

# **Industry Flash**

4 October 2007 | 8 pages

# **Indian IT Services**

## 2Q FY08 Results Preview: Seasonally Strong Quarter

- Good revenue growth The 2Q of every fiscal year has traditionally been seasonally strong for Indian IT companies, and we expect a similar trend this time. The momentum is expected to continue, with strong volume growth especially for tier-I companies.
- Margins likely to improve, bottom lines expected to remain muted We expect margins to improve from the previous quarter (except for Satyam and HCL Tech, as they took wage hikes in 2Q) due to lower visa costs (wage hikes were implemented in 1Q). We expect QoQ net profit growth to be muted due to lower forex gains vs. 1Q.
- Infosys, Satyam expected to raise US\$ revenue guidance We expect Infosys/Satyam to raise US\$ revenue guidance for FY08 by 2-3% after a strong 2Q. Upgrades in EPS guidance will not be significant, in our view, due to further rupee appreciation of ~2% since the previous guidance.
- No further clarity on 2008 IT budgets The biggest issues facing investors today are clarity on CY08 IT budgets and the INR. We believe it is too early for companies to comment on 2008 IT budgets beyond saying "things are fine as of now". Clarity should emerge in the next few months.
- Prefer large-caps We maintain our large-cap bias in recognition of stronger volume growth and better margin leverage. Infosys and TCS remain our top picks. Expect strong results from Wipro and Satyam. Among the mid-cap names, we prefer Mphasis.

			Mkt cap	CMP	TP	P/I	E (x)	EV/EB	TDA (x)
Company	RIC Code	Rating	(US\$m)	(Rs)	(Rs)	FY08E	FY09E	FY08E	FY09E
Infosys	INFY.B0	1L	28,860	2,005	2,440	25.0	20.4	20.8	16.1
TCS	TCS.B0	1L	26,668	1,081	1,460	21.0	17.3	16.9	13.6
Wipro	WIPR.B0	1L	17,390	473	650	20.2	16.5	16.3	12.8
Satyam	SATY.BO	1M	7,617	452	570	18.1	14.9	14.6	11.6
HCL Tech	HCLT.BO	1M	5,099	305	400	16.6	14.0	12.1	9.9
Patni*	PTNI.BO	1M	1,602	458	525	14.2	13.1	8.7	8.2
I-Flex	IFLX.B0	3M	3,975	1,884	2,025	38.2	27.5	26.6	18.9

#### Figure 1. Indian IT Large-Cap Universe

Source: Powered by dataCentral Prices as on 03-Oct-07

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

Citi Investment Research is a division of Citigroup Global Markets Inc. (the "Firm"), which does and seeks to do business with companies covered in its research reports. As a result, investors should be aware that the Firm may have a conflict of interest that could affect the objectivity of this report. Investors should consider this report as only a single factor in making their investment decision. Non-US research analysts who have prepared this report are not registered/qualified as research analysts with the NYSE and/or NASD. Such research analysts may not be associated persons of the member organization and therefore may not be subject to the NYSE Rule 472 and NASD Rule 2711 restrictions on communications with a subject company, public appearances and trading securities held by a research analyst account.

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.

~1Citigroup Global Markets India Private Limited

#### Surendra Goyal, CFA<sup>1</sup>

+91-22-6631-9870 surendra.goyal@citi.com

#### Hitesh Shah, CFA<sup>1</sup>

+91-22-6631-9872 hitesh.b.shah@citi.com

Vishal Agarwal<sup>1</sup> vishal1.agarwal@citi.com

#### Figure 2. 2QFY08 Results Preview – Part I

Infosys	Sep'06	Jun'07	Sep'07E	QoQ	YoY	Key things to watch for
Revenue (US\$ m)	746	928	1,017	9.6%	36.4%	* We expect 9.6% revenue growth in US\$ terms with ~96bps QoQ improvement in
Revenue (Rs m)	34,510	37,730	41,095	8.9%	19.1%	EBITDA margin due to wage increases and visa costs being absorbed in Q1
EBITDA (Rs m)	11,090	10,840	12,203	12.6%	10.0%	* Net profit (excluding extraordinaries) expected to be flat primarily due to lower forex gains QoQ
EBITDA margin (%)	32.1%	28.7%	29.7%	96bp	-244bp	* Key thing to watch - change in FYO8 guidance, comments on outlook for next fev
Net Profit ( Rs m)	9,290	10,790	10,876	0.8%	17.1%	quarters and next year
Wipro - Global IT	,	,	,			
Revenue (US\$ m)	589	726	788	8.5%	33.8%	* We expect 8.5% revenue growth in US\$ terms with ~20 bps increase in EBITDA
Revenue (Rs m)	27,173	29,413	31,839	8.2%	17.2%	margin for Global IT business (despite wage hikes)
EBITDA (Rs m)	7,603	7,317	7,978	9.0%	4.9%	* Our numbers do not factor in Infocrossing acquisition - Infocrossing could
EBITDA margin (%)	28.0%	24.9%	25.1%	18bp	-292bp	contribute ~\$5m to top line * At a company level, we expect 12% gog net profit growth on account of growth i
Wipro - Consolidated	2010/0	211070	2011/0	1000	202.00	business and no forex losses in this quarter
Revenue (Rs m)	35,138	41,832	45,341	8.4%	29.0%	* Key thing to watch - visibility on telecom OEM clients
EBITDA (Rs m)	8,526	8,129	9,229	13.5%	8.2%	, , ,
EBITDA (NS III) EBITDA margin (%)	24.3%	19.4%	20.4%	13.3 % 92bp	-391bp	
Net Profit ( Rs m)	6,963	7,103	7,986	12.4%	-3910p 14.7%	
	0,905	7,105	7,900	12.4 /0	14.7 /0	
	075	1 070	1 200	0.10/	41 70/	
Revenue (US\$ m)	975	1,278	1,382	8.1%	41.7%	* We expect revenue traction to continue - expect 8.1% growth in US\$ terms * Expect EBITDA margins to improve ~90bp sequentially due to decline in cost pe
Revenue (Rs m)	44,822	52,028	55,831	7.3%	24.6%	employee and lower operating costs offset by some promotions
EBITDA (Rs m)	12,294	13,264	14,563	9.8%	18.5%	* Net profit expected to remain flattish due to lower hedging gains
EBITDA margin (%)	27.4%	25.5%	26.1%	59bp	-135bp	* Key thing to watch - outlook on pricing and volume growth
Net Profit ( Rs m)	9,915	11,855	11,953	0.8%	20.6%	
Satyam						
Revenue (US\$ m)	346	449	491	9.4%	41.9%	* Expect another strong quarter - revenue growth of 9.4% in \$ terms
Revenue (Rs m)	16,019	18,302	19,828	8.3%	23.8%	* We expect EBITDA margins to decline ~230bp - mainly on account of wage hike: taken during the quarter
EBITDA (Rs m)	3,625	4,103	3,980	-3.0%	9.8%	* Net profits expected to be flat gog due to no forex losses in the guarter
EBITDA margin (%)	22.6%	22.4%	20.1%	-234bp	-256bp	* Key thing to watch - Change in FY08 guidance and outlook on volumes/pricing
Net Profit ( Rs m)	3,198	3,783	3,770	-0.3%	17.9%	for FY09
HCL Tech						
Revenue (US\$ m)	300	396	428	8.3%	42.6%	* Expect another decent quarter - 8.3% qoq growth in revenues with all business
Revenue (Rs m)	13,795	16,120	16,964	5.2%	23.0%	growing in high single digits
EBITDA (Rs m)	2,989	3,474	3,478	0.1%	16.4%	* We expect 105 bps decline in EBITDA margin - wage increases taken in the quarter will impact profitability
EBITDA margin (%)	21.7%	21.6%	20.5%	-105bp	-117bp	* Net profit expected to decline 37% gog on account of the very high forex gain in
Net Profit ( Rs m)	2,300	4,667	2,944	-36.9%	28.0%	the previous quarter
Fech Mahindra						
Revenue (US\$ m)	150	211	227	7.8%	51.2%	*Expect revenue growth of 7.8% in \$ terms - BTGS contract expected to ramp up
Revenue (Rs m)	6,976	8,763	9,186	4.8%	31.7%	Q3 onwards
EBITDA (Rs m)	1,769	1,933	2,021	4.6%	14.3%	*We expect net profit growth of ~4% qoq
EBITDA margin (%)	25.4%	22.1%	22.0%	-5bp	-335bp	*Key things to watch - Outlook on BT and AT&T (the biggest clients) and ramp up schedule for BTGS
Net Profit ( Rs m)	1,430	1,698	1,770	4.2%	23.8%	
Patni	1,100	1,000	2,770	112,0	2010/0	
Revenue (US\$ m)	152	163	168	3.1%	11.0%	* We expect another sluggish quarter - revenue growth of 3.1% in US\$ terms
Revenue (Rs m)	6,999	6,628	6,686	0.9%	-4.5%	
EBITDA (Rs m)	1,361	1,551	1,107	-28.6%	-18.7%	margins impacted by lower hedging gains * Key thing to watch - headcount addition - company had not hired any significar
EBITDA (KS III) EBITDA margin (%)	1,301	23.4%	1,107	-28.0 % -684bp	-18.7 /s -289bp	* Key thing to watch - headcount addition - company had not hired any significar
Net Profit ( Rs m)	19.4 %	1,348	894	-0840p -33.6%	-2890p -12.7%	numbers as focus was on improving utilization and cost efficiencies
I-flex	1,024	1,340	054	-33.0 /0	-12.1 /0	
	100	101	1/7	10 /0/	26.00/	* We expect revenue growth of 12 19/ neg. Led by product by since the service of
Revenue (US\$ m)	108	131	147	12.4%	36.0%	* We expect revenue growth of 12.4% qoq - led by product business. In services v expect 6.4% qoq growth while in products we expect 50% yoy growth (17% qoq
Revenue (Rs m)	5,009	5,321	5,951	11.9%	18.8%	growth)
EBITDA (Rs m)	970	730	1,255	72.1%	29.4%	* We expect EBITDA margin improvement of ~740bp mainly on account of higher
EBITDA margin (%)	19.4%	13.7%	21.1%	738bp	173bp	license revenues
Net Profit ( Rs m)	804	416	912	119.4%	13.4%	* Key thing to watch - new product wins; Oracle open offer for increase of stake in I-flex

Source: Company Reports and Citi Investment Research estimates

2

#### Figure 3. 2Q FY08 Results Preview – Part II

Mahaala	0	1	0	0.0	<b>N</b> - <b>N</b>	New Altimum to match for
Mphasis	Sep'06	Jun'07	Sep'07E			Key things to watch for
Revenue (US\$ m)	92	130	140	7.7%	52.1%	* Expect another decent quarter with ~8% qoq revenue growth * EBITDA margins expected to improve ~40bp qoq
Revenue (Rs m)	4,263	5,316	5,668	6.6%	32.9%	* Net profit expected to increase ~25% qoq as the company had a forex loss in
EBITDA (Rs m)	745	977	1,062	8.7%	42.6%	Q1FY08
EBITDA margin (%)	17.5%	18.4%	18.7%	36bp	127bp	
Net Profit ( Rs m)	366	513	639	24.5%	74.8%	existing deals
Hexaware						
Revenue (US\$ m)	49	64	66	3.4%	36.4%	* We expect another sluggish quarter - we forecast revenue growth of ~3% qoq
Revenue (Rs m)	2,250	2,616	2,675	2.2%	18.9%	* We expect margins to improve marginally by ~30bp qoq * Key thing to watch - hiring during the quarter and any large deal announcements
EBITDA (Rs m)	361	321	336	4.7%	-7.0%	
EBITDA margin (%)	16.0%	12.3%	12.5%	29bp	-349bp	
Net Profit ( Rs m)	347	261	278	6.5%	-19.8%	
KPIT Cumm.						
Revenue (US\$ m)	25	31	35	11.9%	40.0%	* We expect a strong quarter - 12% qoq growth in US\$ terms
Revenue (Rs m)	1,140	1,353	1,472	8.8%	29.1%	* We expect some improvement in margins of ~35bp qoq
EBITDA (Rs m)	179	215	239	11.2%	33.4%	* Key thing to watch - Ability to achieve FY08 guidance
EBITDA margin (%)	15.7%	15.9%	16.2%	35bp	53bp	
Net Profit ( Rs m)	123	127	143	12.8%	15.8%	
Sasken						
Revenue (US\$ m)	25	31	34	7.1%	32.3%	* We expect some ramp up in the handset side of the services business - expect
Revenue (Rs m)	1,175	1,284	1,359	5.8%	15.6%	7% qoq growth (\$ terms)
EBITDA (Rs m)	220	99	156	57.3%	-29.3%	* Margins expected to improve~375bp after the sharp fall in Q1 and cost optimization efforts undertaken by management
EBITDA margin (%)	18.7%	7.7%	11.5%	375bp	-727bp	* Key thing to watch - visibility on telecom OEM clients; management update on
Net Profit ( Rs m)	119	64	84	31.8%	-29.2%	new and existing design-ins/ design wins
NIIT Ltd						
Revenue (US\$ m)	44	55	67	20.7%	51.5%	* Seasonally strongest quarter - we expect revenue growth of 32% yoy in Rupee
Revenue (Rs m)	2,031	2,254	2,687	19.2%	32.3%	terms
EBITDA (Rs m)	239	145	360	148.6%	50.8%	* Growth to led by individual business - we expect 40% revenue and 96% operating profit growth in this business
EBITDA margin (%)	11.8%	6.4%	13.4%	698bp	165bp	* Key thing to watch - progress on ElementK integration and its profitability;
Net Profit ( Rs m)	162	154	246	59.7%	51.8%	revenue uptick in new businesses; clarity on stake sale in NIIT Tech
Educomp Sol						
Revenue (Rs m)	197	275	357	29.8%	81.0%	*Growth momentum to continue - we expect 81% yoy growth in revenues
EBITDA (Rs m)	93	134	180	34.3%	93.9%	*EBITDA margins expected to improve further by ~330bp yoy
EBITDA margin (%)	47.0%	48.6%	50.3%	171bp	333bp	*Key thing to watch - outlook on the new school business
Net Profit (Rs m)	51	60	101	69.2%	99.1%	

Source: Company Reports and Citi Investment Research estimates

#### Figure 4. Results Schedule

Company	Date
Infosys	11-0ct
TCS	15-0ct
Sasken	15-0ct
HCL Tech	17-0ct
KPIT	17-0ct
Hexaware	18-0ct
Tech Mahindra	19-0ct
Wipro	19-0ct
Satyam	23-0ct

Source: Company Reports

3

-

#### Figure 5. Indian IT Services: Valuation Comparison

Company	RIC	Rating	Mkt cap	CMP	TP	P/I	(x)	EV/EB	TDA (x)	EV/Sa	les(x)	P/B	V (x)	Div.Yi	eld (%)
	Code		(US\$ m)	(Rs)	(Rs)	FY08E	FY09E	FY08E	FY09E	FY08E	FY09E	FY08E	FY09E	FY08E	FY09E
Infosys	INFY.B0	1L	28,860	2,005	2,440	25.0	20.4	20.8	16.1	6.3	5.0	7.7	5.9	0.8%	1.0%
TCS	TCS.BO	1L	26,668	1,081	1,460	21.0	17.3	16.9	13.6	4.5	3.6	8.4	6.2	1.3%	1.5%
Wipro	WIPR.B0	1L	17,390	473	650	20.2	16.5	16.3	12.8	3.4	2.7	5.7	4.7	2.1%	2.5%
Satyam	SATY.BO	1M	7,617	452	570	18.1	14.9	14.6	11.6	3.2	2.5	4.4	3.7	1.8%	2.2%
HCL Tech	HCLT.BO	1M	5,099	305	400	16.6	14.0	12.1	9.9	2.4	2.0	3.6	3.1	2.6%	2.6%
I-Flex	IFLX.B0	3M	3,975	1,884	2,025	38.2	27.5	26.6	18.9	5.6	4.2	7.7	6.0	0.0%	0.0%
Tech Mahindra	TEML.B0	1H	4,027	1,318	1,920	20.7	14.4	17.0	12.0	3.6	2.5	9.2	5.5	0.2%	0.2%
Patni*	PTNI.B0	1M	1,602	458	525	14.2	13.1	8.7	8.2	1.8	1.5	2.4	2.1	0.8%	1.1%
Educomp	EDSO.BO	3H	1,288	2,967	2,380	76.6	43.7	45.0	24.8	21.4	10.4	28.7	17.3	0.1%	0.1%
Mphasis	MBFL.BO	1M	1,193	288	400	23.6	15.1	10.1	7.1	1.9	1.3	5.0	3.9	1.0%	1.0%
NIIT	NIIT.BO	3M	612	148	153	25.3	16.0	23.5	14.6	2.5	2.1	5.6	4.3	0.7%	0.7%
Hexaware*	HEXT.BO	1M	438	121	155	13.4	11.7	9.3	8.0	1.3	1.1	2.1	1.9	1.5%	2.0%
Sasken	SKCT.BO	1M	231	321	505	16.1	9.8	10.0	5.6	1.2	0.9	2.0	1.7	1.6%	3.1%
KPIT	KPIT.BO	1M	232	121	154	16.6	11.8	10.2	7.7	1.6	1.2	3.7	2.8	0.4%	0.6%

Source: Powered by dataCentral; Prices as on 03-Oct-07; \* CY07/CY08 for Dec year-end companies

4

#### Figure 6. Price Performance

		Price			Perform	ance		
		3-0ct-07	1W	1 M	3 M	6M	12M	YTD
Infosys	INFY.B0	2,005	9.9%	7.7%	3.0%	2.1%	10.3%	-10.5%
TCS	TCS.BO	1,081	3.9%	2.1%	-4.1%	-10.0%	6.6%	-11.3%
Wipro	WIPR.B0	473	4.0%	-0.5%	-8.2%	-11.5%	-9.0%	-21.8%
Satyam	SATY.BO	452	4.8%	0.5%	-4.1%	-1.5%	10.0%	-6.6%
HCL Tech	HCLT.BO	305	2.6%	-1.8%	-9.1%	9.5%	10.2%	-6.0%
Patni	PTNI.BO	458	-3.5%	-14.4%	-11.3%	21.3%	18.8%	9.6%
Educomp	EDSO.BO	2,967	4.8%	2.3%	31.5%	198.7%	315.7%	210.4%
TechM	TEML.BO	1,318	-0.3%	0.2%	-7.7%	-1.7%	112.8%	-21.1%
I-Flex	IFLX.B0	1,884	1.5%	-6.8%	-27.2%	-8.7%	31.4%	-3.3%
Mphasis	MBFL.BO	288	1.1%	-4.4%	-11.8%	6.3%	50.1%	-5.1%
Sasken	SKCT.BO	321	-5.5%	-15.6%	-37.5%	-32.4%	-19.3%	-40.1%
Hexaware	HEXT.BO	121	-2.8%	-0.6%	-27.5%	-27.0%	-27.9%	-39.2%
KPIT Cummins	KPIT.BO	121	1.8%	-0.3%	-12.4%	-6.7%	30.2%	-13.2%
Moser Baer	MOSR.BO	316	-2.4%	4.4%	-5.2%	61.4%	124.1%	53.9%
NIIT Ltd	NIIT.BO	148	0.2%	15.7%	4.3%	64.7%	240.2%	110.7%
Aptech	APTA.BO	400	7.9%	28.3%	25.4%	85.4%	205.7%	147.8%
NIIT Tech	NITT.BO	363	7.8%	4.6%	2.6%	27.8%	190.6%	79.0%
iGate	IGAT.BO	218	-0.3%	0.1%	-28.8%	-41.0%	20.2%	-37.1%
Mastek	MAST.BO	305	0.1%	16.2%	4.8%	0.7%	-11.9%	-17.8%
СМС	CMC.BO	995	0.3%	-12.0%	-15.9%	-14.4%	77.6%	47.5%
Infotech Ent	INFE.BO	268	1.2%	-5.1%	-33.5%	-22.2%	27.6%	-16.6%
Geometric s/w	GEOM.BO	95	-0.2%	-5.0%	-24.3%	-3.1%	-11.8%	-20.3%
Geodesic	GEIS.BO	187	-7.4%	-18.5%	-6.5%	24.0%	78.4%	55.8%
Aztec	AZTC.BO	64	-0.8%	-15.0%	-26.6%	-46.4%	-50.3%	-61.1%
HCL Infosystems	HCLI.BO	249	12.5%	21.0%	36.4%	92.9%	72.7%	56.4%
BSE Sensex	.BSESN	17,890	5.7%	16.0%	20.8%	41.7%	44.7%	29.8%
BSE IT Index	.BSEIT	4,789	6.4%	3.9%	-1.8%	0.5%	9.8%	-9.2%

Source: DataStream

#### Figure 7. INR Movement

	1QFY08	2QFY08	Change (diff)	Change (%)
INR/USD				
Period end	40.70	39.81	0.89	-2.2%
Average	41.26	40.54	0.72	-1.7%
INR/GBP				
Period end	81.70	81.52	0.18	-0.2%
Average	81.92	81.93	-0.01	0.0%
INR/Euro				
Period end	55.06	56.82	-1.76	3.2%
Average	55.61	55.70	-0.09	0.2%

Source: Bloomberg

#### Figure 8. Hedge Position (at the end of Jun'07)

	Fore	( Cover (US\$ m)	- Jun'07	Revenue (Jun'07)	Hedge as a % of
	Forwards Options Total		US\$ mn	quarterly revenue	
Infosys	719	204	923	928	99%
TCS	2,500	-	2,500	1,278	196%
Wipro	675	75	750	726	103%
Satyam	297	446	743	449	166%
HCL Tech	1,160	-	1,160	396	293%

Source: Company Reports

#### Figure 9. Infosys 2008 Guidance

	Guidanc	e	Implied gro	owth
	Lower	Upper	Lower	Upper
Revenue (Rs m)	39,520	39,930	4.7%	5.8%
Revenue (\$ m)	974	984	5.0%	6.0%
EPS (Rs)	18.88	18.88	-0.1%	-0.1%

Source: Company Reports; Company guidance based on exchange rate of Rs 40.58/US\$.

#### Figure 10. Satyam 2Q08 Guidance

	Guidan	ce	Implied gr	owth
	Lower	Upper	Lower	Upper
Revenue (Rs m)	19,170	19,260	4.7%	5.2%
Revenue (\$ m)	477	479	5.5%	6.0%
EPS (Rs)	5.36	5.41	-5.4%	-4.6%

Source: Company Reports; Company guidance based on exchange rate of Rs 40.50/US\$.

#### Figure 11. Patni 3Q07 Guidance

5

	Guidanc	e	Implied gr	owth
	Lower	Upper	Lower	Upper
Revenue (\$ m)	167	168	2.2%	2.9%
Net profit (US\$ m)	18.50	19.00	-44.3%	-42.8%

Source: Company Reports; Company guidance excludes forex gain/loss and is based on exchange rate of Rs 40.80/US\$.

# 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 analyst, strategist or research associate in this research report.

#### **IMPORTANT DISCLOSURES**

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 Educomp 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 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 Tata Consultancy Services.

Citigroup Global Markets Inc. or an affiliate received compensation for products and services other than investment banking services from HCL Technologies, Hexaware Technologies, I-Flex Solutions, Infosys Technologies, KPIT Cummins Infosystems, Mphasis, NIIT, 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): 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: 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: HCL Technologies, Hexaware Technologies, I-Flex Solutions, Infosys Technologies, KPIT Cummins Infosystems, Mphasis, NIIT, Patni Computer Systems, Sasken Communication Technologies, Satyam Computers Services, Tata Consultancy Services and Wipro.

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 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 or 50 September 2007	Duy	noiu	3011
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.

6

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 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); 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

D .....

Lold

0.11

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 rating. 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; or Sell/Underweight the bond is expected to underperform the relevant Sector index; or Sell/Underweight the bond is expected to underperform the relevant sector of the Citigroup indexes.

#### **OTHER DISCLOSURES**

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

Citigroup Global Markets Inc. or its affiliates beneficially owns 5% or more of any class of common equity securities of Educomp Solutions.

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 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

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 Mai

7

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 Investment Research's Global Equities Online (GEO) website. If you have questions regarding GEO, please call (81 3) 5574-4860 for help. The Product is made available in Korea by Citigroup Global Markets Korea Securities Ltd., which is regulated by Financial Supervisory Commission and the Financial Supervisory Service. Hungkuk Life Insurance Building, 226 Shinmunno 1-GA, Jongno-Gu, Seoul, 110-061. The Product is made available in Malaysia by Citigroup Global Markets Malaysia Sdn Bhd, which is regulated by Malaysia Securities Commission. Menara Citibank, 165 Jalan Ampang, Kuala Lumpur, 50450. The Product is made available in Mexico by Acciones y Valores Banamex, S.A. De C. V., Casa de Bolsa, which is regulated by Comision Nacional Bancaria y de Valores. Reforma 398, Col. Juarez, 06600 Mexico, D.F. In New Zealand the Product is made available through Citigroup Global Markets New Zealand Ltd., a Participant of the New Zealand Exchange Limited and regulated by the New Zealand Securities Commission. Level 19, Mobile on the Park, 157 lambton Quay, Wellington. The Product is made available in Poland by Dom Maklerski Banku Handlowego SA an indirect subsidiary of Citigroup Inc., which is regulated by Komisja Papierów Wartosciowych i Gield. Bank Handlowy w Warszawie S.A. ul. Senatorska 16, 00-923 Warszawa. The Product is made available in the Russian Federation through ZAO Citibank, which is licensed to carry out banking activities in the Russian Federation in accordance with the general banking license issued by the Central Bank of the Russian Federation and brokerage activities in accordance with the license issued by the Federal Service for Financial Markets. Neither the Product nor any information contained in the Product shall be considered as advertising the securities mentioned in this report within the territory of the Russian Federation or outside the Russian Federation. The Product does not constitute an appraisal within the meaning of the Federal Law of the Russian Federation of 29 July 1998 No. 135-FZ (as amended) On Appraisal Activities in the Russian Federation. 8-10 Gasheka Street, 125047 Moscow. The Product is made available in Singapore through Citigroup Global Markets Singapore Pte. Ltd., a Capital Markets Services Licence holder, and regulated by Monetary Authority of Singapore. 1 Temasek Avenue, #39-02 Millenia Tower, Singapore 039192. The Product is made available by The Citigroup Private Bank in Singapore through Citibank, N.A., Singapore branch, a licensed bank in Singapore that is regulated by Monetary Authority of Singapore. Citigroup Global Markets (Pty) Ltd. is incorporated in the Republic of South Africa (company registration number 2000/025866/07) and its registered office is at 145 West Street, Sandton, 2196, Saxonwold, Citigroup Global Markets (Pty) Ltd. is regulated by JSE Securities Exchange South Africa, South African Reserve Bank and the Financial Services Board. The investments and services contained herein are not available to private customers in South Africa. The Product is made available in Taiwan through Citigroup Global Markets Inc. (Taipei Branch), which is regulated by Securities & Futures Bureau. No portion of the report may be reproduced or quoted in Taiwan by the press or any other person. No. 8 Manhattan Building, Hsin Yi Road, Section 5, Taipei 100, Taiwan. The Product is made available in Thailand through Citicorp Securities (Thailand) Ltd., which is regulated by the Securities and Exchange Commission of Thailand. 18/F, 22/F and 29/F, 82 North Sathorn Road, Silom, Bangrak, Bangkok 10500, Thailand. The Product is made available in United Kingdom by Citigroup Global Markets Limited, which is authorised and regulated by Financial Services Authority. This material may relate to investments or services of a person outside of the UK or to other matters which are not regulated by the FSA and further details as to where this may be the case are available upon request in respect of this material. Citigroup Centre, Canada Square, Canary Wharf, London, E14 5LB. The Product is made available in United States by Citigroup Global Markets Inc, which is regulated by NASD. NYSE and the US Securities and Exchange Commission. 388 Greenwich Street, New York, NY 10013. Unless specified to the contrary, within EU Member States, the Product is made available by Citigroup Global Markets Limited, which is regulated by Financial Services Authority. Many European regulators require that a firm must establish, implement and make available a policy for managing conflicts of interest arising as a result of publication or distribution of investment research. The policy applicable to Citi Investment Research's Products can be found at www.citigroupgeo.com. Compensation of equity research analysts is determined by equity research management and Citigroup's senior management and is not linked to specific transactions or recommendations. The Product may have been distributed simultaneously, in multiple formats, to the Firm's worldwide institutional and retail customers. The Product is not to be construed as providing investment services in any jurisdiction where the provision of such services would be illegal. Subject to the nature and contents of the Product, the investments described therein are subject to fluctuations in price and/or value and investors may get back less than originally invested. Certain high-volatility investments can be subject to sudden and large falls in value that could equal or exceed the amount invested. Certain investments contained in the Product may have tax implications for private customers whereby levels and basis of taxation may be subject to change. If in doubt, investors should seek advice from a tax adviser. The Product does not purport to identify the nature of the specific market or other risks associated with a particular transaction. Advice in the Product is general and should not be construed as personal advice given it has been prepared without taking account of the objectives, financial situation or needs of any particular investor. Accordingly, investors should, before acting on the advice, consider the appropriateness of the advice, having regard to their objectives, financial situation and needs. Prior to acquiring any financial product, it is the client's responsibility to obtain the relevant offer document for the product and consider it before making a decision as to whether to purchase the product.

This Product is not intended for distribution in Poland. Any receipt or review of the Product in Poland is not authorized by the Firm.

8

© 2007 Citigroup Global Markets Inc. (© Nikko Citigroup Limited, if this Product was prepared by it). Citi Investment Research is a division and service mark of Citigroup or its affiliates and is used and registered throughout the world. Citigroup and the Umbrella Device are trademarks and service marks of Citigroup or its affiliates and are used and registered throughout the world. Nikko is a registered trademark of Nikko Cordial Corporation. All rights reserved. Any unauthorized use, duplication, redistribution or disclosure is prohibited by law and will result in prosecution. The information contained in the Product is intended solely for the recipient and may not be further distributed by the recipient. The Firm accepts no liability whatsoever for the actions of third parties. The Product may provide the addresses of, or contain hyperlinks to, websites. Except to the extent to which the Product refers to website material of the Firm, the Firm takes no responsibility for, and makes no representations or warranties whatsoever as to, the data and information contained therein. Such address or hyperlink (including addresses or hyperlinks to website material of the Firm) is provided solely for your convenience and information and the content of the linked site does not in anyway form part of this document. Accessing such website or following such link through the Product or the website of the Firm shall be at your own risk and the Firm shall have no liability arising out of, or in connection with, any such referenced website.

ADDITIONAL INFORMATION IS AVAILABLE UPON REQUEST