

## India: Technology: IT Services

# Upgrading Infosys and TCS to Buy. Despite recent turbulence, LT outlook remains positive

### Industry context

A confluence of issues, including recent tax policy changes, higher interest rates, an appreciating rupee versus the US dollar, early exhaustion of H1-B visas, high fiscal 2008 expectations, and concerns about the US economy has weighed on investor sentiment.

### Source of opportunity

We believe that the recent pullback from 52-week highs for local and ADR shares has created selected opportunities in the space, and therefore, we are using the recent share declines as an opportunity to upgrade our ratings on the shares of Infosys (INFY ADR and INFY.BO) and Tata Consultancy Services (TCS.BO). At current levels we believe that these stocks offer absolute upside potential, positive excess returns, and more balanced risk/reward profiles. Importantly, our fiscal 2008 estimates have been trimmed to reflect the rupee's appreciation and lower utilization assumptions.

### Catalyst

March-quarter earnings results and the fiscal 2008 guidance period, kicked off by the Infosys earnings release on April 13, 2007, and followed by Tata Consultancy Services on April 16, 2007, are expected to set the tone for share price performance. Although we expect some near-term turbulence, we would use weakness in the shares as a buying opportunity, given our view of sustained long-term secular growth supported by a positive demand backdrop for offshore services. Our investment thesis is anchored on three factors: revenue growth opportunities, industry-leading margins, and capital-efficient models offering industry-leading returns.

### Risks

Risks for Indian IT Services stocks include slower-than-expected volume and revenue growth, margin contraction, sustained employee attrition, wage inflation, and possible bill rate deterioration

### SUMMARY CHANGES

↑ Upgrading shares of Infosys and Tata Consultancy Services to Buy from Neutral.

↓ Trimming fiscal 2008 revenue and EPS estimates.

### UPCOMING EVENTS

- ⇒ Infosys Technologies 4QFY07 earnings - April 13, 2007
- ⇒ Tata Consultancy Services 4QFY07 earnings - April 16, 2007
- ⇒ Satyam Computer Services 4QFY07 earnings - April 20, 2007
- ⇒ Wipro Limited 4QFY07 earnings - April 20, 2007
- ⇒ Patni Computer Systems 1QCY07 earnings - April 23-May 3, 2007 (estimated)
- ⇒ Cognizant Technology Solutions 1QCY07 earnings - April 30 - May 10, 2007 (estimated)

See the Financial Advisory Disclosure section of this document for important disclosures about transactions in which The Goldman Sachs Group, Inc. or an affiliate is acting as financial advisor.

**Julio C. Quinteros, Jr.**  
(415) 249-7464 | julio.quinteros@gs.com Goldman, Sachs & Co.

**Vincent Lin**  
(212) 934-0510 | vincent.lin@gs.com Goldman, Sachs & Co.

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Global Investment Research

## Table of contents

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<b>Upgrading Infosys and Tata Consultancy Services to Buy from Neutral</b>	<b>5</b>
<b>Our updated ratings reflect sustained growth models and favorable risk/reward profiles</b>	<b>6</b>
<b>Cognizant Technology Solutions (CTSH – Buy)</b>	<b>7</b>
<b>Infosys Technologies (INFY – Buy; INFY.BO – Buy)</b>	<b>8</b>
<b>Patni Computer Systems (PTI – Neutral; PTNI.BO – Neutral)</b>	<b>9</b>
<b>Satyam Computer Services (SAY – Neutral; SATY.BO – Buy)</b>	<b>11</b>
<b>Tata Consultancy Services (TCS.BO – Buy)</b>	<b>12</b>
<b>Wipro Limited (WIT – Neutral; WIPR.BO – Neutral)</b>	<b>13</b>
<b>Fine-tuning models for fiscal 2008 and 2009, primarily reflecting rupee impact</b>	<b>15</b>
<b>A bottom-up view on our revenue model drivers</b>	<b>16</b>
<b>Disclosures</b>	<b>17</b>

*The prices in the body of this report are based on the market close of April 10, 2007.*

**Exhibit 1: Global IT Services – stock performance and valuation metrics**

	GS Rating	Price 4/10/2007	Market Cap	Performance					EPS		P/E		Relative P/E		LT Growth	PEG		EPS		P/E		EV/EBITDA		Revenues		P/R Ratios		
				Week	MTD	QTD	YTD	TTM	CY07E	CY08E	CY07E	CY08E	CY07E	CY08E		CY07E	CY08E	CY07E	CY08E	FY07E	FY08E	FY07E	FY08E	FY07E	FY08E	CY07E	CY08E	CY07E
<b>Indian IT Services - ADRs and US listed (c)</b>																												
Cognizant Technology	Buy	\$85.67	\$12,985	-4%	-3%	-3%	11%	48%	\$2.17	\$2.80	39.6X	30.6X	2.5X	2.1X	35%	1.14X	0.88X	\$2.17	\$2.80	39.6X	30.6X	29.1X	21.4X	\$2,073	\$2,828	6.3X	4.6X	
Covansys (a)	NC	27.62	1,004	6	12	12	20	60	1.26	1.52	22.0	18.2	1.4	1.2	NM	NM	NM	1.25	1.51	22.0	18.3	9.5	NM	513	591	2.0	NM	
ExiService	Sell	21.09	567	3	2	2	0	56	0.48	0.63	43.8	33.6	2.8	2.3	25	1.75	1.34	0.48	0.63	43.8	33.6	20.1	16.2	156	189	3.6	3.0	
Infosys	Buy	52.08	29,523	1	4	4	(5)	37	1.69	2.07	30.9	25.1	2.0	1.7	31	0.99	0.81	1.44	1.79	36.1	29.2	29.1	22.0	3,833	4,866	7.7	6.1	
Patni Computer Systems	Neutral	23.83	1,660	5	3	3	17	17	1.35	1.54	17.6	15.4	1.1	1.0	18	1.00	0.87	1.35	1.54	17.6	15.4	10.4	8.7	694	836	2.4	2.0	
PeopleSupport (a)	NC	12.84	301	3	12	12	(39)	24	0.45	0.60	28.5	21.3	1.8	1.4	27	1.06	0.79	0.45	0.60	28.5	21.3	8.1	5.8	141	171	2.1	1.8	
Satyam	Neutral	23.28	7,826	0	3	3	(3)	19	0.96	1.20	24.2	19.4	1.5	1.3	34	0.72	0.58	0.86	1.01	27.2	23.0	20.8	16.6	1,732	2,209	4.5	3.5	
Syntel (a)	NC	36.12	1,478	4	4	4	35	90	1.35	1.63	26.7	22.2	1.7	1.5	23	1.19	0.99	1.35	1.63	26.7	22.2	20.1	16.6	326	393	4.5	3.8	
Wipro	Neutral	16.32	23,659	2	4	4	1	12	0.50	0.58	33.0	28.0	2.1	1.9	24	1.37	1.16	0.44	0.51	37.5	31.7	29.0	24.1	3,947	4,944	6.0	4.8	
WNS	Neutral	28.12	1,200	(1)	(4)	(4)	(10)	41	0.75	0.98	37.3	28.6	2.4	1.9	26	1.41	1.08	0.62	0.80	45.1	35.1	26.3	19.4	268	350	4.5	3.4	
<b>Average</b>				<b>2%</b>	<b>4%</b>	<b>4%</b>	<b>3%</b>	<b>40%</b>			<b>30.4X</b>	<b>24.2X</b>	<b>1.9X</b>	<b>1.6X</b>	<b>27</b>	<b>1.18X</b>	<b>0.94X</b>			<b>32.4X</b>	<b>26.0X</b>	<b>20.3X</b>	<b>16.8X</b>			<b>4.4X</b>	<b>3.7X</b>	
<b>Indian IT Services - local listing (b,c)</b>																												
Firstsource Solutions (a)	NC	INR 73	\$716	3%	1%	1%	14%	14%	NA	NA	NM	NM	NM	NM	NA	NM	NM	INR 3.5	INR 4.9	20.7X	15.0X	NM	NM	\$4	\$5	NM	NM	
HCL Technologies (a)	NC	289	4,462	4	(1)	(1)	(11)	(7)	17.9	21.6	16.1	13.4	0.9	0.9	27	0.80	0.50	16.3	19.6	17.8	14.8	13.1	10.4	1,611	2,038	2.8	2.2	
Hexaware Tech. (a)	NC	166	524	(0)	(1)	(1)	(17)	1	11.8	14.8	14.0	11.2	0.8	0.7	27	0.53	0.42	11.8	14.8	14.0	11.2	8.2	7.0	272	346	1.9	1.5	
i-flex solutions (a)	NC	2,172	4,129	5	4	4	11	55	51.8	64.8	41.9	33.5	2.4	2.2	25	1.65	1.32	40.5	55.6	53.6	39.1	38.1	26.4	599	731	6.9	5.7	
iGate Global Solutions (a)	NC	403	280	9	4	4	16	57	24.5	33.0	16.4	12.2	1.0	0.8	NA	NM	NM	14.8	27.8	27.3	14.5	12.9	7.8	227	279	1.2	1.0	
Infosys	Buy	1,998	26,575	2	(1)	(1)	(11)	26	75.8	93.2	26.4	21.4	1.5	1.4	31	0.01	0.01	66.8	80.0	29.9	25.0	24.6	19.3	3,833	4,866	6.9	5.5	
Infotech Enterprises (a)	NC	355	380	3	(2)	(2)	11	83	22.4	28.9	15.8	12.3	0.9	0.8	24	0.66	0.51	17.8	24.0	19.9	14.8	13.7	10.0	165	215	2.3	1.8	
Mastek (a)	NC	306	203	1	(1)	(1)	(17)	(19)	36.2	41.4	8.5	7.4	0.5	0.5	15	0.57	0.50	32.6	39.9	9.4	7.7	5.6	4.7	215	246	0.9	0.8	
Mindtree Consulting (a)	NC	867	742	9	4	4	104	104	NA	NA	NM	NM	NM	NM	NA	NM	NA	NA	NA	NM	NM	NA	NA	NA	NA	NA	NM	NM
Mphasis BFL (a)	NC	275	1,073	2	(2)	(2)	(9)	29	11.6	15.4	23.8	17.8	1.4	1.2	25	0.96	0.72	7.8	12.8	35.2	21.5	19.8	13.5	372	512	2.9	2.1	
Patni Computer Systems	Neutral	408	1,326	8	5	5	(2)	(8)	31.4	36.5	13.0	11.2	0.8	0.7	18	0.73	0.63	31.4	36.5	13.0	11.2	7.3	6.1	694	836	1.9	1.6	
Polaris Software Lab (a)	NC	172	394	1	(4)	(4)	(0)	48	14.3	18.7	12.0	9.2	0.7	0.6	38	0.32	0.25	11.6	15.2	14.8	11.3	9.2	7.2	292	367	1.3	1.1	
Sasken (a)	NC	531	327	12	9	9	(1)	42	26.4	39.7	20.1	13.4	1.2	0.9	25	0.80	0.53	17.1	29.5	31.1	18.0	16.4	9.7	149	199	2.2	1.6	
Satyam	Buy	445	7,017	(3)	(5)	(5)	(8)	9	24.1	29.8	18.4	14.9	1.1	1.0	34	0.55	0.44	21.4	25.3	20.8	17.6	16.5	13.4	1,732	2,209	4.1	3.2	
Tata Consultancy Services	Buy	1,197	27,346	(0)	(3)	(3)	(2)	27	50.5	62.3	23.7	19.2	1.4	1.3	31	0.77	0.63	42.5	53.3	28.2	22.5	22.8	17.8	5,247	6,599	5.2	4.1	
Tech Mahindra (a)	NC	1,397	3,868	4	(2)	(2)	(16)	283	63.4	87.5	22.0	16.0	1.3	1.1	25	0.88	0.64	47.8	68.6	29.2	20.4	21.5	14.0	998	1,422	3.9	2.7	
Wipro	Neutral	548	18,554	3	(2)	(2)	(9)	2	22.2	26.4	24.7	20.7	1.4	1.4	24	1.02	0.86	20.0	23.1	27.3	23.8	21.3	18.3	3,947	4,944	4.7	3.8	
<b>Average</b>				<b>4%</b>	<b>0%</b>	<b>0%</b>	<b>3%</b>	<b>44%</b>			<b>19.8X</b>	<b>15.6X</b>	<b>1.1X</b>	<b>1.0X</b>	<b>26</b>	<b>0.72X</b>	<b>0.57X</b>			<b>24.5X</b>	<b>18.0X</b>	<b>16.7X</b>	<b>12.4X</b>			<b>3.3X</b>	<b>2.6X</b>	
<b>US IT Services (c)</b>																												
Accenture	Buy	\$38.10	\$33,045	-1%	-1%	-1%	3%	31%	\$2.01	\$2.23	18.9X	17.1X	1.2X	1.2X	15%	1.25X	1.13X	\$1.92	\$2.17	19.8X	17.5X	10.3X	9.5X	\$19,481	\$21,172	1.7X	1.6X	
ACS	Neutral	58.61	5,870	(0)	(0)	(0)	20	(2)	3.69	4.14	15.9	14.1	1.0	1.0	15	1.06	0.94	3.27	3.94	17.9	14.9	8.1	7.3	6,012	6,439	1.0	0.9	
BearingPoint	Neutral	7.61	2,355	(2)	(1)	(1)	(3)	(10)	0.32	0.37	23.4	20.5	1.5	1.4	8	3.12	2.73	0.32	0.37	23.4	20.5	5.0	5.2	3,656	3,838	0.6	0.6	
CSC	Neutral	52.85	9,289	(2)	1	1	(1)	(9)	4.05	4.10	13.0	12.9	0.8	0.9	9	1.45	1.43	3.52	3.91	15.0	13.5	5.1	4.6	15,169	15,535	0.6	0.6	
EDS	Neutral	27.80	15,262	0	0	0	1	5	1.60	1.70	17.3	16.4	1.1	1.1	8	2.31	2.18	1.60	1.70	17.3	16.4	5.3	5.1	22,066	22,623	0.7	0.7	
Keane	Neutral	13.58	899	0	0	0	14	(10)	0.61	0.77	22.1	17.7	1.4	1.2	10	2.21	1.77	0.61	0.77	22.1	17.7	10.9	9.0	943	988	1.0	0.9	
Perot Systems (a)	NC	17.89	2,166	(1)	0	0	9	17	0.91	1.07	19.8	16.6	1.3	1.1	12	1.65	1.39	0.91	1.08	19.8	16.6	NM	NM	2,578	2,832	0.8	0.8	
Sapient	Sell	6.83	841	(1)	(0)	(0)	24	(10)	0.17	0.28	39.8	24.8	2.5	1.7	18	2.27	1.42	0.17	0.28	39.8	24.8	16.0	10.4	510	636	1.7	1.3	
<b>Average</b>				<b>-1%</b>	<b>0%</b>	<b>0%</b>	<b>8%</b>	<b>1%</b>			<b>21.3X</b>	<b>17.5X</b>	<b>1.4X</b>	<b>1.2X</b>	<b>12</b>	<b>1.92X</b>	<b>1.62X</b>			<b>21.9X</b>	<b>17.7X</b>	<b>8.7X</b>	<b>7.3X</b>			<b>1.0X</b>	<b>0.9X</b>	
<b>European IT Services (d) (e)</b>																												
Atos Origin	NR	€ 53.81	\$4,905	6%	7%	7%	20%	-17%	€ 2.23	€ 3.50	24.2X	15.4X	NM	NM	2%	12.08X	7.70X	€ 2.23	€ 3.50	24.2X	15.4X	6.2X	5.1X	\$7,863	\$8,136	0.6X	0.6X	
Cappgemini	Buy	€ 58.11	11,257	(1)	2	2	22	32	€ 3.14	€ 3.94	18.5	14.8	NM	NM	40	0.46	0.37	€ 3.14	€ 3.94	18.5	14.8	8.9	7.7	11,676	12,248	1.0	0.9	
Devoteam	Buy	€ 34.57	459	0	8	8	23	26	€ 1.85	€ 2.20	18.7	15.7	NM	NM	27	0.69	0.58	€ 1.85	€ 2.20	18.7	15.7	9.9	8.4	436	484	1.1	0.9	
Groupe Steria	Neutral	€ 50.59	1,263	4	3	3	11	1	€ 3.78	€ 4.32	13.4	11.7	NM	NM	15	0.89	0.78	€ 3.78	€ 4.32	13.4	11.7	7.2	6.3	1,826	1,937	0.7	0.7	
Indra Sistemas SA	Sell	€ 19.41	4,265	1	3	3	4	14	€ 0.87	€ 1.03	22.3	18.8	NM	NM	12	1.86	1.57	€ 0.87	€ 1.03	22.3	18.8	12.3	10.7	2,833	3,026	1.5	1.4	
LogicaCMG	Buy	184.00p	5,556	2	3	3	(1)	(4)	7.02p	8.19p	26.2	22.5	NM	NM	12	2.19	1.87	7.02p	8.19p	26.2	22.5							

**Exhibit 2: Global IT Services coverage: price targets and risk factors**

Ticker	GS Stock Rating	Market Price 4/10/07	GS Price Target <sup>1</sup>	GS Target Period	Upside (%)	Risk Factors
<b>IT Consulting &amp; Systems Integration</b>						
ACN	Buy	\$38.10	\$45.00	12 months	18.1%	(1) A material deceleration in economic activity presents a key risk to discretionary consulting spending. (2) Execution on large outsourcing contracts. (3) Sustained high employee turnover and wage inflation.
BE	Neutral	7.61	7.70	12 months	1.2	(1) A material deceleration in discretionary IT spend. (2) Earnings & cash flow risk as BE continues its turnaround efforts.
KEA	Neutral	13.58	11.65	12 months	(14.2)	(1) Earnings upside on higher than expected revenue growth and margin expansion. (2) Acceleration of contract signings growth.
SAPE	Sell	6.83	5.00	12 months	(26.8)	(1) Earnings upside on higher than expected revenue growth and margin expansion.
<b>IT Outsourcing</b>						
ACS	Neutral	\$58.61	\$60.50	12 months	3.2%	(1) Weaker-than-expected organic revenue and further margin erosion. (2) Delays or inability to close the proposed acquisitions of ACS shares.
CSC	Neutral	52.85	50.28	12 months	(4.9)	(1) Weaker bookings and lower than expected revenue growth. (2) Lower than expected cost savings from current restructuring initiatives. (3) Lower than expected free cash flow results.
EDS	Neutral	27.80	29.45	12 months	5.9	(1) Weaker than expected bookings. (2) Slow down in discretionary IT spending. (3) Weaker than expected free cash flow results.
FIS	Buy	48.00	57.00	12 months	18.8	(1) Decline in margins. (2) Slower than expected organic revenue growth. (3) Contract losses, or pricing pressure.
FISV	Neutral	54.30	58.64	12 months	8.0	(1) Stepped-up acq. activity pressuring ROIC and limiting capital deployment. (2) Lower than expected organic revenue growth and possible margin compression.
PBI	Neutral	46.29	51.14	12 months	10.5	(1) Weaker than expected organic revenue growth in the core mailing segment. (2) Weaker than expected free cash flow results.
UIS	Sell	9.09	6.10	12 months	(32.9)	(1) Better than expected earnings results. (2) Higher revenue growth in its core Technology segment. (3) Earlier restructuring benefits.
<b>Indian IT Services</b>						
CTSH	Buy	\$85.67	\$100.66	12 months	17.5%	(1) Slower than expected volume and revenue growth. (2) Increases in employee turnover, sustained wage inflation, and possible bill rate deterioration. (3) High valuation and possible multiple compression.
EXLS	Sell	21.09	19.34	12 months	(8.3)	(1) Gross margin volatility from unanticipated contract ramp up. (2) Lower than expected SG&A leverage and margin improvement. (3) Potential loss of Aviva BOT revenue at the beginning of CY2008.
INFY	Buy	52.08	60.50	12 months	16.2	(1) Sustained employee attrition. (2) Escalating wage inflation onsite and offshore. (3) Margin contraction risk. (4) Pricing pressure from larger multinational IT Service providers. (5) High valuation.
PTI	Neutral	23.83	20.25	12 months	(15.0)	(1) Sustained wage inflation and employee turnover. (2) Lower operating margins. (3) Discretionary spending slowdown across enterprise and telecom clients.
SAY	Neutral	23.28	25.71	12 months	10.4	(1) Sustained high employee turnover. (2) Slower than expected volume and revenue growth. (3) Sustained wage inflation and possible bill rate deterioration.
WIT	Neutral	16.32	15.19	12 months	(6.9)	(1) Sustained wage inflation. (2) Lower operating margins. (3) Discretionary spending slowdown across enterprise and telecom clients.
WNS	Neutral	28.12	27.33	12 months	(2.8)	(1) Gross margin volatility from unanticipated contract ramp up. (2) Lower than expected SG&A leverage and margin improvement. (3) Potential loss of Aviva BOT revenue at the end of FY2008.
<b>Indian IT Services - Local (Rupees)</b>						
INFY.BO	Buy	1,998.10	2349.15	12 months	17.6%	(1) Sustained employee attrition. (2) Escalating wage inflation onsite and offshore. (3) Margin contraction risk. (4) Pricing pressure from larger multinational IT Service providers. (5) High valuation.
PTNI.BO	Neutral	407.70	401.00	12 months	(1.6)	(1) Sustained wage inflation and employee turnover. (2) Lower operating margins. (3) Discretionary spending slowdown across enterprise and telecom clients.
SATY.BO	Buy	445.35	536.61	12 months	20.5	(1) Sustained high employee turnover. (2) Slower than expected volume and revenue growth. (3) Sustained wage inflation and possible bill rate deterioration.
TCS.BO	Buy	1,196.95	1404.00	12 months	17.3	(1) Sustained high employee turnover. (2) Slower than expected volume and revenue growth. (3) Sustained wage inflation and possible bill rate deterioration.
WIPR.BO	Neutral	548.25	600.90	12 months	9.6	(1) Sustained wage inflation. (2) Lower operating margins. (3) Discretionary spending slowdown across enterprise and telecom clients.
<b>European IT Services</b>						
ATOS.PA	NR	€ 53.81	NA	NA	NA	NA
CAPP.PA	Buy	€ 58.11	€ 62.00	12 months	6.7	(1) An economic slowdown, compromising the long-term objective of double digit margins.
DVTM.PA	Buy	€ 34.57	€ 41.00	12 months	18.6	(1) Macroeconomic deceleration.
TERI.PA	Neutral	€ 50.59	€ 52.00	12 months	2.8	(1) A macroeconomic deceleration. (2) Potential acquisitions in France or the UK.
IDR.MC	Sell	€ 19.41	€ 18.50	12 months	(4.7)	(1) Acceleration of cost cutting actions and faster revenues synergies.
LOG.L	Buy	184.00p	204.00p	12 months	10.9	(1) A macroeconomic deceleration. (2) Slower execution on offshore transition in the Nordics and France.
SOPR.PA	Neutral	€ 69.73	€ 71.00	12 months	1.8	(1) Macroeconomic deceleration. (2) Continued challenges recruiting and retaining staff further affecting growth and margins.
TIE1V.HE	Sell	€ 22.58	€ 18.00	12 months	(20.3)	(1) A takeover of the company. (2) Management change.
XAN.L	Neutral	91.75p	86.00p	12 months	(6.3)	(1) A takeover of the company.

**Notes:**

- US and Indian IT Services - Price targets derived from a regression-based Investment Framework that relies on five equally-weighted valuation tools - DCF, EV/Invested capital, P/Book, EV/EBIT and P/Sales.
- European IT Services - Price targets based on DCF analysis.

Source: Company reports, FactSet, Goldman Sachs Research estimates.

## Upgrading Infosys and Tata Consultancy Services to Buy from Neutral

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### Retain Neutral coverage view on Indian IT Services sector

**We retain our Neutral coverage view**, which we downgraded on January 3, 2007, from Attractive, on the Indian IT Services sector as the group's fundamentals relative to historical performance are expected to remain choppy as we move through the annual guidance period and external cross currents continue to run their course. Importantly, as we indicated in our sector downgrade note, **various factors continue to support our neutral stance**, including limited room for multiple expansion based on fiscal 2008/calendar 2007, weak trading seasonality in the first half of the calendar year, and selected margin headwinds.

### Recent pullback in the sector has created selected opportunities; we are upgrading shares of Infosys and TCS

Following a 17% pullback on the local shares and a 14% pullback on the US listed ADR shares from their 52-week highs, we believe that this has created selected opportunities in the space. Therefore, we are using the recent declines as an **opportunity to upgrade the shares of Infosys (INFY ADR and INFY.BO) and Tata Consultancy Services (TCS.BO) to Buy ratings from Neutral**. Specifically, at current levels we see selected opportunities offering absolute upside potential, positive excess returns, and more balanced risk/reward profiles.

### We are adjusting estimates to reflect rupee's appreciation and more modest utilization assumptions

Although somewhat counterintuitive, our rating upgrades for Infosys and TCS coincide with **revenue and earnings estimate reductions for fiscal 2008** for some of the stocks under our coverage as we attempt to factor in, and more closely reflect, the impact of the rupee's recent appreciation, as well as more modest assumptions for utilization, consistent with our broader view of a mildly decelerating IT spending environment in the US, and early fiscal year seasonal headwinds.

### Long-term secular view remains intact and anchors our selected upgrades

We balance our short-term estimate moves, which could result in some turbulence, against our long-term **secular growth model for Indian IT Services and one that we believe remains well intact**. Although the rupee's recent appreciation takes some air out of our expectations, we see this as a healthy development for our models, and despite this headwind, **we still see long-term value anchored around three factors**: (1) Industry leading revenue growth of 33% on average from fiscal year 2007-2009 on a US dollar basis, and 29% on average on rupee denominated basis over the same period. (2) Industry leading margins of 20% on average over the same period on a fully loaded US GAAP basis, and about 22% on an Indian GAAP basis. (3) Capital efficient models offering industry leading returns on capital in excess of 24% on average through fiscal year 2009.

### The US economy remains a risk factor, but should be mitigated by other positive forces

Among the various external cross currents, perhaps **the US economy continues as the most significant risk**; that said, adoption trends, expansion of services, and geographic diversification adds some insulation to the offshore models, which should help mitigate some of this risk and is now reflected in our more modest utilization assumptions.

## Our updated ratings reflect sustained growth models and favorable risk/reward profiles

Not surprisingly, selectivity has come to the fore, and we therefore align our recommendations with the top-tier companies that we believe have the industry leadership, strategic balance, opportunity for sustained growth, earnings momentum, and favorable risk/reward profiles to generate positive returns. Given what is expected to be a turbulent short-term period, we believe that a basket approach including these stocks currently provides the most balanced approach to investing in the Indian IT Services sector. Specifically, we are focused on the following stocks:

- **CTSH (Buy)—offers the fastest growth trajectory**, in our view, in excess of 45% expected for CY2007 and in excess of 35% expected for CY2008. The shares have traded down about 10% from their recent 52-week high. CTSH is a bit of a unique investment vehicle given the company's US-based listing (not an ADR) and inclusion in the S&P 500, which we believe continues to provide US-based investors with access to the Indian IT Services model, along with liquidity. **Based on current valuation and relative to our 12-month price targets we see about 18% upside on the US listed shares.**
  - On a risk-adjusted basis, CTSH shares offer excess absolute returns of 8% against a 10% market return scenario, and 10% against an 8% market-return scenario.
  - There are no changes in estimates, we continue to forecast revenue growth of 46% in calendar 2007 and 36% in 2008. For earnings, our model suggests growth of 40% in calendar 2007 and 29% in 2008.
  - The shares are currently trading at a P/E of 39X our calendar 2007 EPS estimate, and 30X our calendar 2008 EPS estimate. This compares to the 2004-2007 year-to-date mean multiple of 38X forward 12-month (FTM) P/E.
- **INFY.BO (Buy)/INFY (Buy)—the benchmark company in the sector** given the company's well-established organic revenue growth model, margin profile, capital efficiency, and execution track record. The local shares are currently 17% below their recent 52-week high and the ADR shares are currently 15% below their recent 52-week high. **Based on current valuation and relative to our 12-month price target we see about 17% upside on Infosys ADR shares and about 18% upside on the local shares.**
  - On a risk-adjusted basis, INFY shares offer excess absolute returns of 6% against a 10% market return scenario, and 8% against an 8% market-return scenario, and the local shares offer excess absolute returns of 4% against a 14% market return scenario, based on the 15,000 price target on the Sensex set by our Asia-Pacific Equity Strategy team.
  - The ADR shares are currently trading at a P/E of 31X our revised calendar 2007 EPS estimate, and 25X our revised calendar 2008 EPS estimate. This compares to the 2004-2007 year-to-date mean multiple of 32X forward 12-month (FTM) P/E. The local shares are currently trading at a P/E of 26X our revised calendar 2007 EPS estimate, and 21X our revised calendar 2008 EPS estimate. This compares to the 2004-2007 year-to-date mean multiple of 24X forward 12-month (FTM) P/E.
- **SATY.BO (Buy)—offers what we believe is the best valuation** opportunity in India, offering a combination of discounted valuation and growth profile given the company's exposure to the current ERP cycle. **Based on current valuation and relative to our 12-month price targets we see about 21% upside on SATY.BO local shares and 10% upside on the ADR shares, which remain rated Neutral.**
  - On a risk-adjusted basis, SATY.BO shares offer excess absolute returns of 6% against a 14% market return scenario, while the ADR shares offer a negative excess return of 1% against a 10% market return scenario, and a 1% excess return against an 8% market return scenario.

- SAY ADR shares are currently trading at a P/E of 24X our revised calendar 2007 EPS estimate, and 19X our calendar 2008 EPS estimate. This compares to the 2004-2007 year-to-date mean multiple of 22X forward 12-month (FTM) P/E. SATY.BO local shares are currently trading at a P/E of 18X our revised calendar 2007 EPS estimate, and 15X our calendar 2008 EPS estimate. This compares to the 2004-2007 year-to-date mean multiple of 17X forward 12-month (FTM) P/E.
- **TCS.BO (Buy)—offers exposure to India’s largest and most diversified** IT Services company offering what we believe is the broadest portfolio of services that includes offshore services, business process outsourcing, and asset-based solutions. Based on current valuation and relative to our 12-month price targets we see about 17% upside on the local shares.
  - On a risk-adjusted basis, TCS.BO shares offer excess absolute returns of 4% against a 14% market return scenario.
  - TCS.BO shares are currently trading at a P/E of 24X our revised calendar 2007 EPS estimate, and 19X our calendar 2008 EPS estimate. This compares to the 2004-2007 year-to-date mean multiple of 23X forward 12-month (FTM) P/E.

## Cognizant Technology Solutions (CTSH – Buy)

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### **Retain Buy rating, no change to estimates. Price target suggests 18% upside potential**

We retain our Buy rating on the shares of Cognizant Technology Solutions. There is no change to our estimates or 12-month price target of \$100.66, suggesting 18% upside potential.

### **Investment view**

Our investment thesis on CTSH shares remains positive given the robust secular growth of offshore services, crisp execution, industry-leading growth, and a steady-state operating margin profile, which adds to the defensive appeal of the shares in the face of recent appreciation of the rupee. Not surprisingly, given current valuation earnings momentum remains the key to further share appreciation. We believe leading indicators such as headcount and capex plans suggest a strong demand environment capable of supporting revenue growth in excess of 45% in CY2007.

### **Estimates revision**

There is no change to our CY2007 and CY2008 EPS estimates of \$2.17 and \$2.80, respectively. Our CY2007 EPS estimate of \$2.17 (+40% year over year) is based on a revenue growth assumption of 46% and an operating margin assumption of 18.2% (20.0% excluding ESOs). Our CY2008 EPS estimate of \$2.80 (+29% year over year) is based on a revenue growth assumption of 36% and an operating margin assumption of 18.1% (19.4% excluding ESOs).

**Exhibit 3: Cognizant Technology Solutions (CTSH), GS versus consensus estimates**

Rupees in mn, except per share items

	Revenue					OP Income							EPS				
	GS	yr ago	Y-Y %	Street	Y-Y %	GS	yr ago	Y-Y %	Margin	Street	Y-Y %	Margin	GS	yr ago	Y-Y %	Street	Y-Y %
CY2007E	\$2,073	\$1,424	45.6%	\$2,074	45.6%	\$378	\$259	45.8%	18.2%	\$376	45.2%	18.1%	\$2.17	\$1.55	40.1%	\$2.15	39.1%
<b>CY2008E</b>	<b>\$2,828</b>	<b>\$2,073</b>	<b>36.4%</b>	<b>\$2,831</b>	<b>36.5%</b>	<b>\$513</b>	<b>\$378</b>	<b>35.9%</b>	<b>18.1%</b>	<b>\$511</b>	<b>36.0%</b>	<b>18.1%</b>	<b>\$2.80</b>	<b>\$2.17</b>	<b>29.4%</b>	<b>\$2.85</b>	<b>32.6%</b>

Source: Company data, Goldman Sachs Research estimates, First Call.

**Infosys Technologies (INFY – Buy; INFY.BO – Buy)****Upgrading ADR and local shares to Buy from Neutral; fine-tuning FY2008 and FY2009 estimates**

We are upgrading Infosys ADR and local shares to Buy from Neutral based on 17% and 18% upside potential, respectively. We have also fine-tuned our FY2008 and FY2009 EPS estimates reflecting a combination of lower revenue estimates, higher operating margin assumptions, and a lower \$/rupee exchange rate assumption. Our 12-month price target for the ADR shares remains unchanged at \$60.50, suggesting 17% upside. Similarly, our 12-month price target for the local shares remains unchanged at 2349.15 rupees, suggesting 18% upside.

**Investment view**

We continue to view Infosys as a benchmark company and core holding in the Indian IT Services sector and have continued confidence in the company's ability to drive growth while maintaining its industry leading margin profile despite headwinds. Following the recent pullback in the shares we see a more balanced risk/reward that that presents a buying opportunity given the company's fundamental track record, in our view. Despite likely near-term volatility surrounding the company's FY2008 guidance, expected on April 13, 2007, we remain positive on the long-term outlook of the shares, and would use any weakness as an opportunity to build a position in the shares.

**Estimates revision**

- **ADR shares** – For FY2008, we are trimming our EPS estimate by \$0.01 to \$1.79 (+24% year over year), reflecting a lower revenue growth assumption of 33% (versus 37% previously) which is partially offset by a higher operating margin assumption of 27.3% (versus 26.8% previously). For FY2009, we are raising our EPS estimate by \$0.03 to \$2.18 (+22% year over year, reflecting a higher operating margin assumption of 26.8% (versus 25.9% previously) which was partially offset by a lower revenue estimate of \$5.14 bn, or 25% yoy growth.



**Exhibit 4: Infosys Technologies ADR shares (INFY), GS versus Consensus estimates**

\$ in mn, except per share items

	Revenue					OP Income							EPS				
	GS	yr ago	Y-Y %	Street	Y-Y %	GS	yr ago	Y-Y %	Margin	Street	Y-Y %	Margin	GS	yr ago	Y-Y %	Street	Y-Y %
FY2007E	\$3,086	\$2,152	43.4%	\$3,094	43.8%	\$857	\$589	45.6%	27.8%	\$858	45.7%	27.7%	\$1.44	\$0.98	47.5%	\$1.46	49.5%
<b>FY2008E</b>	<b>\$4,099</b>	<b>\$3,086</b>	<b>32.8%</b>	<b>\$4,148</b>	<b>34.1%</b>	<b>\$1,119</b>	<b>\$857</b>	<b>30.6%</b>	<b>27.3%</b>	<b>\$1,133</b>	<b>32.2%</b>	<b>27.3%</b>	<b>\$1.79</b>	<b>\$1.44</b>	<b>23.9%</b>	<b>\$1.86</b>	<b>27.4%</b>

Source: Company data, Goldman Sachs Research estimates, First Call.

- Local shares** – FY2008, we are trimming our EPS estimate to 79.96 rupees (+20% year over year) from 81.84 rupees, reflecting a lower revenue growth assumption of 28% (versus 34% previously) which is partially offset by a higher operating margin assumption of 27.5% (versus 26.9% previously). For FY2009, we are trimming our EPS estimate to 97.93 rupees (+22% year over year) from 98.30 rupees, reflecting a lower revenue estimate which was partially offset by a higher operating margin assumption of 26.9% (versus 26.0% previously).

**Exhibit 5: Infosys Technologies local shares (INFY.BO), GS versus consensus estimates**

Rupees in mn, except per share items

	Revenue					OP Income							EPS				
	GS	yr ago	Y-Y %	Street	Y-Y %	GS	yr ago	Y-Y %	Margin	Street	Y-Y %	Margin	GS	yr ago	Y-Y %	Street	Y-Y %
FY2007E	139,101	95,336	45.9%	140,143	47.0%	39,011	26,582	46.8%	28.0%	41,109	54.7%	29.3%	66.85	45.27	47.7%	67.20	48.5%
<b>FY2008E</b>	<b>178,298</b>	<b>139,101</b>	<b>28.2%</b>	<b>189,242</b>	<b>35.0%</b>	<b>48,946</b>	<b>39,011</b>	<b>25.5%</b>	<b>27.5%</b>	<b>55,038</b>	<b>33.9%</b>	<b>29.1%</b>	<b>79.96</b>	<b>66.85</b>	<b>19.6%</b>	<b>88.07</b>	<b>31.1%</b>

Source: Company data, Goldman Sachs Research estimates, First Call.

**Patni Computer Systems (PTI – Neutral; PTNI.BO – Neutral)****Maintain Neutral on ADR and local shares. Fine-tuning rupee-based estimates for \$/rupee assumption**

We maintain our Neutral rating on Patni ADR and local shares. For the local shares, we also fine-tuned our CY2007 and CY2008 EPS estimates reflecting a lower \$/rupee exchange rate assumption. Our 12-month price target for the ADR shares remains unchanged at \$20.25, suggesting 15% downside. Our 12-month price target for the local shares also remains unchanged at 401.00 rupees, suggesting 2% downside.

**Investment view**

We acknowledge Patni's initial progress in improving its margin profile as a good step, and believe that the interim process of driving revenue growth and margin improvements could become challenged should the growth expectations for the year fail to

materialize or come in below expectations. Importantly, we continue to look for progress in SG&A efficiency, labor utilization, and optimized delivery platforms.

**Valuation**

- Patni ADR shares are trading at 18X our CY2007 EPS estimate of \$1.35 (+23% yoy) and 15X our CY2008 EPS estimate of \$1.54 (+14% yoy). At current levels the ADR shares are trading below its CY2005-2007 YTD mean FTM P/E multiple of 18X and at 0.92X, below its relative mean multiple of 0.99X.
- Patni local shares are trading at 13X our revised CY2007 EPS estimate of 31.43 rupees (+19% yoy) and 11X our revised CY2008 EPS estimate of 36.54 rupees (+16% yoy). At current levels the local shares are trading below its CY2004-2007 YTD mean FTM P/E multiple of 14X and at 0.73X, below its relative mean multiple of 1.12X.

**Estimates revision**

- **ADR shares** – Our CY2007 EPS estimate of \$1.35 (+23% year over year) remains unchanged. Our CY2007 EPS estimate is based on a revenue growth assumption of 20% and an operating margin assumption of 15.5% (16.4% excluding ESOs). Our CY2008 EPS estimate of \$1.54 (+14% year over year) also remains unchanged. Our CY2008 EPS estimate is based on a revenue growth assumption of 20% and an operating margin assumption of 15.3% (16.2% excluding ESOs).

**Exhibit 6: Patni Computer Systems ADR shares (PTI), GS versus consensus estimates**

\$ in mn, except per share items

	Revenue					OP Income							EPS				
	GS	yr ago	Y-Y %	Street	Y-Y %	GS	yr ago	Y-Y %	Margin	Street	Y-Y %	Margin	GS	yr ago	Y-Y %	Street	Y-Y %
CY2007E	\$694	\$579	19.9%	\$689	19.1%	\$107	\$87	23.3%	15.5%	\$107	22.4%	15.5%	\$1.35	\$1.10	23.1%	\$1.30	18.6%
<b>CY2008E</b>	<b>\$836</b>	<b>\$694</b>	<b>20.5%</b>	<b>\$824</b>	<b>19.6%</b>	<b>\$128</b>	<b>\$107</b>	<b>19.5%</b>	<b>15.3%</b>	<b>\$130</b>	<b>21.8%</b>	<b>15.8%</b>	<b>\$1.54</b>	<b>\$1.35</b>	<b>14.4%</b>	<b>\$1.51</b>	<b>16.2%</b>

Source: Company data, Goldman Sachs Research estimates, First Call.

- **Local shares** – For CY2007, we are trimming our EPS estimate to 31.43 rupees (+19% year over year) from 31.93 rupees, reflecting a slightly lower revenue growth assumption of 16% (versus 18% previously). Our operating margin assumption remains unchanged at 16.4%. For CY2008, we are trimming our EPS estimate to 36.54 rupees (+16% year over year) from 37.30 rupees, reflecting a slightly lower revenue estimate. Our operating margin assumption remains unchanged at 16.2%.

**Exhibit 7: Patni Computer Systems local shares (PTNI.BO), GS versus consensus estimates**

Rupees in mn, except per share items

	Revenue					OP Income							EPS				
	GS	yr ago	Y-Y %	Street	Y-Y %	GS	yr ago	Y-Y %	Margin	Street	Y-Y %	Margin	GS	yr ago	Y-Y %	Street	Y-Y %
CY2007E	30,335	26,050	16.5%	31,621	21.4%	4,962	4,085	21.5%	16.4%	5,305	29.9%	16.8%	31.43	26.32	19.4%	30.00	14.0%
CY2008E	36,371	30,335	19.9%	38,273	21.0%	5,883	4,962	18.6%	16.2%	6,622	24.8%	17.3%	36.54	31.43	16.3%	36.07	20.2%

Source: Company data, Goldman Sachs Research estimates, First Call.

**Satyam Computer Services (SAY – Neutral; SATY.BO – Buy)****Maintain Neutral on ADR shares and Buy on local shares. Fine-tuning rupee-based estimates for \$/rupee assumption**

We maintain our Neutral rating on Satyam ADR shares and our Buy rating on Satyam local shares. For the local shares, we have also fine-tuned our FY2008 and FY2009 EPS estimates reflecting a lower \$/rupee exchange rate assumption. Our 12-month price target for the ADR shares remains unchanged at \$25.71, suggesting 10% upside. Our 12-month price target for the local shares also remains unchanged at 536.61 rupees, suggesting 21% upside.

**Investment view**

In our view, margin expectations going into FY2008 will be key to the shares. Wage pressure coupled with planned RSU grant and recent rupee appreciation is expected to result in some headwind. However, normal operating leverage coupled with continued expense controls should allow Satyam to offset some of the expected margin pressure. On the revenue side, we believe a healthy demand environment for its enterprise application services should support current growth trajectory. Given current valuation, and a 10% premium for the ADR we continue to prefer the local shares, given the opportunity for absolute excess returns.

**Estimates revision**

- **ADR shares** – Our FY2008 EPS estimate of \$1.01 (+19% year over year) remains unchanged. Our FY2008 EPS estimate is based on a revenue growth assumption of 28% and an operating margin assumption of 19.2% (20.8% excluding ESOs and RSUs). Our FY2009 EPS estimate of \$1.27 (+25% year over year) also remains unchanged. Our FY2009 EPS estimate is based on a revenue growth assumption of 28% and an operating margin assumption of 19.4% (20.5% excluding ESOs and RSUs).

**Exhibit 8: Satyam Computer Services ADR shares (SAY), GS versus consensus estimates**

\$ in mn, except per share items

	Revenue					OP Income							EPS				
	GS	yr ago	Y-Y %	Street	Y-Y %	GS	yr ago	Y-Y %	Margin	Street	Y-Y %	Margin	GS	yr ago	Y-Y %	Street	Y-Y %
FY2007E	\$1,443	\$1,096	31.6%	\$1,449	32.1%	\$285	\$195	46.4%	19.8%	\$286	46.7%	19.7%	\$0.86	\$0.58	48.5%	\$0.87	50.9%
<b>FY2008E</b>	<b>\$1,840</b>	<b>\$1,443</b>	<b>27.5%</b>	<b>\$1,870</b>	<b>29.1%</b>	<b>\$353</b>	<b>\$285</b>	<b>23.6%</b>	<b>19.2%</b>	<b>\$348</b>	<b>21.8%</b>	<b>18.6%</b>	<b>\$1.01</b>	<b>\$0.86</b>	<b>18.0%</b>	<b>\$1.02</b>	<b>17.2%</b>

Source: Company data, Goldman Sachs Research estimates, First Call.

- **Local shares** – For FY2008, we are trimming our EPS estimate to 25.34 rupees (+18% year over year) from 25.86 rupees, reflecting a slightly lower revenue growth assumption of 24% (versus 26% previously). Our operating margin assumption remains unchanged at 20.8%. For FY2009, we are trimming our EPS estimate to 31.57 rupees (+25% year over year) from 32.22 rupees, reflecting a slightly lower revenue estimate. Our operating margin assumption remains unchanged at 20.5%.

**Exhibit 9: Satyam Computer Services local shares (SATY.BO), GS versus consensus estimates**

Rupees in mn, except per share items

	Revenue					OP Income							EPS				
	GS	yr ago	Y-Y %	Street	Y-Y %	GS	yr ago	Y-Y %	Margin	Street	Y-Y %	Margin	GS	yr ago	Y-Y %	Street	Y-Y %
FY2007E	64,765	48,635	33.2%	64,928	33.5%	13,772	9,756	41.2%	21.3%	14,460	48.2%	22.3%	21.43	14.72	45.5%	21.03	42.9%
<b>FY2008E</b>	<b>80,055</b>	<b>64,765</b>	<b>23.6%</b>	<b>85,346</b>	<b>31.4%</b>	<b>16,685</b>	<b>13,772</b>	<b>21.1%</b>	<b>20.8%</b>	<b>18,335</b>	<b>26.8%</b>	<b>21.5%</b>	<b>25.34</b>	<b>21.43</b>	<b>18.2%</b>	<b>26.11</b>	<b>24.1%</b>

Source: Company data, Goldman Sachs Research estimates, First Call.

**Tata Consultancy Services (TCS.BO – Buy)****Upgrading to Buy from Neutral based on 17% upside potential**

We are upgrading the shares of Tata Consultancy Services to Buy from Neutral based on 17% upside potential to our 12-month price target of 1,404 rupees. We have also modestly trimmed our FY2008 and FY2009 EPS estimates reflecting a combination of lower revenue estimates and a lower \$/rupee exchange rate assumption.

**Investment view**

We view TCS as a core holding in Indian IT Services whose growth profile should be supported by the secular adoption of offshore services given the company's diversified revenue model. On the margin front, we believe that the company has multiple opportunities for sustaining its margin performance given several levers. Specifically, we point to its continued offshore effort mix, pricing leverage, resource management initiatives, continued operating efficiency improvements, and improved contribution from

recent large contracts and acquisitions. From a valuation standpoint, on a calendar 2008 P/E multiple basis, TCS shares trade at a 10% premium to the Indian IT Services average of 17.5X. However, on the same basis when compared with its tier-1 peers, Tata Consultancy shares trade at a 10% discount to Infosys and an 8% discount to Wipro. While we do not expect the valuation gap to completely close in the near term, we believe a closing of this gap is warranted given Tata Consultancy's sustained growth, margins, and return on capital profile which is tops the industry at 23% estimated for FY2008.

### Estimates revision

For FY2008, we are trimming our EPS estimate to 53.26 rupees (+25% year over year) from 54.55 rupees, reflecting a lower revenue growth rate of 29% (versus 32% previously). Our operating margin assumption of 25.1% remains unchanged. For FY2009, we are trimming our EPS estimate to 65.26 rupees (+23% year over year) from 68.12 rupees, reflecting a slightly lower revenue growth assumption of 25% (versus 27% previously). Our operating margin assumption of 24.6% remains unchanged.

### Exhibit 10: Tata Consultancy Services (TCS.BO), GS versus consensus estimates

Rupees in mn, except per share items

	Revenue					OP Income							EPS				
	GS	yr ago	Y-Y %	Street	Y-Y %	GS	yr ago	Y-Y %	Margin	Street	Y-Y %	Margin	GS	yr ago	Y-Y %	Street	Y-Y %
FY2007E	185,962	132,455	40.4%	186,780	41.0%	47,067	33,894	38.9%	25.3%	48,430	42.9%	25.9%	42.48	29.46	44.2%	42.50	44.2%
FY2008E	239,083	185,962	28.6%	246,552	32.0%	59,975	47,067	27.4%	25.1%	63,352	30.8%	25.7%	53.26	42.48	25.4%	55.41	30.4%

Source: Company data, Goldman Sachs Research estimates, First Call.

## Wipro Limited (WIT – Neutral; WIPR.BO – Neutral)

### Maintain Neutral rating on ADR and local shares. Lowering estimates and price targets

We maintain our Neutral rating on Wipro ADR and local shares. We are also lowering our FY2008 and FY2009 EPS estimates reflecting lower revenue growth and operating margin assumptions. Based on our revised estimates and updated Investment Framework results, our 12-month price target for the ADR shares now stands at \$15.19 (versus \$15.61 previously), suggesting 7% downside. Our 12-month price target for the local shares now stands at 600.90 rupees (versus 660.00 rupees previously), suggesting 10% upside.

### Investment view

In our view, given a healthy demand backdrop, Wipro's diverse strategy and mix of operations, coupled with an acquisition growth model and crisp execution, should allow the company to sustain its current growth trajectory. That said, at current valuation and given limited float, our bias remains neutral. Not surprisingly, we believe earnings growth will remain the primary driver for share performance.

### Valuation

- Wipro ADR shares are trading at 33X our revised CY2007 EPS estimate of \$0.50 (+21% yoy) and 28X our revised CY2008 EPS estimate of \$0.58 (+18% yoy). At current levels the ADR shares are trading below its CY2004-2007 YTD mean FTM P/E multiple of 33X and at 1.59X, below its relative mean multiple of 1.75X.
- Wipro local shares are trading at 25X our revised CY2007 EPS estimate of 22.17 rupees (+17% yoy) and 21X our revised CY2008 EPS estimate of 26.43 rupees (+19% yoy). At current levels the local shares are trading below its CY2004-2007 YTD mean FTM P/E multiple of 26X and at 1.46X, below its relative mean multiple of 1.73X.

### Estimates revision

- ADR shares** – For FY2008, we are lowering our EPS estimate by \$0.02 to \$0.51 (+18% year over year), reflecting a lower revenue growth assumption of 27% (versus 29% previously) and a lower operating margin assumption of 19.8% (versus 20.2% previously). For FY2009, we are lowering our EPS estimate by \$0.04 to \$0.61 (+18% year over year); reflecting a lower revenue growth assumption of 25% (versus 27% previously) and a lower operating margin assumption of 19.3% (versus 20.0% previously).

#### Exhibit 11: Wipro Limited ADR shares (WIT), GS versus consensus estimates

\$ in mn, except per share items

	Revenue					OP Income						EPS					
	GS	yr ago	Y-Y %	Street	Y-Y %	GS	yr ago	Y-Y %	Margin	Street	Y-Y %	Margin	GS	yr ago	Y-Y %	Street	Y-Y %
FY2007E	\$3,279	\$2,398	36.8%	\$3,300	37.6%	\$664	\$495	34.1%	20.3%	\$665	34.4%	20.2%	\$0.44	\$0.32	35.7%	\$0.44	37.2%
FY2008E	\$4,180	\$3,279	27.5%	\$4,346	31.7%	\$827	\$664	24.6%	19.8%	\$872	31.0%	20.1%	\$0.51	\$0.44	18.3%	\$0.55	25.0%

Source: Company data, Goldman Sachs Research estimates, First Call.

- Local shares** – For FY2008, we are lowering our EPS estimate to 23.07 rupees (+15% year over year) from 24.03 rupees, reflecting a lower revenue growth assumption of 23% (versus 26% previously) and a lower operating margin assumption of 19.8% (versus 20.2% previously). For FY2009, we are lowering our EPS estimate to 27.70 rupees (+20% year over year) from 29.75 rupees, reflecting a lower revenue growth assumption of 25% (versus 27% previously) and a lower operating margin assumption of 19.3% (versus 20.0% previously).

#### Exhibit 12: Wipro Limited local shares (WIPR.BO), GS versus consensus estimates

Rupees in mn, except per share items

	Revenue					OP Income						EPS					
	GS	yr ago	Y-Y %	Street	Y-Y %	GS	yr ago	Y-Y %	Margin	Street	Y-Y %	Margin	GS	yr ago	Y-Y %	Street	Y-Y %
FY2007E	147,835	106,004	39.5%	148,065	39.7%	30,188	22,029	37.0%	20.4%	30,612	39.0%	20.7%	20.05	14.41	39.1%	19.77	37.2%
FY2008E	181,814	147,835	23.0%	194,228	31.2%	36,047	30,188	19.4%	19.8%	39,508	29.1%	20.3%	23.07	20.05	15.1%	25.45	28.7%

Source: Company data, Goldman Sachs Research estimates, First Call.

## Fine-tuning models for fiscal 2008 and 2009, primarily reflecting rupee impact

**Exhibit 13: Indian IT Services – comparative revenue growth, operating margin assumptions, and estimated earnings growth, fiscal years 2008 and 2009.**

	Cognizant	Infosys	Patni	Satyam	TCS	Wipro
<b>Revenues - rupees (% change yoy)</b>						
FY08E (a)						
Previous	NA	34%	18%	26%	32%	26%
<b>New</b>	<b>NA</b>	<b>28%</b>	<b>16%</b>	<b>24%</b>	<b>29%</b>	<b>23%</b>
FY09E (b)						
Previous	NA	25%	20%	28%	27%	27%
<b>New</b>	<b>NA</b>	<b>25%</b>	<b>20%</b>	<b>28%</b>	<b>25%</b>	<b>25%</b>
<b>Revenues - US \$ (% change yoy)</b>						
FY08E (a)						
Previous	46%	37%	20%	28%	NA	29%
<b>New</b>	<b>46%</b>	<b>33%</b>	<b>20%</b>	<b>28%</b>	<b>NA</b>	<b>27%</b>
FY09E (b)						
Previous	36%	25%	20%	28%	NA	27%
<b>New</b>	<b>36%</b>	<b>25%</b>	<b>20%</b>	<b>28%</b>	<b>NA</b>	<b>25%</b>
<b>Operating margin - rupees</b>						
FY08E (a)						
Previous	NA	26.9%	16.4%	20.8%	25.1%	20.2%
<b>New</b>	<b>NA</b>	<b>27.5%</b>	<b>16.4%</b>	<b>20.8%</b>	<b>25.1%</b>	<b>19.8%</b>
FY09E (b)						
Previous	NA	26.0%	16.2%	20.5%	24.6%	20.0%
<b>New</b>	<b>NA</b>	<b>26.9%</b>	<b>16.2%</b>	<b>20.5%</b>	<b>24.6%</b>	<b>19.3%</b>
<b>Operating margin - US GAAP</b>						
FY08E (a)						
Previous	18.2%	26.8%	15.5%	19.2%	NA	20.2%
<b>New</b>	<b>18.2%</b>	<b>27.3%</b>	<b>15.5%</b>	<b>19.2%</b>	<b>NA</b>	<b>19.8%</b>
FY09E (b)						
Previous	18.1%	25.9%	15.3%	19.4%	NA	20.0%
<b>New</b>	<b>18.1%</b>	<b>26.8%</b>	<b>15.3%</b>	<b>19.4%</b>	<b>NA</b>	<b>19.3%</b>
<b>EPS - rupees (% change yoy)</b>						
FY08E (a)						
Previous	NA	22%	21%	21%	28%	20%
<b>New</b>	<b>NA</b>	<b>20%</b>	<b>19%</b>	<b>18%</b>	<b>25%</b>	<b>15%</b>
FY09E (b)						
Previous	NA	20%	17%	25%	25%	24%
<b>New</b>	<b>NA</b>	<b>22%</b>	<b>16%</b>	<b>25%</b>	<b>23%</b>	<b>20%</b>
<b>EPS - US \$ (% change yoy)</b>						
FY08E (a)						
Previous	40%	25%	23%	19%	NA	22%
<b>New</b>	<b>40%</b>	<b>24%</b>	<b>23%</b>	<b>19%</b>	<b>NA</b>	<b>18%</b>
FY09E (b)						
Previous	29%	19%	14%	25%	NA	22%
<b>New</b>	<b>29%</b>	<b>22%</b>	<b>14%</b>	<b>25%</b>	<b>NA</b>	<b>18%</b>

(a) CY2007E data presented for Cognizant and Patni

(b) CY2008E data presented for Cognizant and Patni

Source: Company reports, Goldman Sachs Research estimates.

## A bottom-up view on our revenue model drivers

### Exhibit 14: Indian IT Services – comparative net headcount additions, volume growth, and US dollar-rupee assumptions

Net headcount additions, volume growth, utilization, and pricing remain the most significant levers driving revenue and margin assumptions.

	Cognizant	Infosys	Patni	Satyam	TCS	Wipro
<b>Net headcount adds</b>						
FY08E (a)						
Previous	17,200	22,000	2,590	12,050	23,500	20,000
<b>New</b>	<b>17,200</b>	<b>22,000</b>	<b>2,590</b>	<b>12,050</b>	<b>23,500</b>	<b>20,000</b>
FY09E (b)						
Previous	17,300	22,700	2,680	13,200	26,000	20,725
<b>New</b>	<b>17,300</b>	<b>22,700</b>	<b>2,680</b>	<b>13,200</b>	<b>26,000</b>	<b>20,725</b>
<b>Volume growth (% change yoy)</b>						
FY08E (a)						
Previous	51.5%	33.6%	19.2%	33.6%	30.9%	32.9%
<b>New</b>	<b>51.5%</b>	<b>29.5%</b>	<b>19.2%</b>	<b>33.6%</b>	<b>29.3%</b>	<b>32.4%</b>
FY09E (b)						
Previous	37.4%	22.5%	19.8%	29.9%	25.4%	25.8%
<b>New</b>	<b>37.4%</b>	<b>23.2%</b>	<b>19.8%</b>	<b>29.9%</b>	<b>24.5%</b>	<b>24.4%</b>
<b>\$/Rupee assumption</b>						
FY08E (a)						
Previous	44.1	44.1	44.1	44.1	44.1	44.1
<b>New</b>	<b>43.5</b>	<b>43.5</b>	<b>43.5</b>	<b>43.5</b>	<b>43.5</b>	<b>43.5</b>
FY09E (b)						
Previous	44.1	44.1	44.1	44.1	44.1	44.1
<b>New</b>	<b>43.5</b>	<b>43.5</b>	<b>43.5</b>	<b>43.5</b>	<b>43.5</b>	<b>43.5</b>
<b>Utilization</b>						
FY08E (a)						
Previous	61.9%	72.0%	73.1%	75.3%	75.8%	67.8%
<b>New</b>	<b>61.9%</b>	<b>69.8%</b>	<b>73.1%</b>	<b>75.3%</b>	<b>74.8%</b>	<b>67.4%</b>
FY09E (b)						
Previous	61.5%	71.6%	73.0%	75.0%	75.8%	67.6%
<b>New</b>	<b>61.5%</b>	<b>69.8%</b>	<b>73.0%</b>	<b>75.0%</b>	<b>74.3%</b>	<b>66.6%</b>
<b>Pricing (% change yoy)</b>						
FY08E (a)						
Previous	-2.1%	5.1%	0.6%	0.0%	4.0%	0.6%
<b>New</b>	<b>-2.1%</b>	<b>5.1%</b>	<b>0.6%</b>	<b>0.0%</b>	<b>4.0%</b>	<b>0.6%</b>
FY09E (b)						
Previous	-0.7%	1.0%	0.6%	-2.2%	0.9%	-0.9%
<b>New</b>	<b>-0.7%</b>	<b>1.0%</b>	<b>0.6%</b>	<b>-2.2%</b>	<b>0.9%</b>	<b>-0.9%</b>

(a) CY2007E data presented for Cognizant and Patni

(b) CY2008E data presented for Cognizant and Patni

Source: Goldman Sachs Research estimates.



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