A a trigger** — Patni has been widely reported to be in talks with several players (including private equity firms) for a stake sale. With Patni's size and capabilities, presence of a large private equity player and the weak operational performance, we believe Patni is a likely candidate for restructuring/stake sale. Any such trigger would be positive for the stock, in our view.
- **Cutting estimates to factor in higher INR** — We are cutting our estimates by 3-5% for 2008-09. Operational upgrade post a steady Q3 has partly offset our new currency estimates of Rs38/36 for CY08/CY09.
- **Valuations look reasonable** – Patni trades at significant discounts of ~50% and ~60% to peers Satyam and Infosys, respectively.
- **We rate Patni as Buy/High Risk** — We lower our target price to Rs475 based on 14x CY08E EPS (down from 15x CY08E earlier). This is primarily to adjust for lower earnings growth now on account of our new currency estimates. We have changed our risk rating from Medium to High to factor in the possibility of delay in the stake sale.

Fiscal year end 31-Dec	2005	2006	2007E	2008E	2009E
Valuation Ratios					
P/E adjusted (x)	16.6	18.4	10.6	10.4	9.7
EV/EBITDA adjusted (x)	10.2	7.5	6.2	5.9	4.9
P/BV (x)	2.2	2.2	1.9	1.6	1.4
Dividend yield (%)	0.7	0.9	1.0	1.4	1.4
Per Share Data (Rs)					
EPS adjusted	21.03	19.05	32.93	33.77	36.18
EPS reported	21.03	19.05	32.93	33.77	36.18
BVPS	159.71	162.36	189.13	217.51	248.31
DPS	2.50	3.00	3.50	5.00	5.00
Profit & Loss (RsM)					
Net sales	19,834	26,140	27,026	30,663	35,311
Operating expenses	-16,734	-22,205	-22,314	-26,004	-30,319
EBIT	**3,100**	**3,935**	**4,712**	**4,659**	**4,991**
Net interest expense	0	0	0	0	0
Non-operating/exceptionals	186	564	791	1,017	1,282
Pre-tax profit	**3,286**	**4,499**	**5,503**	**5,677**	**6,273**
Tax	-608	-932	-894	-951	-1,209
Extraord./Min.Int./Pref.div.	0	-913	0	0	0
Reported net income	**2,678**	**2,654**	**4,609**	**4,726**	**5,064**
Adjusted earnings	2,678	2,654	4,609	4,726	5,064
Adjusted EBITDA	3,770	4,775	5,682	5,624	5,947
Growth Rates (%)					
Sales	40.4	31.8	3.4	13.5	15.2
EBIT adjusted	17.8	26.9	19.7	-1.1	7.1
EBITDA adjusted	20.7	26.7	19.0	-1.0	5.7
EPS adjusted	10.3	-9.4	72.9	2.5	7.1
Cash Flow (RsM)					
Operating cash flow	**3,830**	**2,717**	**4,713**	**5,032**	**5,212**
Depreciation/amortization	670	840	970	965	956
Net working capital	865	-213	-75	359	474
Investing cash flow	**-2,636**	**-2,370**	**-2,995**	**-363**	**31**
Capital expenditure	-2,423	-2,251	-1,858	-1,344	-1,204
Acquisitions/disposals	-128	-456	-1,805	0	0
Financing cash flow	**4,825**	**-639**	**-815**	**-791**	**-791**
Borrowings	2	-1	-6	0	0
Dividends paid	-317	-473	-553	-791	-791
Change in cash	**6,019**	**-292**	**903**	**3,879**	**4,452**
Balance Sheet (RsM)					
Total assets	**24,815**	**28,232**	**33,407**	**38,305**	**43,810**
Cash & cash equivalent	13,062	12,770	13,673	17,551	22,003
Accounts receivable	0	0	0	0	0
Net fixed assets	4,136	5,547	6,435	6,814	7,062
Total liabilities	**4,397**	**5,797**	**7,173**	**8,136**	**9,368**
Accounts payable	0	0	0	0	0
Total Debt	19	17	11	11	11
Shareholders' funds	**20,418**	**22,434**	**26,234**	**30,169**	**34,442**
Profitability/Solvency Ratios (%)					
EBITDA margin adjusted	19.0	18.3	21.0	18.3	16.8
ROE adjusted	16.1	12.4	18.9	16.8	15.7
ROIC adjusted	34.2	33.2	32.6	27.8	28.3
Net debt to equity	-63.9	-56.8	-52.1	-58.1	-63.9
Total debt to capital	0.1	0.1	0.0	0.0	0.0

For further data queries on Citigroup's full coverage universe please contact CIR Data Services Asia Pacific at CitiResearchDataServices@citigroup.com or +852-2501-2791

Powered by: dataCentral

Patni Computer Systems

Company description

Patni is a mid-tier IT solutions provider from India and a pioneer of offshore IT services delivery. Founded in 1978, it operated both software and hardware businesses until 1999, when the hardware business was de-merged. It continues to operate as a global consulting and IT services provider. Patni employs ~14,300 professionals, who service more than 290 global corporations. It has a sizeable presence in insurance, financial services, manufacturing and telecoms verticals. GE is Patni's largest customer, contributing close to 13% of 3Q CY07 revenues.

Investment strategy

Our Buy/High Risk rating is based on Patni being a prime M&A target, in our view. Patni trades at a large discount to Satyam on a one-year forward EV/EBITDA basis and has ~25% of its market cap in cash and equivalents. With a high cash position of ~US$320m, we believe Patni is a decent-sized player with a relatively inexpensive valuation, making it an ideal acquisition candidate. Expect revenue CAGR of ~11% over the next three years, slower than those of peers. The company has historically offered lower pricing to clients by employing low-cost resources. But with demand for IT professionals growing, Patni is facing increased wage pressure. However, over the past few quarters, cost optimization efforts have resulted in margin expansion.

Valuation

Our target price of Rs475 (14x CY08E earnings) is based on a 25% target-multiple discount (raised from 20% earlier because we factor in a slower earnings CAGR for Patni) to Patni's closest peer, Satyam. Patni has traded at a 10-40% discount to Satyam over the past year, mainly due to slower growth and lower RoIC/RoE. We ascribe only a 25% discount for Patni to factor in M&A expectations. We believe P/E is a good valuation measure given Patni's profitability and strong earnings visibility.

Risks

Although our quantitative risk-rating system suggests Medium Risk, we rate Patni as High Risk given its slower growth profile and delay in M&A possibilities. Key downside risks to our target price include: 1) significant QoQ volatility in growth rates; 2) any significant appreciation of the rupee against the USD/Euro/GBP; 3) a sharp slowdown in the US economy; 4) a slowdown in the banking, financial services and insurance (BFSI) sector; 5) H1B visa quotas; and 6) acquisition-related risks.

Company Focus

Sasken Communication Technologies (SKCT.BO)

Buy: Down But Not Out

Rating change ☑
Target price change ☑
Estimate change ☑

Buy/High Risk	**1H**
from Buy/Medium Risk	
Price (05 Nov 07)	Rs281.10
Target price	Rs372.00
from Rs505.00	
Expected share price return	32.3%
Expected dividend yield	1.8%
Expected total return	**34.1%**
Market Cap	Rs8,026M
	US$205M

Price Performance (RIC: SKCT.BO, BB: SACT IN)

Statistical Abstract

Year to 31 Mar	Net Profit (RsM)	Diluted EPS (Rs)	EPS growth (%)	P/E (x)	P/B (x)	ROE (%)	Yield (%)
2006A	229	8.09	-40.2	34.8	2.0	8.7	1.1
2007A	393	13.76	70.2	20.4	1.9	9.7	1.1
2008E	485	16.82	22.2	16.7	1.8	11.1	1.8
2009E	675	23.40	39.1	12.0	1.6	14.3	3.6
2010E	891	30.86	31.9	9.1	1.5	17.2	3.6

Source: Powered by dataCentral

- **One-time gains resulted in strong reported 2Q FY08** — Revenues of Rs1.43bn included Rs105m one-time compensation from a tier-one customer. Reported profits were Rs143m, driven by the compensation. Management reiterated guidance of services revenues growing 20-25% (over US$110m run rate in 4Q) and 15-17% EBITDA margins. In products, it expects EBITDA breakeven by 4Q FY08. With the sharp rupee appreciation, this remains a challenging task in our view.

- **Services business impacted by weakness in telecoms** — Excluding one-time compensation, top-line growth was muted at ~4% qoq in $ terms mainly due to a shift toward offshore and lower utilization in Botnia (due to the holiday season in Finland). Management has scaled down the hiring guidance to ~500 adds for FY08 as it is focusing on increasing utilization.

- **Product business update** — In 2Q, the products segment delivered robust revenue growth of 16% qoq along with a reduction in losses. Royalty revenues have got delayed with phone shipments being deferred. In the coming quarters, profitability of product business should improve with necessary investments already having been made in the business.

- **Cutting estimates and target price; change in risk rating** — We are cutting our estimates by 16-28% over FY08-FY10. A below-expectation 2Q, coupled with our new rupee forecasts, has resulted in estimate cuts. We have also changed our risk rating from Medium to High to factor in the higher risk in services due to restructuring in a couple of Sasken's large customers in the telecoms space. We have cut our target price to Rs372 (from Rs.505 earlier) following our earnings downgrades.

- **Why we rate Sasken Buy/High Risk** — Sasken has one of the strongest capabilities in the telecoms space and any recovery in telecom OEMs should benefit Sasken. With investment in the product business having being made, profitability should only improve in the segment. Valuations do not look expensive and are at historical lows; we rate the stock Buy/High Risk.

Fiscal year end 31-Mar	2006	2007	2008E	2009E	2010E
Valuation Ratios					
P/E adjusted (x)	34.8	20.4	16.7	12.0	9.1
EV/EBITDA adjusted (x)	14.8	11.2	14.5	9.1	7.9
P/BV (x)	2.0	1.9	1.8	1.6	1.5
Dividend yield (%)	1.1	1.1	1.8	3.6	3.6
Per Share Data (Rs)					
EPS adjusted	8.09	13.76	16.82	23.40	30.86
EPS reported	8.09	13.76	16.82	23.40	30.86
BVPS	138.10	150.09	159.24	171.40	191.10
DPS	3.01	3.00	5.00	10.00	10.00
Profit & Loss (RsM)					
Net sales	3,081	4,683	5,486	6,802	8,590
Operating expenses	-2,779	-4,262	-5,182	-6,261	-7,926
EBIT	**303**	**420**	**304**	**541**	**665**
Net interest expense	0	0	0	0	0
Non-operating/exceptionals	63	73	292	273	391
Pre-tax profit	**365**	**493**	**596**	**814**	**1,055**
Tax	-69	-101	-110	-139	-165
Extraord./Min.Int./Pref.div.	-68	0	0	0	0
Reported net income	**229**	**393**	**485**	**675**	**891**
Adjusted earnings	229	393	485	675	891
Adjusted EBITDA	472	638	528	813	987
Growth Rates (%)					
Sales	27.4	52.0	17.2	24.0	26.3
EBIT adjusted	42.0	38.8	-27.7	78.1	22.8
EBITDA adjusted	33.0	35.0	-17.2	53.9	21.3
EPS adjusted	-40.2	70.2	22.2	39.1	31.9
Cash Flow (RsM)					
Operating cash flow	**149**	**218**	**894**	**875**	**1,155**
Depreciation/amortization	170	218	224	272	322
Net working capital	-250	-393	184	-72	-58
Investing cash flow	**-454**	**-451**	**-316**	**-588**	**-704**
Capital expenditure	-454	-449	-316	-588	-704
Acquisitions/disposals	0	0	0	0	0
Financing cash flow	**2,332**	**1,174**	**-348**	**-512**	**-439**
Borrowings	-3	904	-183	-183	-110
Dividends paid	-96	-98	-164	-329	-329
Change in cash	**2,027**	**941**	**230**	**-225**	**12**
Balance Sheet (RsM)					
Total assets	**4,243**	**5,908**	**6,297**	**6,613**	**7,375**
Cash & cash equivalent	2,015	717	1,631	920	534
Accounts receivable	653	1,108	1,172	1,398	1,765
Net fixed assets	1,011	2,996	2,494	3,401	4,295
Total liabilities	**392**	**1,694**	**1,759**	**1,728**	**1,928**
Accounts payable	0	0	0	0	0
Total Debt	12	916	733	550	440
Shareholders' funds	**3,850**	**4,218**	**4,538**	**4,885**	**5,446**
Profitability/Solvency Ratios (%)					
EBITDA margin adjusted	15.3	13.6	9.6	12.0	11.5
ROE adjusted	8.7	9.7	11.1	14.3	17.2
ROIC adjusted	14.8	10.2	4.8	9.9	10.1
Net debt to equity	-52.0	4.7	-19.8	-7.6	-1.7
Total debt to capital	0.3	17.8	13.9	10.1	7.5

For further data queries on Citigroup's full coverage universe please contact CIR Data Services Asia Pacific at CitiResearchDataServices@citigroup.com or +852-2501-2791

Powered by: dataCentral

Sasken Communication Technologies

Company description

Bangalore-based Sasken was established in 1989 and initially worked on electronic design automation projects. It now offers embedded software services to network equipment manufacturers, device manufacturers and service providers in the wireless and broadband space, and to semiconductor vendors. Key clients include large tier-one vendors such as Nokia and Nortel. Sasken has also been investing in a products business.

Investment strategy

We rate Sasken as Buy/High Risk (1H). Increasing competition is driving telecoms vendors to outsource software and services to countries such as India. Sasken, with a strong focus on the telecoms and embedded space, is benefiting from this trend. We expect Sasken's services business to record revenue CAGR of 20% over FY07-10E. The acquisition of Botnia has helped in accelerating growth. The products business is in investment mode, but the number of design-ins is encouraging. We expect a ramp-up and a turnaround in the products business in FY08; we forecast a 57% CAGR in revenues over FY07-10E and see the business turning around from losses to a 20%+ margin in FY10E.

Valuation

Our 12-month target price of Rs372 is based on a sum-of-the-parts valuation for the services business and the loss-making products business. We apply an FY09E EV/EBITDA target of 10x for Sasken's services business, which is supported by the target valuations of comparable mid-caps. We value Sasken's products business at 3x EV/Sales, similar to the valuation Motorola paid for Sasken's largest competitor, TTPCom, and is supported by our forecast 12%-plus margin in FY09. Our target price implies a P/E of 16x FY09E EPS.

Risks

Although our quantitative risk-rating system suggests Medium Risk, we rate Sasken as High Risk given the QoQ volatility inherent in the products business and delay in royalty revenues. Risks that could impede the stock from reaching our target price include: (1) high client concentration; (2) slowdown in the telecoms industry; (3) delays in the handset launches in which Sasken is involved, or poor customer response to the handsets; (4) technology obsolescence; (5) wage inflation and currency appreciation; and (6) volatility in QoQ revenues, as investors are used to more linear models of growth for most Indian IT services companies.

Company Focus

Mphasis (MBFL.BO)

Buy: Poised for Growth; Remains Our Top Mid-cap Pick

Target price change ☑
Estimate change ☑

Buy/Medium Risk	1M
Price (05 Nov 07)	Rs297.45
Target price	Rs360.00
from Rs400.00	
Expected share price return	21.0%
Expected dividend yield	1.0%
Expected total return	**22.0%**
Market Cap	Rs48,895M
	US$1,247M

Price Performance (RIC: MBFL.BO, BB: MPHL IN)

Statistical

Year to 31 Mar	Net Profit (RsM)	Diluted EPS (Rs)	EPS growth (%)	P/E (x)	P/B (x)	ROE (%)	Yield (%)
2006A	1,499	9.25	16.9	32.1	7.3	23.0	1.0
2007A	1,801	8.63	-6.7	34.5	6.1	21.6	1.0
2008E	2,588	12.30	42.5	24.2	5.2	23.5	1.0
2009E	3,794	18.02	46.6	16.5	4.1	28.1	1.0
2010E	4,874	23.15	28.5	12.8	3.2	28.5	1.0

Source: Powered by dataCentral

- **Consistent strong growth** — Revenue growth in US$ terms was 14%+ qoq, the sixth quarter in a row when Mphasis reported double-digit growth in revenues. On a QoQ basis IT services grew ~16%; ITO ~18% and BPO ~6%. While EBITDA margin was down ~40bp qoq due to strong INR, profits grew strongly at ~29% qoq to Rs663m.

- **Strong hiring lends confidence** — The company hired over 2,000 employees in 2Q (~9% of quarter ago base). Management has guided for ~1,500-2,000 net hiring for 4Q07 and ~11,000 for 2008. Management expects campus hires to rise to 3,500 in CY08 against 1,800 in CY07. Strong hiring indicates a healthy business pipeline, in our view.

- **Client metrics continue to improve** — Mphasis had significant client addition from EDS parentage – Japanese technology major, US based airline, one of the largest fund transfer companies and European operations of one of the largest medical equipment companies. Also, the number of US$20m+ client relationships increased to 7 from 4 in the previous quarter.

- **Adjusting estimates for stronger INR** — We are cutting our estimates by ~5-6% over FY09-10. Operational upgrades post a solid 2Q (particularly on volumes) have partially offset earnings downgrade from our new currency forecasts.

- **Lowering target price; maintaining Buy/Medium Risk** — We lower our target price to Rs360 based on 20x FY09E EPS (down from 21x earlier). This is primarily to adjust for lower earnings growth on account of changes in our currency estimates and sector derating.

- **Top mid-cap pick** — With the demand side of the equation assured and Mphasis being an important part of EDS' revival strategy, we see strong top-line driven earnings growth for Mphasis. The stock remains our top pick in the mid-cap IT services space.

Fiscal year end 31-Mar	2006	2007	2008E	2009E	2010E
Valuation Ratios					
P/E adjusted (x)	32.1	34.5	24.2	16.5	12.8
EV/EBITDA adjusted (x)	24.3	15.5	10.6	7.8	5.7
P/BV (x)	7.3	6.1	5.2	4.1	3.2
Dividend yield (%)	1.0	1.0	1.0	1.0	1.0
Per Share Data (Rs)					
EPS adjusted	9.25	8.63	12.30	18.02	23.15
EPS reported	9.25	8.63	12.30	18.02	23.15
BVPS	41.03	48.44	57.27	72.02	91.94
DPS	3.00	3.00	3.00	3.00	3.00
Profit & Loss (RsM)					
Net sales	9,401	17,606	25,080	36,836	50,879
Operating expenses	-7,952	-15,563	-22,084	-32,749	-45,331
EBIT	**1,449**	**2,043**	**2,995**	**4,087**	**5,549**
Net interest expense	17	75	102	120	172
Non-operating/exceptionals	77	-135	-213	300	400
Pre-tax profit	**1,543**	**1,983**	**2,884**	**4,507**	**6,121**
Tax	-44	-182	-296	-714	-1,247
Extraord./Min.Int./Pref.div.	0	0	0	0	0
Reported net income	**1,499**	**1,801**	**2,588**	**3,794**	**4,874**
Adjusted earnings	1,499	1,801	2,588	3,794	4,874
Adjusted EBITDA	1,967	3,060	4,454	6,017	7,906
Growth Rates (%)					
Sales	22.8	87.3	42.4	46.9	38.1
EBIT adjusted	42.5	41.1	46.6	36.4	35.8
EBITDA adjusted	39.3	55.6	45.6	35.1	31.4
EPS adjusted	16.9	-6.7	42.5	46.6	28.5
Cash Flow (RsM)					
Operating cash flow	**1,217**	**1,419**	**3,519**	**4,194**	**5,352**
Depreciation/amortization	518	1,017	1,459	1,930	2,358
Net working capital	-706	-1,459	-639	-1,110	-1,307
Investing cash flow	**-698**	**-2,151**	**-3,122**	**-2,573**	**-3,050**
Capital expenditure	-775	-2,080	-2,983	-2,993	-3,622
Acquisitions/disposals	0	0	0	0	0
Financing cash flow	**-485**	**1,636**	**-703**	**-717**	**-717**
Borrowings	-9	-8	18	0	0
Dividends paid	-555	-579	-716	-717	-717
Change in cash	**34**	**904**	**-306**	**904**	**1,586**
Balance Sheet (RsM)					
Total assets	**8,117**	**13,029**	**15,592**	**19,841**	**25,440**
Cash & cash equivalent	989	1,893	1,591	2,495	4,081
Accounts receivable	2,117	4,210	5,051	6,756	8,639
Net fixed assets	1,455	2,518	4,043	5,106	6,370
Total liabilities	**1,511**	**2,944**	**3,645**	**4,817**	**6,259**
Accounts payable	0	0	0	0	0
Total Debt	37	28	46	46	46
Shareholders' funds	**6,606**	**10,085**	**11,947**	**15,024**	**19,181**
Profitability/Solvency Ratios (%)					
EBITDA margin adjusted	20.9	17.4	17.8	16.3	15.5
ROE adjusted	23.0	21.6	23.5	28.1	28.5
ROIC adjusted	25.9	27.5	29.6	29.9	31.5
Net debt to equity	-14.4	-18.5	-12.9	-16.3	-21.0
Total debt to capital	0.6	0.3	0.4	0.3	0.2

For further data queries on Citigroup's full coverage universe please contact CIR Data Services Asia Pacific at CitiResearchDataServices@citigroup.com or +852-2501-2791

Powered by: dataCentral

Mphasis

Company description

Mphasis Ltd (formerly Mphasis BFL Ltd.) is a mid-tier Indian IT services company headquartered in Bangalore, India. The company has a presence in IT services (primarily application development and maintenance) and BPO services space. It serves global clients across financial services, retail, logistics and transportation verticals and had 80 million-dollar clients at the end of FY07. Mphasis BFL was originally formed by the integration of BFL Software, Mphasis Corp and Msource. It later acquired Navion Shanghai Software ('03), Kshema Technologies ('04), Princeton Consulting (Feb'05) and Eldorado Consulting (Mar'05) over a few years post the tech slowdown in the US. Post majority stake acquisition in Mphasis and merger with EDS India, Electronic Data Systems Corporation (EDS) holds over 60% in Mphasis.

Investment strategy

We rate Mphasis shares as Buy/Medium Risk (1M) based on a fundamental 12-month view. Offshore IT outsourcing has now become a mainstream option. Scale and scalability at offshore, in our view, remains the key criterion for success of MNC firms like IBM, Accenture, EDS, etc. Mphasis is in a sweet spot as the offshore arm of a global IT major - EDS - for whom getting its bestshore strategy right is a key to its success. The demand side of the business is near-guaranteed for Mphasis due to EDS's order backlog and new large deals it has signed. Supply side scalability and execution track record are also key factors. In our view, revenue and earnings growth should accelerate from here as offshore creditability of Mphasis is established. We expect a revenue CAGR of 42% and an EPS CAGR of 39% in FY07-10E.

Valuation

Our target price of Rs360 is based on 20x FY09E EPS. We believe P/E remains the most appropriate valuation measure given Mphasis' profitable record and high earnings visibility. The 20x target multiple is closer to the lower end of the last one-year trading band of 18-30x (average of ~24.3x) 1-year forward earnings post EDS acquisition of a majority stake. This multiple factors in some premium for the likelihood of de-listing as EDS would like to own a larger share of its offshore base. We forecast revenue CAGR of 42% and EPS CAGR of 39% over FY07-10E - this is at the higher end of our coverage universe, with some upside potential from further wins in offshore application space for EDS-Mphasis combine. Eventual de-listing from Indian exchanges could be a likely endgame for Mphasis, in our view. Valuation should build in some premium for this factor.

Risks

We rate Mphasis shares as Medium Risk based on our quantitative risk-rating system, which tracks 260-day historical share price volatility. Key risks that could impede the stock from reaching our target price include: (1) high client concentration; (2) a slowdown in the financial, retail, transportation & logistics industries; (3) a slowdown in the US/global economies; (4) supply-side situation becoming more difficult, i.e., wage inflation being higher than that factored in our model, or higher-than-expected attrition; (5) surprises in INR appreciation, (6) risk of transfer pricing, and (7) limited quota for H1B visas.

Company Focus

Hexaware Technologies (HEXT.BO)

Buy: Business Sluggish; Buyback a Positive Catalyst

Target price change ☑
Estimate change ☑

Buy/Medium Risk	**1M**
Price (05 Nov 07)	Rs100.35
Target price	Rs122.00
from Rs155.00	
Expected share price return	21.6%
Expected dividend yield	1.8%
Expected total return	**23.4%**
Market Cap	Rs14,389M
	US$367M

Price Performance (RIC: HEXT.BO, BB: HEXW IN)

Statistical

Year to 31 Dec	Net Profit (RsM)	Diluted EPS (Rs)	EPS growth (%)	P/E (x)	P/B (x)	ROE (%)	Yield (%)
2005A	913	7.50	49.1	13.4	3.4	29.7	0.6
2006A	1,242	9.02	20.2	11.1	2.2	26.2	1.6
2007E	1,136	7.91	-12.2	12.7	1.8	16.2	1.8
2008E	1,349	9.40	18.7	10.7	1.6	15.8	2.4
2009E	1,565	10.89	16.0	9.2	1.4	16.4	2.8

Source: Powered by dataCentral

- **Weak 3Q results, buyback a silver lining** — Hexaware reported revenue of US$63m (–1.5% qoq) and net profit of Rs269 (+3% qoq). The company announced that the board would meet in Nov 07 to review, consider and approve the buyback of its equity shares.

- **Strong order bookings** — Hexaware had record order bookings of US$100m+ in the quarter, including a) US$50 m+ deal from an existing client and b) €5m+ from a German client for its leasing system. In the call, management commented about additional bookings of US$35m+ in early 4Q.

- **Hiring returns after two quarters of lull** — Hexaware hired ~1,000 employees on a net basis (including 635 campus recruits) – 18% of the quarter-ago base. In our view, this indicates management confidence in business recovery especially after marginal declines during the preceding two quarters.

- **Improving pipeline/buyback to support the stock price** — 3Q CY07 results were below expectations and 4Q CY07 guidance was not encouraging either. However, good order bookings and employee additions point to growth returning in CY08. Moreover, the buyback announcement should also support the stock price in the near term.

- **Adjusting estimates for stronger INR and weak quarter** — We are cutting our estimates by 9-12% for CY07-09 on an operationally disappointing 3Q and new currency estimates.

- **Lowering target price; maintaining Buy/Medium Risk** — We lower our target price to Rs122 based on 13x CY08E EPS (down from 15x CY08E earlier). This is primarily to adjust for lower earnings growth and sector derating.

Fiscal year end 31-Dec	2005	2006	2007E	2008E	2009E
Valuation Ratios					
P/E adjusted (x)	13.4	11.1	12.7	10.7	9.2
EV/EBITDA adjusted (x)	12.4	9.7	8.9	7.0	5.6
P/BV (x)	3.4	2.2	1.8	1.6	1.4
Dividend yield (%)	0.6	1.6	1.8	2.4	2.8
Per Share Data (Rs)					
EPS adjusted	7.50	9.02	7.91	9.40	10.89
EPS reported	7.50	9.02	7.91	9.40	10.89
BVPS	29.11	45.46	56.14	62.78	70.46
DPS	0.60	1.60	1.80	2.40	2.80
Profit & Loss (RsM)					
Net sales	6,787	8,482	10,467	12,617	15,173
Operating expenses	-5,913	-7,360	-9,389	-11,321	-13,549
EBIT	**874**	**1,122**	**1,078**	**1,297**	**1,624**
Net interest expense	139	241	258	261	256
Non-operating/exceptionals	0	0	0	0	0
Pre-tax profit	**1,012**	**1,363**	**1,336**	**1,558**	**1,880**
Tax	-100	-120	-201	-209	-315
Extraord./Min.Int./Pref.div.	0	0	0	0	0
Reported net income	**913**	**1,242**	**1,136**	**1,349**	**1,565**
Adjusted earnings	913	1,242	1,136	1,349	1,565
Adjusted EBITDA	1,084	1,322	1,312	1,579	1,946
Growth Rates (%)					
Sales	24.3	25.0	23.4	20.5	20.3
EBIT adjusted	43.1	28.4	-3.9	20.3	25.2
EBITDA adjusted	40.5	22.0	-0.7	20.3	23.2
EPS adjusted	49.1	20.2	-12.2	18.7	16.0
Cash Flow (RsM)					
Operating cash flow	**537**	**1,032**	**980**	**902**	**1,198**
Depreciation/amortization	210	200	234	282	322
Net working capital	-485	-202	-78	-468	-432
Investing cash flow	**-173**	**-1,768**	**-724**	**-796**	**-918**
Capital expenditure	-173	-1,768	-724	-796	-918
Acquisitions/disposals	0	0	0	0	0
Financing cash flow	**40**	**2,962**	**-316**	**-135**	**-205**
Borrowings	10	-61	0	0	0
Dividends paid	-164	-247	-293	-396	-462
Change in cash	**403**	**2,227**	**-60**	**-29**	**75**
Balance Sheet (RsM)					
Total assets	**4,713**	**9,211**	**10,155**	**11,286**	**12,849**
Cash & cash equivalent	1,187	3,414	3,355	3,326	3,400
Accounts receivable	1,836	2,063	2,294	2,765	3,326
Net fixed assets	933	2,501	2,991	3,505	4,101
Total liabilities	**1,239**	**1,712**	**2,093**	**2,271**	**2,731**
Accounts payable	0	0	0	0	0
Total Debt	62	0	0	0	0
Shareholders' funds	**3,474**	**7,500**	**8,062**	**9,015**	**10,118**
Profitability/Solvency Ratios (%)					
EBITDA margin adjusted	16.0	15.6	12.5	12.5	12.8
ROE adjusted	29.7	26.2	16.2	15.8	16.4
ROIC adjusted	36.9	31.3	20.1	21.1	21.3
Net debt to equity	-32.4	-45.5	-41.6	-36.9	-33.6
Total debt to capital	1.7	0.0	0.0	0.0	0.0

For further data queries on Citigroup's full coverage universe please contact CIR Data Services Asia Pacific at CitiResearchDataServices@citigroup.com or +852-2501-2791

Powered by: dataCentral

Hexaware Technologies

Company description

Hexaware was established in 1992 and began international operations in 1995. In February 2001, it merged with the software division of Aptech. The merged entity was later de-merged from the training arm of Aptech and listed as Hexaware Technologies. It offers BPO service through 100% subsidiary CaliberPoint. Hexaware has built its business by scaling up in niche areas such as ERP, airlines and BFSI. It employs over 5,500 people in its IT and BPO operations, and has more than 150 clients.

Investment strategy

We rate Hexaware as Buy/Medium Risk (1M). Offshore IT outsourcing has now become the norm, with scale IT services players as well as smaller companies with niche focus benefiting. Hexaware has carved a niche for itself in several small though scalable areas, and has targeted under-penetrated markets. Ties with PeopleSoft/Exult have helped Hexaware develop expertise in HR-IT, and relationships with Air Canada/Lufthansa have led the company to the broader travel and transportation vertical. Hexaware is developing expertise in testing solution through organic and inorganic initiatives. We forecast a 23% revenue CAGR and an 11% EPS CAGR for Hexaware over 2006-09, driven by niche segments and the company's ability to mine clients.

Valuation

Our 12-month target price of Rs122 is based on 13x CY08E EPS, which is derived by using a ~30% discount (raised from 20% due to slower earnings growth expectations) to our target multiple for Satyam of 19x. We believe the discount is fair, as Satyam is a larger and more diversified company. We use Satyam as a benchmark to value all mid-tier IT services companies. We believe 13x is a fair multiple given the growth we still expect — 16% EPS CAGR over CY07E-09E and revenue CAGR of 26% in US$ terms. Also, a low valuation multiple could attract M&A interest. Moreover, the company is mulling buyback of its equity share – this should serve as support for valuations. Our target multiple is also supported by a two-year historical valuation range of 12-20x forward earnings. We believe a P/E-based valuation is appropriate given Hexaware's earnings track record and the widespread use of this methodology.

Risks

Our quantitative risk-rating system, which tracks 260-day historical share price volatility, rates Hexaware Technologies as Medium Risk. Risks that could impede the stock from reaching our target price include: (1) high client concentration; (2) a slowdown in the financial and transportation industry; (3) a slowdown in the US/global economies; (4) losing edge to scale players; (5) supply-side situation becoming more difficult - wage inflation being higher than factored in our model; (6) upside surprises in currency appreciation; and (7) limited H1B visas.

Company Focus

KPIT Cummins Infosystems (KPIT.BO)

Buy: Banking on Price Hikes

Target price change ☑
Estimate change ☑

Buy/Medium Risk	**1M**
Price (05 Nov 07)	Rs105.35
Target price	Rs130.00
from Rs154.00	
Expected share price return	23.4%
Expected dividend yield	0.5%
Expected total return	**23.9%**
Market Cap	Rs8,040M
	US$205M

Price Performance (RIC: KPIT.BO, BB: NKPIT IN)

Statistical

Year to 31 Mar	Net Profit (RsM)	Diluted EPS (Rs)	EPS growth (%)	P/E (x)	P/B (x)	ROE (%)	Yield (%)
2006A	326	3.66	7.0	28.8	5.4	26.3	0.3
2007A	505	5.47	49.5	19.3	4.0	29.6	0.3
2008E	557	7.01	28.3	15.0	3.1	23.9	0.5
2009E	745	9.28	32.3	11.4	2.5	24.7	0.7
2010E	834	10.40	12.0	10.1	2.0	22.3	0.7

Source: Powered by dataCentral

- **In-line 2Q results** — KPIT reported revenue of US$35.6m, up 13% qoq. EBITDA margin was at 15.7%; net profit at Rs141m was boosted by strong revenue growth and lower interest costs.
- **Good deal wins, better pricing** — The company had some good deal wins in 2Q: a) ~US$20m deal from Asian tier-1 supplier in the auto-electronics space; b) ~US$10m deal for enterprise software support; and c) multi-million $ deal in the BI space. Management has commented that recent deal wins were at 12-15% better price points, and the company was prospecting three more US$10m+ deals.
- **Management expects to meet guidance on the back of price hikes from 4Q** — Management has not revised its FY08 guidance. Revenues of US$145-148m look reasonable but profit guidance of Rs630-680m would be a challenging task, in our view. Management expects to meet this guidance on the back of pricing improvement starting Jan-08 from new and key existing clients. We have reduced our FY08 profit estimate to Rs557m from Rs573m to account for weaker 1H profits and a stronger INR.
- **Additional equity issuance** — KPIT will be issuing up to 1.6m equity shares to Cummins, raising Cummins' stake by 1.8% to 14.9%. Based on the SEBI formula, the company would get ~US$5.4m of cash and this would lead to ~2% equity dilution.
- **Cutting estimates for stronger INR** — We are cutting our estimates by 4-11% for FY08-10. Operational upgrades post a good 2Q (on volumes and pricing) have partially offset changes due to our new currency estimates and dilution from equity stake to Cummins.
- **Lowering target price; maintaining Buy/Medium Risk** — We lower our target price to Rs130 based on 14x FY09E EPS (down from 15x FY09E earlier). This is primarily to adjust for lower earnings growth and sector derating.

Fiscal year end 31-Mar	2006	2007	2008E	2009E	2010E
Valuation Ratios					
P/E adjusted (x)	28.8	19.3	15.0	11.4	10.1
EV/EBITDA adjusted (x)	17.7	12.0	9.0	6.8	5.6
P/BV (x)	5.4	4.0	3.1	2.5	2.0
Dividend yield (%)	0.3	0.3	0.5	0.7	0.7
Per Share Data (Rs)					
EPS adjusted	3.66	5.47	7.01	9.28	10.40
EPS reported	3.66	5.47	7.01	9.28	10.40
BVPS	19.67	26.62	34.31	42.99	52.82
DPS	0.35	0.35	0.50	0.75	0.75
Profit & Loss (RsM)					
Net sales	3,182	4,637	6,051	7,915	9,873
Operating expenses	-2,804	-4,043	-5,352	-6,995	-8,786
EBIT	**378**	**594**	**699**	**920**	**1,087**
Net interest expense	0	0	0	0	0
Non-operating/exceptionals	-19	-39	-72	-61	-40
Pre-tax profit	**359**	**555**	**627**	**859**	**1,048**
Tax	-33	-52	-69	-112	-210
Extraord./Min.Int./Pref.div.	0	2	-1	-3	-4
Reported net income	**326**	**505**	**557**	**745**	**834**
Adjusted earnings	326	505	557	745	834
Adjusted EBITDA	462	715	930	1,181	1,373
Growth Rates (%)					
Sales	26.0	45.7	30.5	30.8	24.7
EBIT adjusted	24.9	57.3	17.7	31.6	18.2
EBITDA adjusted	38.1	54.9	30.0	27.0	16.2
EPS adjusted	7.0	49.5	28.3	32.3	12.0
Cash Flow (RsM)					
Operating cash flow	**-156**	**824**	**698**	**822**	**868**
Depreciation/amortization	84	121	231	261	285
Net working capital	-587	158	-162	-247	-295
Investing cash flow	**-519**	**-1,028**	**-422**	**-410**	**-540**
Capital expenditure	-500	-940	-350	-349	-500
Acquisitions/disposals	0	0	0	0	0
Financing cash flow	**540**	**416**	**-75**	**-364**	**-363**
Borrowings	505	348	-209	-300	-300
Dividends paid	-26	-30	-44	-67	-67
Change in cash	**-135**	**212**	**202**	**49**	**-34**
Balance Sheet (RsM)					
Total assets	**2,675**	**3,893**	**4,315**	**4,883**	**5,550**
Cash & cash equivalent	411	625	826	872	834
Accounts receivable	868	1,102	1,276	1,626	2,029
Net fixed assets	826	1,397	1,516	1,603	1,819
Total liabilities	**1,253**	**1,898**	**1,630**	**1,516**	**1,412**
Accounts payable	0	0	0	0	0
Total Debt	875	1,223	1,014	714	414
Shareholders' funds	**1,422**	**1,995**	**2,685**	**3,366**	**4,138**
Profitability/Solvency Ratios (%)					
EBITDA margin adjusted	14.5	15.4	15.4	14.9	13.9
ROE adjusted	26.3	29.6	23.9	24.7	22.3
ROIC adjusted	24.8	24.4	23.4	26.9	25.6
Net debt to equity	32.6	30.0	7.0	-4.7	-10.1
Total debt to capital	38.1	38.0	27.4	17.5	9.1

For further data queries on Citigroup's full coverage universe please contact CIR Data Services Asia Pacific at CitiResearchDataServices@citigroup.com or +852-2501-2791

Powered by: dataCentral

KPIT Cummins Infosystems

Company description

KPIT Cummins Infosystems is a mid-tier IT services provider focused on two verticals: manufacturing services and BFSI (banking, financial services and insurance). Within these two verticals, the company is focused on a few key customers. Among service lines, in addition to regular application development and maintenance services, KPIT Cummins offers VLSI and embedded software services, package implementation, business intelligence, and BPO services. The company has close to 4,000 employees working for over 100 clients.

Investment strategy

We rate KPIT Cummins as Buy/Medium Risk (1M). With offshoring becoming mainstream, clients are increasingly using offshore for newer service areas like product engineering, embedded software, and engineering design services. KPIT Cummins has a head-start in the fast-growing embedded software and VLSI design services due to its Cummins and Renesas relationships. With client access to 7 of the top 10 auto OEMs and 13 leading tier 1 & 2 auto suppliers and five of top 10 semiconductor manufacturers, KPIT Cummins could become one of the top offshore vendors in auto electronics and semiconductor design - leading to 35% revenue and 36% earnings CAGRs over FY07-09E.

Valuation

Our 12-month target price is Rs130 based on 14x our FY09E EPS. Our target multiple is derived by applying a ~25% discount (up from 20% due to slower earnings growth expectations) to our target multiple for peer Satyam. We apply this discount as Satyam is a large and diversified company while KPIT is a niche-focused mid-tier IT player. We believe 14x is a fair multiple given the strong growth that we expect from KPIT over the next three years. Our target multiple is also supported by an historical valuation range of 10-20x forward earnings (average 15x) for the KPIT stock over the past three years. We believe a P/E-based valuation is most appropriate given KPIT's profitable track record and widespread investor use of this metric.

Risks

Our quantitative risk-rating system, which tracks 260-day historical share price volatility, rates KPIT Cummins as Medium Risk. Risks that could impede the stock from reaching our target price include: (1) high client concentration; (2) a slowdown in the auto-electronics industry; (3) a slowdown in the US/global economies; (4) technology obsolescence; (5) supply-side situation becoming more difficult - wage inflation being higher than that factored in our model; (6) currency appreciation more than that factored in our model; and (7) limited H1B visas.

Appendix A-1

Analyst Certification

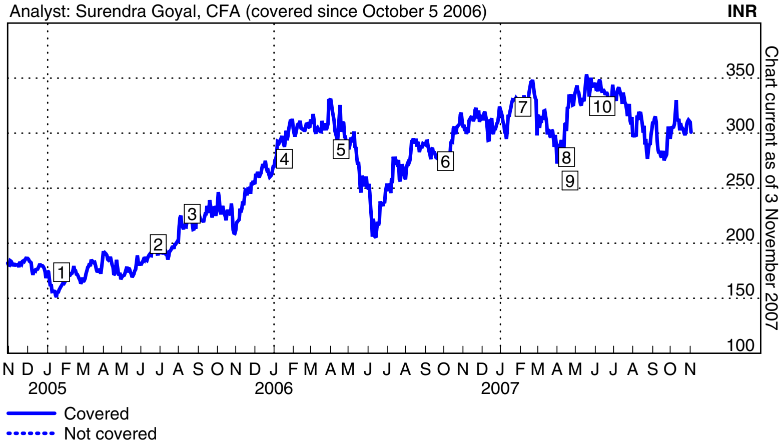
Each research analyst(s), strategist(s) or research associate(s) responsible for the preparation and content of this research report hereby certifies that, with respect to each issuer or security that the research analyst, strategist or research associate covers in this research report, all of the views expressed in this research report accurately reflect their personal views about those issuer(s) or securities. Each research analyst(s) strategist(s) or research associate(s) also certify that no part of their compensation was, is, or will be, directly or indirectly, related to the specific recommendation(s) or view(s) expressed by that research analyst, strategist or research associate in this research report.

IMPORTANT DISCLOSURES

HCL Technologies (HCLT.BO)

Ratings and Target Price History - Fundamental Research

Analyst: Surendra Goyal, CFA (covered since October 5 2006)



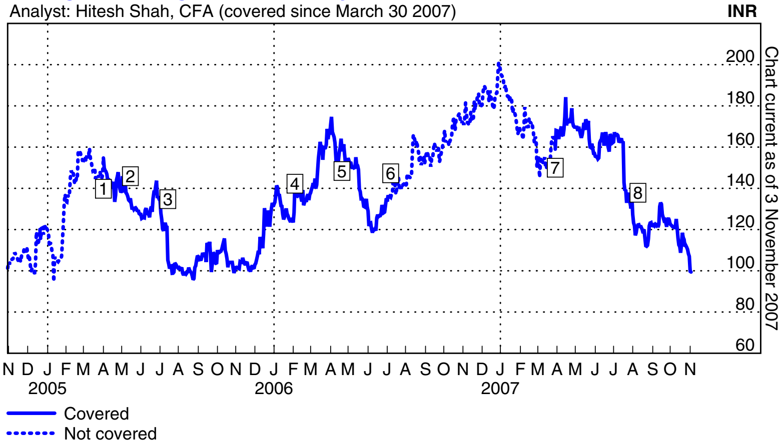
#	Date	Rating	Target Price	Closing Price
1:	25 Jan 05	2H	*187.50	161.60
2:	29 Jun 05	*2M	*205.00	190.23
3:	23 Aug 05	2M	*235.00	218.13
4:	18 Jan 06	2M	*307.50	287.55
5:	19 Apr 06	*2L	*310.00	301.15
6:	4 Oct 06	*1M	*340.00	276.70
7:	6 Feb 07	1M	*385.00	328.33
8:	17 Apr 07	1M	385.00	301.90
9:	23 Apr 07	1M	*405.00	329.05
10:	13 Jun 07	1M	*400.00	336.95

*Indicates change.

Hexaware Technologies (HEXT.BO)

Ratings and Target Price History - Fundamental Research

Analyst: Hitesh Shah, CFA (covered since March 30 2007)



#	Date	Rating	Target Price	Closing Price
1:	1 Apr 05	1M	176.00	154.73
2:	16 May 05	1M	*160.00	135.15
3:	14 Jul 05	*3H	*100.00	105.20
4:	3 Feb 06	*2M	*140.00	142.25
5:	20 Apr 06	*3M	*150.00	159.20
6:	7 Jul 06	Coverage suspended		
7:	29 Mar 07	*1M	*214.00	159.00
8:	9 Aug 07	1M	*155.00	122.25

*Indicates change.

I-Flex Solutions (IFLX.BO)

Ratings and Target Price History - Fundamental Research

Analyst: Surendra Goyal, CFA (covered since October 5 2006)

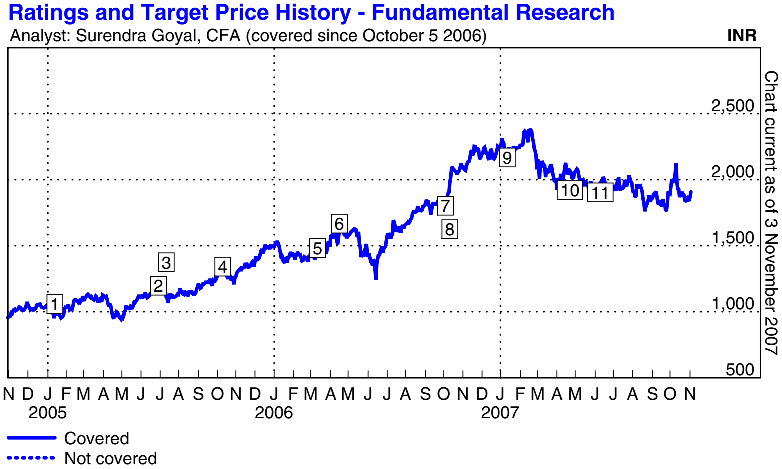
#	Date	Rating	Target Price	Closing Price
1:	4 Oct 06	3M	1,540.00	1,430.55
2:	6 Feb 07	3M	*1,850.00	1,979.00
3:	13 Jun 07	3M	*2,025.00	2,364.70

*Indicates change.

Infosys Technologies (INFY.BO)

Ratings and Target Price History - Fundamental Research

Analyst: Surendra Goyal, CFA (covered since October 5 2006)



#	Date	Rating	Target Price	Closing Price
1:	13 Jan 05	1M	*1,200.00	982.70
2:	29 Jun 05	1M	*1,400.00	1,162.05
3:	12 Jul 05	1M	*1,350.00	1,109.97
4:	11 Oct 05	1M	*1,570.00	1,341.95
5:	12 Mar 06	*1L	*1,635.00	1,466.70
6:	16 Apr 06	1L	*1,737.50	1,615.15
7:	4 Oct 06	1L	*2,165.00	1,803.20
8:	11 Oct 06	1L	*2,340.00	1,981.35
9:	11 Jan 07	1L	*2,660.00	2,183.00
10:	23 Apr 07	1L	*2,580.00	2,067.55
11:	10 Jun 07	1L	*2,440.00	1,980.10

*Indicates change.

KPIT Cummins Infosystems (KPIT.BO)

Ratings and Target Price History - Fundamental Research

Analyst: Hitesh Shah, CFA (covered since December 15 2006)

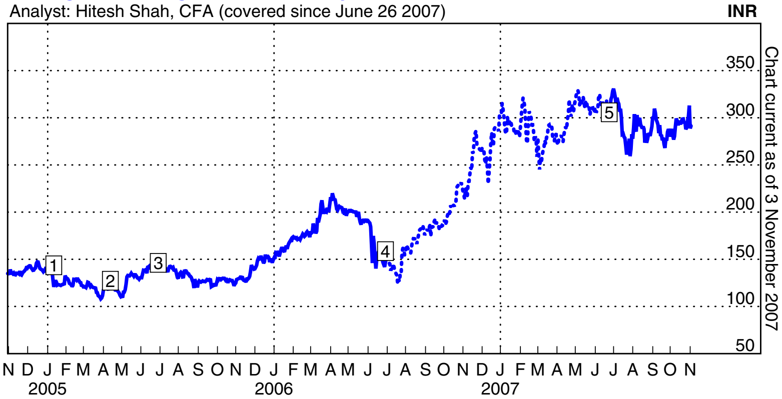
#	Date	Rating	Target Price	Closing Price
1:	14 Dec 06	1M	140.00	117.75
2:	25 Jan 07	*3M	*173.00	167.85
3:	8 Mar 07	*1M	173.00	120.00
4:	13 Jun 07	1M	*180.00	140.60
5:	9 Aug 07	1M	*154.00	120.35

*Indicates change.

Mphasis (MBFL.BO)

Ratings and Target Price History - Fundamental Research

Analyst: Hitesh Shah, CFA (covered since June 26 2007)



Covered
Not covered

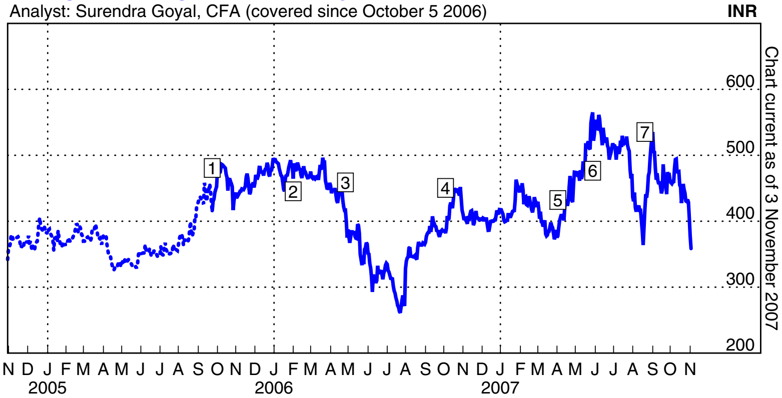
#	Date	Rating	Target Price	Closing Price
1:	12 Jan 05	*3M	*135.00	120.68
2:	13 Apr 05	*2M	*145.00	127.25
3:	29 Jun 05	2M	*155.00	141.85
4:	29 Jun 06	Coverage suspended		
5:	25 Jun 07	*1M	*400.00	305.80

*Indicates change.

Patni Computer Systems (PTNI.BO)

Ratings and Target Price History - Fundamental Research

Analyst: Surendra Goyal, CFA (covered since October 5 2006)



Covered
Not covered

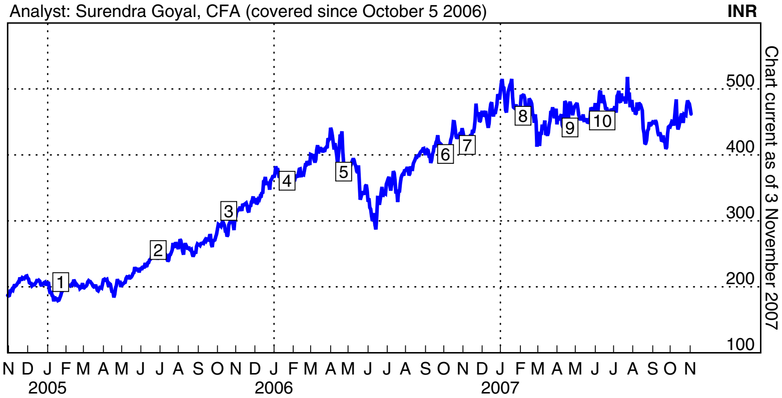
#	Date	Rating	Target Price	Closing Price
1:	23 Sep 05	1M	510.00	416.05
2:	1 Feb 06	1M	*560.00	464.60
3:	26 Apr 06	1M	*500.00	416.70
4:	4 Oct 06	*3M	*405.00	381.95
5:	3 Apr 07	*1M	*463.00	377.70
6:	29 May 07	*3M	*565.00	565.10
7:	21 Aug 07	*1M	*525.00	418.95

*Indicates change.

Satyam Computers Services (SATY.BO)

Ratings and Target Price History - Fundamental Research

Analyst: Surendra Goyal, CFA (covered since October 5 2006)



Covered
Not covered

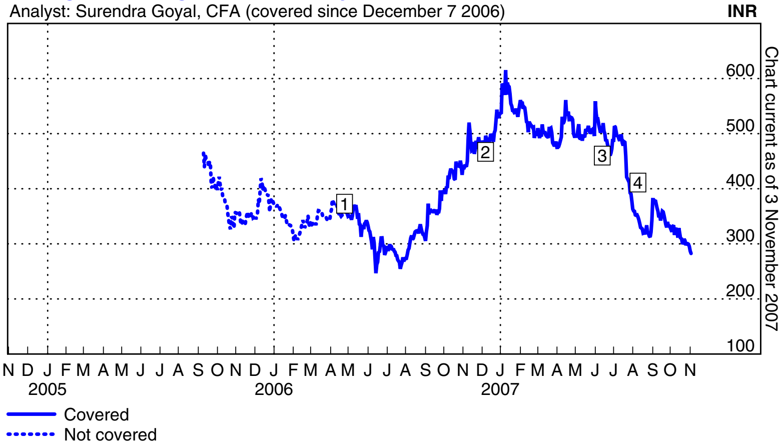
#	Date	Rating	Target Price	Closing Price
1:	24 Jan 05	1M	*230.00	186.80
2:	29 Jun 05	1M	*300.00	244.48
3:	20 Oct 05	1M	*350.00	293.75
4:	22 Jan 06	1M	*450.00	363.13
5:	23 Apr 06	*1L	*465.00	386.73
6:	4 Oct 06	*2M	*475.00	401.42
7:	8 Nov 06	*1M	*510.00	415.20
8:	6 Feb 07	1M	*582.00	490.65
9:	23 Apr 07	1M	*590.00	480.65
10:	13 Jun 07	1M	*570.00	486.35

*Indicates change.

Sasken Communication Technologies (SKCT.BO)

Ratings and Target Price History - Fundamental Research

Analyst: Surendra Goyal, CFA (covered since December 7 2006)



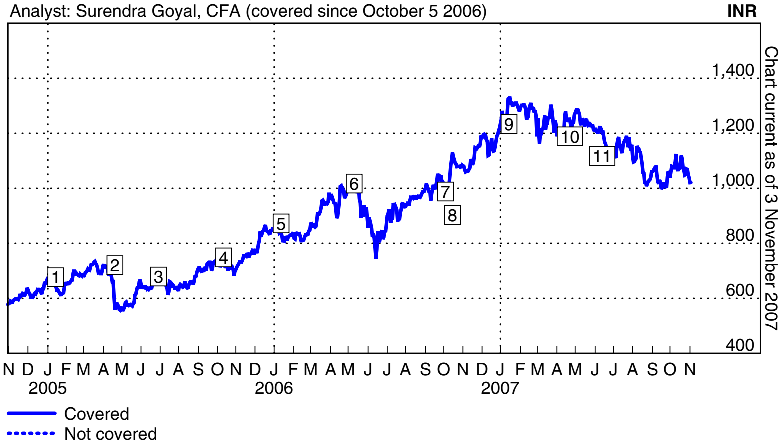
#	Date	Rating	Target Price	Closing Price
1:	25 Apr 06	1M	430.00	358.30
2:	7 Dec 06	1M	*653.00	496.15
3:	13 Jun 07	1M	*643.00	504.20
4:	9 Aug 07	1M	*505.00	348.85

*Indicates change.

Tata Consultancy Services (TCS.BO)

Ratings and Target Price History - Fundamental Research

Analyst: Surendra Goyal, CFA (covered since October 5 2006)



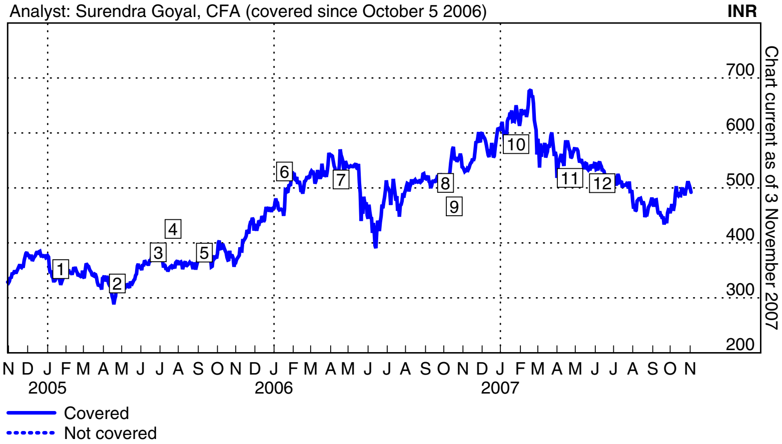
#	Date	Rating	Target Price	Closing Price
1:	14 Jan 05	1M	*800.00	648.47
2:	20 Apr 05	1M	*720.00	557.83
3:	29 Jun 05	1M	*790.00	666.63
4:	12 Oct 05	1M	*870.00	NA
5:	12 Jan 06	1M	*1,000.00	839.13
6:	10 May 06	*1L	*1,165.00	1,011.97
7:	4 Oct 06	1L	*1,185.00	988.10
8:	16 Oct 06	1L	*1,300.00	1,130.45
9:	15 Jan 07	1L	*1,560.00	1,327.90
10:	23 Apr 07	1L	*1,550.00	1,246.10
11:	13 Jun 07	1L	*1,460.00	1,202.80

*Indicates change.

Wipro (WIPR.BO)

Ratings and Target Price History - Fundamental Research

Analyst: Surendra Goyal, CFA (covered since October 5 2006)



#	Date	Rating	Target Price	Closing Price
1:	24 Jan 05	1M	*410.00	323.65
2:	25 Apr 05	1M	*392.50	325.30
3:	29 Jun 05	1M	*440.00	377.13
4:	22 Jul 05	1M	*430.00	357.48
5:	12 Sep 05	1M	430.00	371.90
6:	18 Jan 06	1M	*535.00	461.15
7:	19 Apr 06	*1L	*640.00	559.90
8:	4 Oct 06	1L	*615.00	509.10
9:	18 Oct 06	1L	*650.00	557.25
10:	25 Jan 07	1L	*730.00	650.40
11:	23 Apr 07	1L	*685.00	567.00
12:	13 Jun 07	1L	*650.00	530.70

*Indicates change.

Customers of the Firm in the United States can receive independent third-party research on the company or companies covered in this report, at no cost to them, where such research is available. Customers can access this independent research at http://www.smithbarney.com (for retail clients) or http://www.citigroupgeo.com (for institutional clients) or can call (866) 836-9542 to request a copy of this research.

Citi is acting as advisor to Wipro Technologies - the global IT services business of Wipro Limited - regarding their acquisition of Infocrossing Inc, via tender offer and subsequent merger.

Citigroup Global Markets Inc. or its affiliates beneficially owns 1% or more of any class of common equity securities of Capgemini, Cognizant Technology Solutions, Patni Computer Systems, Sasken Communication Technologies and Satyam Computers Services. This position reflects information available as of the prior business day.

Citigroup Global Markets Inc. or its affiliates has received compensation for investment banking services provided within the past 12 months from Capgemini, Electronic Data Systems, I-Flex Solutions, Mphasis, Tata Consultancy Services and Wipro.

Citigroup Global Markets Inc. or its affiliates expects to receive or intends to seek, within the next three months, compensation for investment banking services from Electronic Data Systems and Mphasis.

Citigroup Global Markets Inc. or an affiliate received compensation for products and services other than investment banking services from Accenture Ltd, Atos Origin, Capgemini, Cognizant Technology Solutions, Electronic Data Systems, HCL Technologies, Hexaware Technologies, I-Flex Solutions, Infosys Technologies, KPIT Cummins Infosystems, Mphasis, Patni Computer Systems, Sasken Communication Technologies, Satyam Computers Services, Tata Consultancy Services and Wipro in the past 12 months.

Citigroup Global Markets Inc. currently has, or had within the past 12 months, the following company(ies) as investment banking client(s): Accenture Ltd, Capgemini, Cognizant Technology Solutions, Electronic Data Systems, I-Flex Solutions, Mphasis, Tata Consultancy Services and Wipro.

Citigroup Global Markets Inc. currently has, or had within the past 12 months, the following company(ies) as clients, and the services provided were non-investment-banking, securities-related: Accenture Ltd, Atos Origin, Capgemini, Cognizant Technology Solutions, Electronic Data Systems, HCL Technologies, I-Flex Solutions, Infosys Technologies, KPIT Cummins Infosystems, Mphasis, Patni Computer Systems, Sasken Communication Technologies, Satyam Computers Services, Tata Consultancy Services and Wipro.

Citigroup Global Markets Inc. currently has, or had within the past 12 months, the following company(ies) as clients, and the services provided were non-investment-banking, non-securities-related: Accenture Ltd, Atos Origin, Capgemini, Cognizant Technology Solutions, Electronic Data Systems, HCL Technologies, Hexaware Technologies, I-Flex Solutions, Infosys Technologies, KPIT Cummins Infosystems, Mphasis, Patni Computer Systems, Sasken Communication Technologies, Satyam Computers Services, Tata Consultancy Services and Wipro.

Citigroup Global Markets Inc. or an affiliate received compensation in the past 12 months from Accenture Ltd, Cognizant Technology Solutions and Electronic Data Systems.

Analysts' compensation is determined based upon activities and services intended to benefit the investor clients of Citigroup Global Markets Inc. and its affiliates ("the Firm"). Like all Firm employees, analysts receive compensation that is impacted by overall firm profitability, which includes revenues from, among other business units, the Private Client Division, Institutional Sales and Trading, and Investment Banking.

The Firm is a market maker in the publicly traded equity securities of Accenture Ltd, Cognizant Technology Solutions, Electronic Data Systems, Infosys Technologies, Satyam Computers Services and Wipro.

For important disclosures (including copies of historical disclosures) regarding the companies that are the subject of this Citi Investment Research product ("the Product"), please contact Citi Investment Research, 388 Greenwich Street, 29th Floor, New York, NY, 10013, Attention: Legal/Compliance. In addition, the same important disclosures, with the exception of the Valuation and Risk assessments and historical disclosures, are contained on the Firm's disclosure website at www.citigroupgeo.com. Private Client Division clients should refer to www.smithbarney.com/research. Valuation and Risk assessments can be found in the text of the most recent research note/report regarding the subject company. Historical disclosures (for up to the past three years) will be provided upon request.

Citi Investment Research Ratings Distribution

Data current as of 30 September 2007	**Buy**	**Hold**	**Sell**
Citi Investment Research Global Fundamental Coverage (3358)	50%	38%	12%
% of companies in each rating category that are investment banking clients	53%	55%	42%

Guide to Fundamental Research Investment Ratings:

Citi Investment Research's stock recommendations include a risk rating and an investment rating.

Risk ratings, which take into account both price volatility and fundamental criteria, are: Low (L), Medium (M), High (H), and Speculative (S).

Investment ratings are a function of Citi Investment Research's expectation of total return (forecast price appreciation and dividend yield within the next 12 months) and risk rating.

For securities in developed markets (US, UK, Europe, Japan, and Australia/New Zealand), investment ratings are: Buy (1) (expected total return of 10% or more for Low-Risk stocks, 15% or more for Medium-Risk stocks, 20% or more for High-Risk stocks, and 35% or more for Speculative stocks); Hold (2) (0%-10% for Low-Risk stocks, 0%-15% for Medium-Risk stocks, 0%-20% for High-Risk stocks, and 0%-35% for Speculative stocks); and Sell (3) (negative total return).

For securities in emerging markets (Asia Pacific, Emerging Europe/Middle East/Africa, and Latin America), investment ratings are: Buy (1) (expected total return of 15% or more for Low-Risk stocks, 20% or more for Medium-Risk stocks, 30% or more for High-Risk stocks, and 40% or more for Speculative stocks); Hold (2) (5%-15% for Low-Risk stocks, 10%-20% for Medium-Risk stocks, 15%-30% for High-Risk stocks, and 20%-40% for Speculative stocks); and Sell (3) (5% or less for Low-Risk stocks, 10% or less for Medium-Risk stocks, 15% or less for High-Risk stocks, and 20% or less for Speculative stocks).

Investment ratings are determined by the ranges described above at the time of initiation of coverage, a change in investment and/or risk rating, or a change in target price (subject to limited management discretion). At other times, the expected total returns may fall outside of these ranges because of market price movements and/or other short-term volatility or trading patterns. Such interim deviations from specified ranges will be permitted but will become subject to review by Research Management. Your decision to buy or sell a security should be based upon your personal investment objectives and should be made only after evaluating the stock's expected performance and risk.

Guide to Corporate Bond Research Credit Opinions and Investment Ratings:

Citi Investment Research's corporate bond research issuer publications include a fundamental credit opinion of Improving, Stable or Deteriorating and a complementary risk rating of Low (L), Medium (M), High (H) or Speculative (S) regarding the credit risk of the company featured in the report. The fundamental credit opinion reflects the CIR analyst's opinion of the direction of credit fundamentals of the issuer without respect to securities market vagaries. The fundamental credit opinion is not geared to, but should be viewed in the context of debt ratings issued by major public debt ratings companies such as Moody's Investors Service, Standard and Poor's, and Fitch Ratings. CBR risk ratings are approximately equivalent to the following matrix: Low Risk Triple A to Low Double A; Low to Medium Risk High Single A through High Triple B; Medium to High Risk Mid Triple B through High Double B; High to Speculative Risk Mid Double B and Below. The risk rating element illustrates the analyst's opinion of the relative likelihood of loss of principal when a fixed income security issued by a company is held to maturity, based upon both fundamental and market risk factors. Certain reports published by Citi Investment Research will also include investment ratings on specific issues of companies under coverage which have been assigned fundamental credit opinions and risk ratings. Investment ratings are a function of Citi Investment Research's expectations for total return, relative return (to publicly available Citigroup bond indices performance), and risk rating. These investment ratings are: Buy/Overweight the bond is expected to outperform the relevant Citigroup bond market sector index (Broad Investment Grade, High Yield Market or Emerging Market), performances of which are updated monthly and can be viewed at http://sd.ny.ssmb.com/ using the "Indexes" tab; Hold/Neutral Weight the bond is expected to perform in line with the relevant Citigroup bond market sector index; or Sell/Underweight the bond is expected to underperform the relevant sector of the Citigroup indexes.

OTHER DISCLOSURES

Citigroup Global Markets Inc. and/or its affiliates has a significant financial interest in relation to Accenture Ltd, Electronic Data Systems and Wipro. (For an explanation of the determination of significant financial interest, please refer to the policy for managing conflicts of interest which can be found at www.citigroupgeo.com.)

Citigroup Global Markets Inc. or its affiliates beneficially owns 2% or more of any class of common equity securities of Capgemini and Sasken Communication Technologies.

For securities recommended in the Product in which the Firm is not a market maker, the Firm is a liquidity provider in the issuers' financial instruments and may act as principal in connection with such transactions. The Firm is a regular issuer of traded financial instruments linked to securities that may have been recommended in the Product. The Firm regularly trades in the securities of the subject company(ies) discussed in the Product. The Firm may engage in securities transactions in a manner inconsistent with the Product and, with respect to securities covered by the Product, will buy or sell from customers on a principal basis.

Securities recommended, offered, or sold by the Firm: (i) are not insured by the Federal Deposit Insurance Corporation; (ii) are not deposits or other obligations of any insured depository institution (including Citibank); and (iii) are subject to investment risks, including the possible loss of the principal amount invested. Although information has been obtained from and is based upon sources that the Firm believes to be reliable, we do not guarantee its accuracy and it may be incomplete and condensed. Note, however, that the Firm has taken all reasonable steps to determine the accuracy and completeness of the disclosures made in the Important Disclosures section of the Product. The Firm's research department has received assistance from the subject company(ies) referred to in this Product including, but not limited to, discussions with management of the subject company(ies). Firm policy prohibits research analysts from sending draft research to subject companies. However, it should be presumed that the author of the Product has had discussions with the subject company to ensure factual accuracy prior to publication. All opinions, projections and estimates constitute the judgment of the author as of the date of the Product and these, plus any other information contained in the Product, are subject to change without notice. Prices and availability of financial instruments also are subject to change without notice. Notwithstanding other departments within the Firm advising the companies discussed in this Product, information obtained in such role is not used in the preparation of the Product. Although Citi Investment Research does not set a predetermined frequency for publication, if the Product is a fundamental research report, it is the intention of Citi Investment Research to provide research coverage of the/those issuer(s) mentioned therein, including in response to news affecting this issuer, subject to applicable quiet periods and capacity constraints. The Product is for informational purposes only and is not intended as an offer or solicitation for the purchase or sale of a security. Any decision to purchase securities mentioned in the Product must take into account existing public information on such security or any registered prospectus.

Investing in non-U.S. securities, including ADRs, may entail certain risks. The securities of non-U.S. issuers may not be registered with, nor be subject to the reporting requirements of the U.S. Securities and Exchange Commission. There may be limited information available on foreign securities. Foreign companies are generally not subject to uniform audit and reporting standards, practices and requirements comparable to those in the U.S. Securities of some foreign companies may be less liquid and their prices more volatile than securities of comparable U.S. companies. In addition, exchange rate movements may have an adverse effect on the value of an investment in a foreign stock and its corresponding dividend payment for U.S. investors. Net dividends to ADR investors are estimated, using withholding tax rates conventions, deemed accurate, but investors are urged to consult their tax advisor for exact dividend computations. Investors who have received the Product from the Firm may be prohibited in certain states or other jurisdictions from purchasing securities mentioned in the Product from the Firm. Please ask your Financial Consultant for additional details. Citigroup Global Markets Inc. takes responsibility for the Product in the United States. Any orders by US investors resulting from the information contained in the Product may be placed only through Citigroup Global Markets Inc.

The Citigroup legal entity that takes responsibility for the production of the Product is the legal entity which the first named author is employed by. The Product is made available in Australia to wholesale clients through Citigroup Global Markets Australia Pty Ltd. (ABN 64 003 114 832 and AFSL No. 240992) and to retail clients through Citi Smith Barney Pty Ltd. (ABN 19 009 145 555 and AFSL No. 240813), Participants of the ASX Group and regulated by the Australian Securities & Investments Commission. Citigroup Centre, 2 Park Street, Sydney, NSW 2000. The Product is made available in Australia to Private Banking wholesale clients through Citigroup Pty Limited (ABN 88 004 325 080 and AFSL 238098). Citigroup Pty Limited provides all financial product advice to Australian Private Banking wholesale clients through bankers and relationship managers. If there is any doubt about the suitability of investments held in Citigroup Private Bank accounts, investors should contact the Citigroup Private Bank in Australia. Citigroup companies may compensate affiliates and their representatives for providing products and services to clients. The Product is made available in Brazil by Citigroup Global Markets Brasil - CCTVM SA, which is regulated by CVM - Comissão de Valores Mobiliários, BACEN - Brazilian Central Bank, APIMEC - Associação Associação dos Analistas e Profissionais de Investimento do Mercado de Capitais and ANBID - Associação Nacional dos Bancos de Investimento. Av. Paulista, 1111 - 11º andar - CEP. 01311920 - São Paulo - SP. If the Product is being made available in certain provinces of Canada by Citigroup Global Markets (Canada) Inc. ("CGM Canada"), CGM Canada has approved the Product. Citigroup Place, 123 Front Street West, Suite 1100, Toronto, Ontario M5J 2M3. The Product may not be distributed to private clients in Germany. The Product is distributed in Germany by Citigroup Global Markets Deutschland AG & Co. KGaA, which is regulated by Bundesanstalt fuer Finanzdienstleistungsaufsicht (BaFin). Frankfurt am Main, Reuterweg 16, 60323 Frankfurt am Main. If the Product is made available in Hong Kong by, or on behalf of, Citigroup Global Markets Asia Ltd., it is attributable to Citigroup Global Markets Asia Ltd., Citibank Tower, Citibank Plaza, 3 Garden Road, Hong Kong. Citigroup Global Markets Asia Ltd. is regulated by Hong Kong Securities and Futures Commission. If the Product is made available in Hong Kong by The Citigroup Private Bank to its clients, it is attributable to Citibank N.A., Citibank Tower, Citibank Plaza, 3 Garden Road, Hong Kong. The Citigroup Private Bank and Citibank N.A. is regulated by the Hong Kong Monetary Authority. The Product is made available in India by Citigroup Global Markets India Private Limited, which is regulated by Securities and Exchange Board of India. Bakhtawar, Nariman Point, Mumbai 400-021. The Product is made available in Indonesia through PT Citigroup Securities Indonesia. 5/F, Citibank Tower, Bapindo Plaza, Jl. Jend. Sudirman Kav. 54-55, Jakarta 12190. Neither this Product nor any copy hereof may be distributed in Indonesia or to any Indonesian citizens wherever they are domiciled or to Indonesian residents except in compliance with applicable capital market laws and regulations. This Product is not an offer of securities in Indonesia. The securities referred to in this Product have not been registered with the Capital Market and Financial Institutions Supervisory Agency (BAPEPAM-LK) pursuant to relevant capital market laws and regulations, and may not be offered or sold within the territory of the Republic of Indonesia or to Indonesian citizens through a public offering or in circumstances which constitute an offer within the meaning of the Indonesian capital market laws and regulations. If the Product was prepared by Citi Investment Research and distributed in Japan by Nikko Citigroup Limited ("NCL"), it is being so distributed under license. If the Product was prepared by NCL and distributed by Nikko Cordial Securities Inc. or Citigroup Global Markets Inc. it is being so distributed under license. NCL is regulated by Financial Services Agency, Securities and Exchange Surveillance Commission, Japan Securities Dealers Association, Tokyo Stock Exchange and Osaka Securities Exchange. Shin-Marunouchi Building, 1-5-1 Marunouchi, Chiyoda-ku, Tokyo 100-6520 Japan. In the event that an error is found in an NCL research report, a revised version will be posted on Citi