

Fails to meet heightened Street expectations In-line quarter, but miss on Street expectations to weigh on valuation

October 18, 2011

Rating Remains	Neutral
Target price Increased from 1070	INR 1100
Closing price October 17, 2011	INR 1120
Potential downside	-1.8%

Action: Miss on consensus numbers; negative reaction likely

TCS's 2Q results miss on consensus USD revenue growth and PAT could likely weigh on stock price performance, in our view. We reiterate our preference for Infosys (INFO IN, INR2746.55, Buy) over TCS driven by 1) a reversal in the trend of revenue growth outperformance at TCS vs Infosys; and 2) a widening of Infosys' margin lead over TCS, which we believe is likely to persist going forward. We expect Street expectations on TCS to be toned down on disappointments on the pricing front given two consecutive quarters of declines (contrary to management's previous expectation).

In-line results; commentary still upbeat

TCS reported USD revenue growth of 4.7% (vs consensus estimate of 5.5%), EBIT margin improvement of 90bps (vs consensus of 120bps) and PAT of INR24.4bn (vs consensus of INR25.3bn). We believe the results per se were strong, with 6.2% volume growth and 10 large deals signings each in excess of USD100mn+. Management continues to be upbeat on demand, with no warning bells so far.

Catalysts: Economic uncertainty shifting to individual clients and management commentary turning less upbeat on demand

Valuation: Reiterate Neutral; TP raised to INR1100 on roll forward

We expect a USD revenue CAGR of 19% and an EPS CAGR of 15% over FY11-13F. Our estimates remain largely unchanged post results. We raise our TP to INR1100 based on 18x one-year-forward earnings (unchanged). We find the stock fairly valued and see limited upside triggers.

Anchor themes

We believe it's prudent to participate in the sector through companies focused on market share gains, having low client concentration and better operating scope in the current uncertain economic environment.

Nomura vs consensus

Our FY13F earnings forecast is ~3% lower than Bloomberg consensus, as we factor in higher risk for growth amid the economic uncertainty and high BFSI/Europe exposure.

Research analysts

India Technology/Services & Software

Ashwin Mehta - NFASL
ashwin.mehta@nomura.com
+91 22 4037 4465

Pinku Pappan - NSFSPL
pinqu.pappan@nomura.com
+91 22 4037 4360

31 Mar	FY11	FY12F		FY13F		FY14F	
Currency (INR)	Actual	Old	New	Old	New	Old	New
Revenue (mn)	373,245	465,259	472,295	518,526	520,204	596,807	600,757
Reported net profit (mn)	87,166	102,340	102,852	116,175	115,946	128,225	131,313
Normalised net profit (mn)	87,166	102,340	102,852	116,175	115,946	128,225	131,313
Normalised EPS	44.54	52.29	52.55	59.36	59.24	65.51	67.09
Norm. EPS growth (%)	27.0	17.4	18.0	13.5	12.7	10.4	13.3
Norm. P/E (x)	25.2	N/A	21.3	N/A	18.9	N/A	16.7
EV/EBITDA (x)	19.4	16.0	15.5	14.0	13.8	12.6	12.1
Price/book (x)	8.6	N/A	7.2	N/A	5.8	N/A	4.7
Dividend yield (%)	1.2	N/A	1.5	N/A	1.7	N/A	1.7
ROE (%)	37.6	35.8	36.9	32.8	34.1	29.6	31.3
Net debt/equity (%)	net cash	net cash	net cash	net cash	net cash	net cash	net cash

Source: Nomura estimates

Key company data: See page 2 for company data and detailed price/index chart.

See Appendix A-1 for analyst certification, important disclosures and the status of non-US analysts.

Key data on Tata Consultancy Services

Income statement (INRmn)

Year-end 31 Mar	FY10	FY11	FY12F	FY13F	FY14F
Revenue	300,289	373,245	472,295	520,204	600,757
Cost of goods sold	-163,805	-205,865	-259,262	-286,138	-339,337
Gross profit	136,484	167,380	213,034	234,065	261,420
SG&A	-56,975	-62,609	-83,094	-91,945	-103,049
Employee share expense					
Operating profit	79,509	104,771	129,940	142,120	158,371
EBITDA	86,800	111,985	139,048	152,358	169,634
Depreciation	-7,291	-7,214	-9,108	-10,238	-11,263
Amortisation					
EBIT	79,509	104,771	129,940	142,120	158,371
Net interest expense					
Associates & JCEs					
Other income	2,255	5,324	6,291	9,691	13,396
Earnings before tax	81,764	110,095	136,231	151,811	171,767
Income tax	-12,088	-21,739	-32,386	-34,916	-39,506
Net profit after tax	69,676	88,356	103,844	116,894	132,261
Minority interests	-1,019	-1,190	-992	-948	-948
Other items	-10	0	0	0	0
Preferred dividends					
Normalised NPAT	68,647	87,166	102,852	115,946	131,313
Extraordinary items	0	0	0	0	0
Reported NPAT	68,647	87,166	102,852	115,946	131,313
Dividends	-45,797	-32,058	-38,927	-43,507	-43,507
Transfer to reserves	22,850	55,108	63,925	72,439	87,805

Valuation and ratio analysis

FD normalised P/E (x)	31.9	25.2	21.3	18.9	16.7
FD normalised P/E at price target (x)	29.9	23.6	20.0	17.7	15.7
Reported P/E (x)	31.9	25.2	21.3	18.9	16.7
Dividend yield (%)	1.8	1.2	1.5	1.7	1.7
Price/cashflow (x)	74.3	18.8	24.5	20.0	18.7
Price/book (x)	10.4	8.6	7.2	5.8	4.7
EV/EBITDA (x)	25.1	19.4	15.5	13.8	12.1
EV/EBIT (x)	27.4	20.8	16.6	14.8	12.9
Gross margin (%)	45.5	44.8	45.1	45.0	43.5
EBITDA margin (%)	28.9	30.0	29.4	29.3	28.2
EBIT margin (%)	26.5	28.1	27.5	27.3	26.4
Net margin (%)	22.9	23.4	21.8	22.3	21.9
Effective tax rate (%)	14.8	19.7	23.8	23.0	23.0
Dividend payout (%)	66.7	36.8	37.8	37.5	33.1
Capex to sales (%)	3.6	4.5	3.9	3.7	3.3
Capex to depreciation (x)	1.5	2.3	2.0	1.9	1.8
ROE (%)	37.5	37.6	36.9	34.1	31.3
ROA (pretax %)	33.3	36.3	38.4	37.4	38.0

Growth (%)

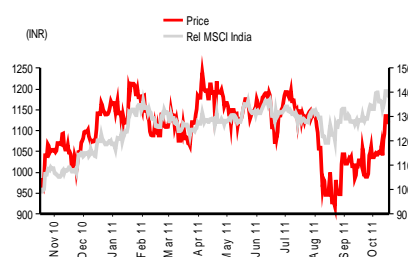
Revenue	8.0	24.3	26.5	10.1	15.5
EBITDA	20.9	29.0	24.2	9.6	11.3
EBIT	20.4	31.8	24.0	9.4	11.4
Normalised EPS	33.6	27.0	18.0	12.7	13.3
Normalised FDEPS	33.6	27.0	18.0	12.7	13.3

Per share

Reported EPS (INR)	35.07	44.54	52.55	59.24	67.09
Norm EPS (INR)	35.07	44.54	52.55	59.24	67.09
Fully diluted norm EPS (INR)	35.07	44.54	52.55	59.24	67.09
Book value per share (INR)	107.49	130.31	155.74	192.75	237.61
DPS (INR)	20.00	14.00	17.00	19.00	19.00

Source: Nomura estimates

Relative performance chart (one year)



Source: ThomsonReuters, Nomura research

(%)	1M	3M	12M
Absolute (INR)	9.0	-2.3	17.9
Absolute (USD)	5.3	-11.1	6.2
Relative to index	8.0	6.2	35.3
Market cap (USDmn)	44,792.2		
Estimated free float (%)	23.0		
52-week range (INR)	1247/902		
3-mth avg daily turnover (USDmn)	50.56		
Major shareholders (%)			
Tata Sons Ltd	73.8		

Source: Thomson Reuters, Nomura research

Notes

We expect USD revenue growth of 25.1%/12.9% for FY12/13F

Cashflow (INRmn)

Year-end 31 Mar	FY10	FY11	FY12F	FY13F	FY14F
EBITDA	86,800	111,985	139,048	152,358	169,634
Change in working capital	-44,271	27,556	-16,201	-6,621	-12,211
Other operating cashflow	-13,035	-22,929	-33,378	-35,864	-40,454
Cashflow from operations	29,494	116,612	89,468	109,872	116,969
Capital expenditure	-10,932	-16,934	-18,243	-19,200	-20,000
Free cashflow	18,561	99,678	71,225	90,672	96,969
Reduction in investments	-20,546	-53,005	-2,577	0	0
Net acquisitions					
Reduction in other LT assets	5,706	-3,266	-4,195	-6,193	-7,713
Addition in other LT liabilities	0	0	0	0	0
Adjustments	1,160	-1,946	-1,006	-570	-570
Cashflow after investing acts	4,882	41,461	63,447	83,909	88,686
Cash dividends	-45,797	-32,058	-38,927	-43,507	-43,507
Equity issue	30,864	-11,354	-12,722	0	0
Debt issue	4,605	1,919	1,075	1,285	2,088
Convertible debt issue	0	0	0	0	0
Others	2,255	5,322	6,291	9,691	13,396
Cashflow from financial acts	-8,073	-36,171	-44,283	-32,531	-28,023
Net cashflow	-3,191	5,290	19,164	51,378	60,664
Beginning cash	13,440	10,249	15,539	34,703	86,081
Ending cash	10,249	15,539	34,703	86,081	146,744
Ending net debt	-10,249	-15,539	-34,703	-86,081	-146,744

Source: Nomura estimates

Notes

Cash flow generation remains strong

Balance sheet (INRmn)

As at 31 Mar	FY10	FY11	FY12F	FY13F	FY14F
Cash & equivalents	10,249	15,539	34,703	86,081	146,744
Marketable securities	37,799	90,821	93,398	93,398	93,398
Accounts receivable	70,109	95,497	129,520	143,312	165,726
Inventories	0	0	0	0	0
Other current assets	59,762	14,485	15,816	17,500	20,237
Total current assets	177,919	216,342	273,438	340,291	426,106
LT investments	17	0	0	0	0
Fixed assets	41,706	51,996	61,701	71,233	80,540
Goodwill	32,415	33,791	34,227	34,227	34,227
Other intangible assets	0	0	0	0	0
Other LT assets	22,488	25,754	29,949	36,142	43,855
Total assets	274,546	327,883	399,314	481,893	584,727
Short-term debt					
Accounts payable	50,996	58,663	77,816	86,670	99,611
Other current liabilities					
Total current liabilities	50,996	58,663	77,816	86,670	99,611
Long-term debt					
Convertible debt					
Other LT liabilities	9,110	11,029	12,104	13,390	15,478
Total liabilities	60,106	69,692	89,920	100,060	115,089
Minority interest	4,056	3,147	4,581	4,581	4,581
Preferred stock	1,000	1,000	1,000	1,000	1,000
Common stock	1,957	1,957	1,957	1,957	1,957
Retained earnings	207,427	252,087	301,856	374,295	462,100
Proposed dividends					
Other equity and reserves					
Total shareholders' equity	210,384	255,044	304,813	377,252	465,058
Total equity & liabilities	274,546	327,883	399,314	481,893	584,727

Notes

Cash levels are on the rise

Liquidity (x)

Current ratio	3.49	3.69	3.51	3.93	4.28
Interest cover	na	na	na	na	na

Leverage

Net debt/EBITDA (x)	net cash	net cash	net cash	net cash	net cash
Net debt/equity (%)	net cash	net cash	net cash	net cash	net cash

Activity (days)

Days receivable	88.4	81.0	87.2	95.7	93.9
Days inventory	0.0	0.0	0.0	0.0	0.0
Days payable	125.6	97.2	96.3	104.9	100.2
Cash cycle	-37.2	-16.2	-9.1	-9.2	-6.3

Source: Nomura estimates

In-line results in both absolute and relative terms

TCS reported USD revenue growth of 4.7% q-q (vs our estimate of 5.4%), EBIT margin improvement of 90bps (in line) and PAT was INR24.4bn (vs our estimate of INR24.6).

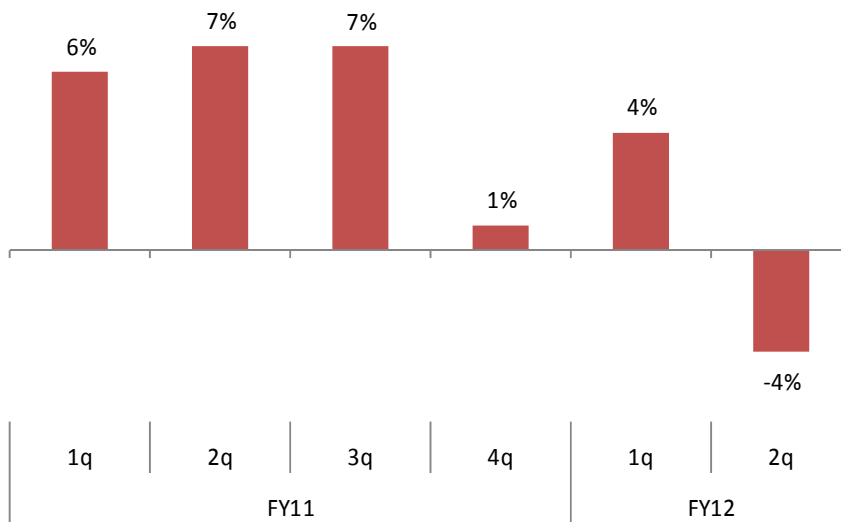
On a relative basis (compared to Infosys), TCS results were again in line with our expectations of 1) smaller outperformance to Infosys in q-q USD revenue growth compared to the previous two quarters and 2) lower margin expansion than Infosys. TCS outperformance to Infosys in q-q USD revenue growth narrowed from 3ppt in the previous two quarters to 0.2ppt in 2Q. Also, EBIT margins improved by 90bps q-q at TCS compared to 210bps at Infosys in 2Q.

Consensus outperformance ends after five quarters

TCS's 2Q results missed on consensus PAT expectations after five quarters of outperformance. We believe the miss could likely weigh on stock price performance in the near term.

Fig. 1: Trend of TCS's earnings outperformance (%) over consensus expectations

TCS misses consensus earnings by 4% in 2QFY12 after 5 quarters of outperformance



Source: Bloomberg, Nomura research

Pricing declines a key disappointment

Pricing declined by ~1% in 2QFY12 on the back of 0.5% decline in the previous quarter. We believe the Street will likely be disappointed by the performance on the pricing front, as TCS management had been guiding for an upward bias in pricing in the previous two quarters. Management has changed its stance this quarter and expects pricing to be stable going forward, with no hope of any increase.

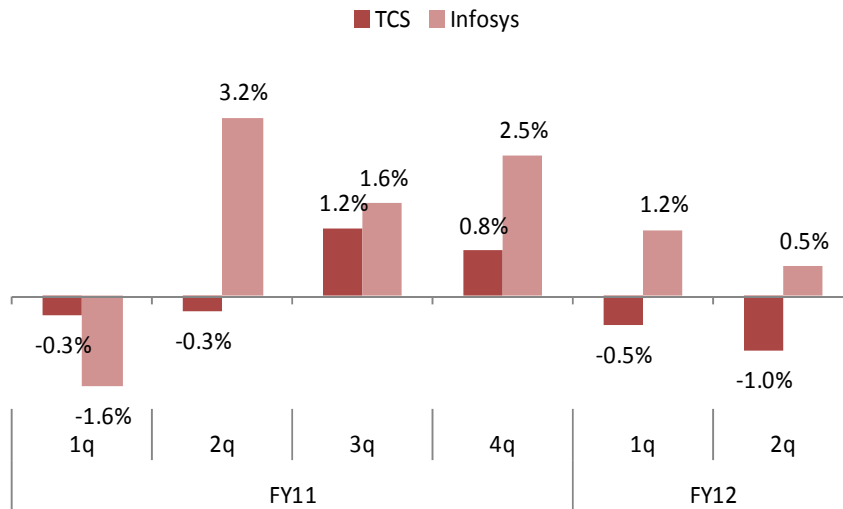
Decline in FPP mix key reason for pricing decline, however mitigating factors plenty

The 290bps q-q decline in the fixed-price mix in 2Q was cited as one of the reasons for the ~1% pricing decline. However, factors that could have aided pricing growth, too, were present, including: 1) a 4% q-q decline in India business, which is a lower-realization business, compared to International business, which grew by 9% q-q in rupee terms; and 2) strong growth in high-realization service lines such as Enterprise solutions (8% q-q in USD terms) and Products (16% q-q in USD terms). In contrast, Infosys

delivered 0.5% blended growth in pricing on a sequential basis (1% on constant-currency pricing) aided by a robust 3.5% pricing increase in offshore on a constant-currency basis.

Fig. 2: TCS vs Infosys: pricing growth (%) trend

TCS has seen pricing declines over the past 2 quarters despite guiding for an upward bias



Note: Pricing growth for Infosys is based on IT Services and Consulting, while for TCS is at the consolidated level

Source: Company data, Nomura research

Fig. 3: TCS management commentary on pricing in the past 3 quarters

TCS commentary on pricing increases has turned from certainty (in 4QFY11) to unlikelihood (in 2QFY12)

Quarter	Management commentary on pricing
2QFY12	<i>Pricing will be stable, very difficult to get pricing increases</i>
1QFY12	<i>We do expect to see some pricing uptick, but it is getting delayed. It is not coming in as expected for various reasons, but I do think that sometime in this fiscal year we should see an uptick, maybe the later part.</i>
4QFY11	<i>Going forward we continue to expect some pricing improvement in the next fiscal year, because customers are not only focused on cost, they are increasingly focusing on value, which should drive significant number of projects due discretionary spend in the coming year.</i>

Note: Excerpts taken from earnings transcript

Source: Company data, Nomura research

Results per se positive, management commentary upbeat

We found TCS results to be positive, although it may not have met heightened Street expectations. The key highlights for the quarter are:

- Volume growth of 6.25% and revenue growth of 6% q-q in the International business (92% of revenues) in USD terms.
- 10 deals signed in 2Q, with each deal having total contract value in excess of USD100mn. These deals were won across all major verticals and split evenly across US and Europe.
- TCS is currently chasing 10 large deals – again, across all major verticals.
- Management commentary: Robust pipeline, deal signings on track, no red flags raised by any client yet.

- Three large deals signed in Telecom vertical – management is optimistic about growth in this vertical in 3Q on the back of these deals (in 2Q, Telecom revenues declined by 4% q-q in USD terms).

No material changes to our estimates

Our USD revenue estimates remain largely unchanged, and we look for 25.1%/12.9% revenue growth in FY12/13F. We have slightly increased our EBITDA margin estimates for FY12F on a higher USD/INR rate assumption. Tax rates assumption has gone up marginally in line with management guidance.

Over FY11F-13F, we expect USD-denominated revenue to record a CAGR of 19%, an EPS CAGR of 15% and an EBITDA margin decline of 70bps.

Fig. 4: Earnings revision

	New		Old		Change (%)	
	FY12F	FY13F	FY12F	FY13F	FY12F	FY13F
Revenue (US\$ mn)	10,242	11,560	10,248	11,523	-0.1	0.3
US\$/INR rate	46.1	45.0	45.4	45.0	1.6	0.0
Revenue (Rs bn)	472.3	520.2	465.3	518.5	1.5	0.3
EBITDA margin (%)	29.4	29.3	28.9	29.1	50 bps	20 bps
Tax Rate (%)	23.8	23.0	22.9	22.5	80 bps	50 bps
Diluted EPS (Rs)	52.6	59.2	52.3	59.4	0.5	-0.2

Source: Nomura estimates

Maintain Neutral; reiterate preference for Infosys over TCS

We maintain our Neutral rating on TCS and reiterate our preference for Infosys over TCS driven by 1) a reversal in the trend of revenue growth outperformance at TCS vs Infosys; and 2) a widening of Infosys' margin lead over TCS and likely sustenance going forward. We find the stock fairly valued and see limited upside triggers.

Revenue growth outperformance of TCS over Infosys likely to reverse next quarter

We expect TCS's revenue growth outperformance over Infosys possibly reversing from next quarter onwards as Infosys starts to gain in momentum post the recent organizational restructuring and lower exposure to Europe/BFSI, the first segment to be impacted by the slowdown. Also, Infosys has guided for an evenly spread out FY12F in terms of sequential revenue growth. Typically, 3Q is a weak quarter compared to 2Q for IT companies on account of fewer working days (due to the holiday season) and client shutdowns. However, Infosys has guided for 5.4% q-q revenue growth in 3Q at the top end – higher than the 4.5% q-q growth it achieved in 2Q. TCS management expects the seasonal weakness in 3Q to play out – confirming our view that Infosys can outperform TCS in 3Q.

Infosys margin lead over TCS likely to sustain

We expect better operational performance at Infosys over TCS in 3Q and going forward, given what we view as the better operational scope at Infosys.

We increase our TP, based on 18x one-year-forward earnings (unchanged) increases to INR1,100 (vs INR1,070 previously) on our roll-forward of earnings.

2QFY12 result highlights

- USD revenue growth was below expectations at 4.7% q-q compared with our and consensus estimate of 5.4% (and in line with Infosys at 4.5% q-q after significant outperformance over the past few quarters)
- Revenue at INR 116.3bn was in line with consensus and our expectation
- EBIT margin at 27.1%, up 90bps, was in line with our estimate and below consensus expectation of +120 bps
- PAT at INR 24.4bn was below our estimate of 24.6bn and consensus of 25.3bn, 2.5% growth q-q
- Headcount increased by 12,580 employees (6.2% q-q growth)
- Attrition declined by 110bps to 13.7% (on a LTM basis, excluding subsidiaries)

Fig. 5: TCS 2QFY12: Actual vs expected

Key parameters	2QFY12		1QFY12	q-q (%)	2QFY11	y-y (%)
	Actual	Estimate				
Revenues (US\$ mn)	2,525	2,542	2,412	4.7	2,004	26.0
Revenues (Rs mn)	116,335	116,433	107,970	7.7	92,864	25.3
EBITDA (Rs mn)	33,829	33,655	30,310	11.6	27,775	21.8
EBITDA margin (%)	29.1	28.9	28.1	100bps	29.9	-80bps
PAT (Rs mn)	24,390	24,584	23,803	2.5	21,262	14.7
EPS (Rs)	12.5	12.6	12.2	2.5	10.9	14.7

Source: Company data, Nomura estimates

Segmental performance

- Growth was broad-based, with BFSI (5% q-q), Manufacturing (7% q-q), Retail (9% q-q) and Energy & Utilities (18% q-q) leading. Telecom declined by 4% q-q.
- TCS grew by 6% q-q in the US, 6% q-q in the UK and 7% q-q in Continental Europe, while India underperformed the company's overall growth significantly with a 7% q-q decline.
- Among service lines, Enterprise solutions (+8% q-q), Infrastructure services (+6% q-q) and Products (+16% q-q) were the leaders. Application development and maintenance had a muted quarter with 1% q-q growth.

Fig. 6: Quarterly performance and expectations

Y/E MARCH	FY11				FY12				FY11	FY12F
	1Q	2Q	3Q	4Q	1Q	2Q	3QF	4QF		
Rs mn										
Revenues (US\$ mn)	1,794	2,004	2,144	2,244	2,412	2,525	2,614	2,692	8,186	10,248
<i>q-q change %</i>	6.4	11.7	7.0	4.7	7.5	4.7	3.5	3.0	29.1	25.2
Revenues	82,173	92,864	96,633	101,575	107,970	116,335	124,172	123,819	373,245	465,259
<i>q-q change %</i>	6.2	13.0	4.1	5.1	6.3	7.7	6.7	-0.3	24.3	24.7
Direct Expenses	44,129	49,956	51,502	53,786	58,791	62,141	65,228	64,904	199,372	251,190
SG&A Expenses	13,889	15,133	15,957	16,909	18,869	20,365	21,429	21,519	61,888	79,537
EBITDA	24,155	27,775	29,174	30,880	30,310	33,829	37,514	37,395	111,985	134,531
<i>EBITDA margin (%)</i>	29.4	29.9	30.2	30.4	28.1	29.1	30.2	30.2	30.0	28.9
Other Income	820	443	1,822	2,239	2,886	997	1,052	1,356	5,324	8,362
Depreciation	1,575	1,660	1,856	2,123	2,049	2,286	2,390	2,383	7,216	8,656
PBT	23,400	26,558	29,140	30,996	31,147	32,540	36,176	36,367	110,093	134,237
Provision for Tax	4,475	5,001	5,491	6,772	7,063	7,913	8,682	8,728	21,739	30,774
<i>Tax rate (%)</i>	19.1	18.8	18.8	21.8	22.7	24.3	24.0	24.0	19.7	22.9
Minority Interest	292	295	189	415	281	237	237	237	1,190	1,124
PAT	18,633	21,262	23,460	23,809	23,803	24,390	27,257	27,402	87,164	102,340
<i>q-q change %</i>	-3.5	14.1	10.3	1.5	0.0	2.5	11.8	0.5	26.8	17.4
Diluted EPS (Rs)	9.5	10.9	12.0	12.2	12.2	12.5	13.9	14.0	44.5	52.3

Source: Company data, Nomura research

Fig. 7: Sequential growth matrix

q-q growth (%)	2QFY11	3QFY11	4QFY11	1QFY12	2QFY12
Service Lines					
ADM	9%	3%	7%	8%	1%
Business Intelligence	16%	1%	-3%	7%	0%
Engineering and Industrial Services	14%	5%	5%	3%	9%
Infrastructure Services	21%	20%	-9%	12%	6%
Enterprise Solutions	17%	0%	18%	7%	8%
Global Consulting	12%	17%	-4%	13%	24%
Asset Leverage Solutions	3%	26%	-6%	7%	16%
Assurance Services	15%	15%	3%	12%	9%
BPO	9%	12%	7%	1%	5%
Industry Verticals					
BFSI	10%	8%	3%	6%	5%
Manufacturing	12%	4%	9%	9%	7%
Telecom	13%	-1%	-3%	14%	-4%
Life Sciences & Healthcare	10%	9%	7%	5%	7%
Retail & Distribution	11%	7%	8%	11%	9%
Transportation	15%	14%	20%	2%	8%
Energy and Utilities	46%	9%	9%	-11%	18%
Media & Entertainment	18%	23%	5%	3%	0%
Hi-Tech	12%	16%	13%	15%	7%
Geographies					
America	9%	7%	4%	6%	6%
UK	13%	12%	1%	6%	6%
Rest of Europe	14%	9%	11%	7%	7%
Europe	14%	11%	5%	7%	6%
India	26%	-1%	0%	14%	-7%
APAC	17%	19%	9%	9%	8%
Ibero America	1%	-15%	8%	4%	1%
MEA	6%	13%	5%	18%	5%

Source: Company data, Nomura research

Scenario analysis: What if the US and Europe slip back into recession?

As the markets have been signaling that risks to our baseline forecasts are on the downside, our global economics team have considered a bear case economic scenario, most obviously triggered by a market meltdown, but the fragile state of the advanced economies leaves them vulnerable to unforeseen shocks or policy errors. For details, see Global Weekly Economic Monitor, 12 August 2011, and Global market turbulence: Implications for Asia, 9 August 2011.

The bear case scenario assumes:

- The US and Euro area slip back into recession, with US GDP averaging -1% saar in 2H11 and Euro GDP averaging -3% before recovering to around 2% growth in 2012.
- The CRB commodity price index falls 15% between now and year-end, but starts rising back again through 2012 reaching current levels by end-2012.

If there is a market meltdown and recessions in the US and euro area, we have no doubt that initially many economies in the region would be hit hard again in an echo of the global financial crisis, as non-linear effects start to kick in, notably financial decelerator effects, multiplier effects of weakening exports on domestic capex and jobs, and capital flight. However, less disturbing this time around are the two factors that there is less leverage in the financial system (less room for capital flight) and less chance of Asian trade finance drying up, as the world's central banks have most likely learnt the need to provide ample USD liquidity through FX swap arrangements.

In this scenario, we find Hong Kong, Singapore, Malaysia and Taiwan to be among the most vulnerable. But, as in 2009, we would expect that, over time, powerful tailwinds would develop, allowing Asia to bounce back before other regions. These tailwinds include a likely further decline in commodity prices and the ample room Asia has to ease monetary and fiscal policies – more so than any other region. In our bear case scenario, we would expect the Fed to resort to further quantitative easing, which once again would likely precipitate strong net capital inflows into Asia, attracted by stronger growth, superior fundamentals and higher interest rates relative to other regions.

What if things get even worse than we can foresee? Although our global economics team does not see such a situation as plausible at the moment, they have run an extreme-case scenario analysis to provide some perspective. This extreme scenario assumes:

- US GDP averaging about -4% saar in 2H11 and Euro GDP averaging -6.5% before recovering to around 1% growth in 2012.
- CRB commodity price index falls 40% between now and year-end, and stays at the lower level through 2012.

The table below summarises both the official bear case and the hypothetical extreme case scenarios.

Fig. 8: Real GDP growth forecasts: baseline and downside scenarios

	2011F			2012F		
	Base case	Bear case	Extreme case	Base case	Bear case	Extreme case
Australia	2.2	1.5	0.9	4.6	3.5	3.3
China	9.5	9.0	8.5	8.6	8.8	6.0
Hong Kong	5.4	4.4	3.4	4.5	4.0	1.2
India	7.7	7.0	6.5	7.9	7.6	7.0
Indonesia	6.5	6.0	4.8	7.0	6.8	4.0
Malaysia	4.7	4.0	1.0	5.1	4.8	-0.4
New Zealand	2.2	1.8	1.4	3.5	3.5	3.3
Philippines	5.1	4.7	3.3	5.7	5.3	2.4
Singapore	4.8	4.3	1.5	5.3	5.1	-1.8
South Korea	3.5	2.5	1.5	5.0	5.0	2.5
Taiwan	4.5	3.6	2.4	5.0	4.9	0.9
Thailand	4.1	3.5	0.6	4.7	4.5	-0.5
Vietnam	6.4	6.0	4.5	6.9	6.5	4.2
Asia ex Japan, Aus, NZ	7.8	7.2	6.4	7.6	7.6	5.1

Source: CEIC and Nomura Global Economics. Units: % y-o-y

The global bear case does not look bad for much of Asia and in fact is marginally better than the base case for China in 2012 because we would expect a V-shape rebound for the region thanks to the likely decline in commodity prices and the ample room Asia has to ease monetary and fiscal policies. We would also expect the Fed to resort to further quantitative easing, which once again would likely precipitate strong net capital inflows into Asia. In the extreme case, however, even these strengths will be tested.

What does this mean for our companies?

In the above-mentioned bear case scenario, we have assumed a 1% pricing cut in the quarter ending March 2012, followed by a 4% cut in the quarter ending June 2012. Under the extreme scenario, we have assumed a 2% pricing cut in the quarter ending March 2012, followed by an 8% cut in the quarter ending June 2012. We have assumed 10%/20% de-rating in P/E multiples in the bear case/extreme case scenarios, respectively.

Fig. 9: Earnings and Price target sensitivity

	Base case	Bear case	Downside %	Extreme case	Downside %
TCS					
FY 12F EPS	53	52	-1%	52	-2%
FY 13F EPS	59	51	-14%	42	-28%
12-m target price	1100	860	-22%	630	-43%

Source: Nomura estimates

Appendix A-1

Analyst Certification

We, Ashwin Mehta and Pinku Pappan, hereby certify (1) that the views expressed in this Research report accurately reflect our personal views about any or all of the subject securities or issuers referred to in this Research report, (2) no part of our compensation was, is or will be directly or indirectly related to the specific recommendations or views expressed in this Research report and (3) no part of our compensation is tied to any specific investment banking transactions performed by Nomura Securities International, Inc., Nomura International plc or any other Nomura Group company.

Issuer Specific Regulatory Disclosures

Mentioned companies

Issuer name	Ticker	Price	Price date	Stock rating	Sector rating	Disclosures
Infosys	INFO IN	INR 2746	17-Oct-2011	Buy	Not rated	123
Tata Consultancy Services	TCS IN	INR 1120	17-Oct-2011	Neutral	Not rated	

Disclosures required in the U.S.

123 Market Maker - NSI

Nomura Securities International Inc. makes a market in securities of the company.

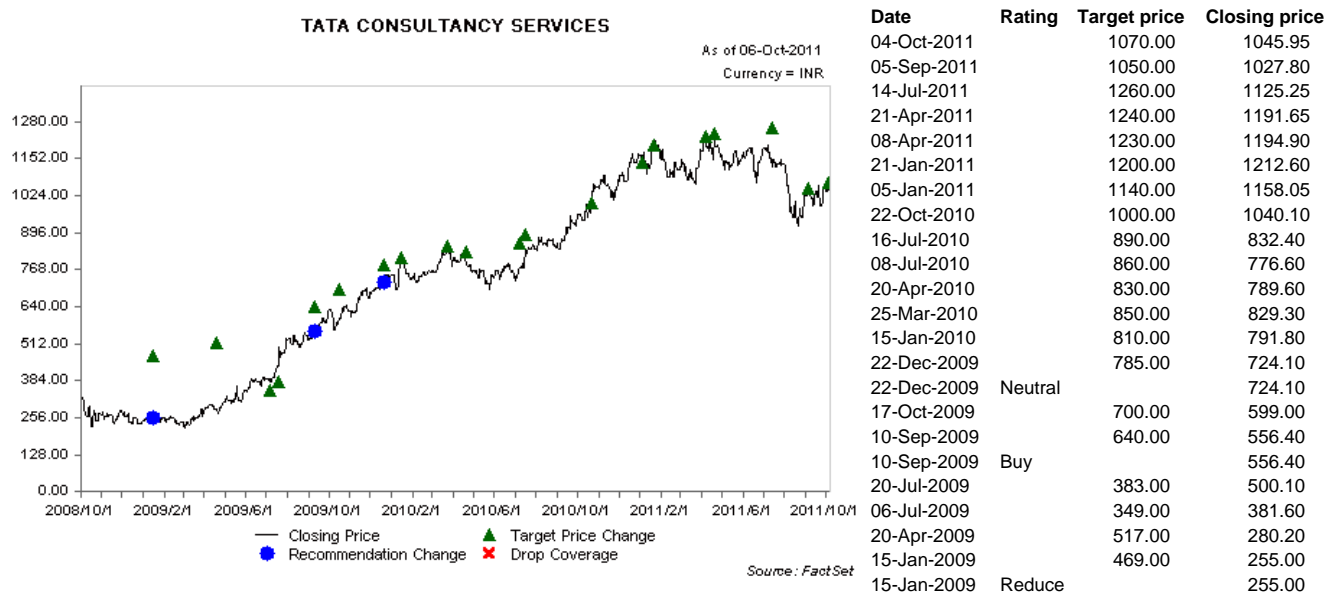
Previous Rating

Issuer name	Previous Rating	Date of change
Infosys	Neutral	21-Jan-2011
Tata Consultancy Services	Buy	22-Dec-2009

Tata Consultancy Services (TCS IN)

INR 1120 (17-Oct-2011) Neutral (Sector rating: Not rated)

Rating and target price chart (three year history)



For explanation of ratings refer to the stock rating keys located after chart(s)

Valuation Methodology Our target price of INR1,100 is based on 18x our FY13F earnings forecast of INR62. Our target multiple is in line with the stock's historical average, reflecting heightened economic uncertainties and risk on its high BFSI and Europe exposure.

Risks that may impede the achievement of the target price The key risks include: 1) faster-than-anticipated slowdown and breakage of pricing discipline in the industry; 2) rupee appreciation; 3) client-specific issues; and 4) deterioration in management commentary from the current position of no issues on demand.

Important Disclosures

Online availability of research and additional conflict-of-interest disclosures

Nomura Equity Research is available on nomuranow.com, Bloomberg, Capital IQ, Factset, Reuters and ThomsonOne.

Important disclosures may be accessed through the left hand side of the Nomura Disclosure web

page <http://go.nomuranow.com/research/globalresearchportal> or requested from Nomura Securities International, Inc., on 1-877-865-5752. If you have any difficulties with the website, please email grpsupport-eu@nomura.com for technical assistance.

The analysts responsible for preparing this report have received compensation based upon various factors including the firm's total revenues, a portion of which is generated by Investment Banking activities. Unless otherwise noted, the non-US analysts listed at the front of this report are not registered/qualified as research analysts under FINRA/NYSE rules, may not be associated persons of NSI, and may not be subject to FINRA Rule 2711 and NYSE Rule 472 restrictions on communications with covered companies, public appearances, and trading securities held by a research analyst account.

Industry Specialists identified in some Nomura International plc research reports are employees within the Firm who are responsible for the sales and trading effort in the sector for which they have coverage. *Industry Specialists* do not contribute in any manner to the content of research reports in which their names appear. *Marketing Analysts* identified in some Nomura research reports are research analysts employed by Nomura International plc who are primarily responsible for marketing Nomura's Equity Research product in the sector for which they have coverage. *Marketing Analysts* may also contribute to research reports in which their names appear and publish research on their sector.

Distribution of ratings (US)

The distribution of all ratings published by Nomura US Equity Research is as follows:

39% have been assigned a Buy rating which, for purposes of mandatory disclosures, are classified as a Buy rating; 8% of companies with this rating are investment banking clients of the Nomura Group*.

54% have been assigned a Neutral rating which, for purposes of mandatory disclosures, is classified as a Hold rating; 3% of companies with this rating are investment banking clients of the Nomura Group*.

7% have been assigned a Reduce rating which, for purposes of mandatory disclosures, are classified as a Sell rating; 0% of companies with this rating are investment banking clients of the Nomura Group*.

As at 30 September 2011. *The Nomura Group as defined in the Disclaimer section at the end of this report.

Distribution of ratings (Global)

The distribution of all ratings published by Nomura Global Equity Research is as follows:

49% have been assigned a Buy rating which, for purposes of mandatory disclosures, are classified as a Buy rating; 41% of companies with this rating are investment banking clients of the Nomura Group*.

41% have been assigned a Neutral rating which, for purposes of mandatory disclosures, is classified as a Hold rating; 50% of companies with this rating are investment banking clients of the Nomura Group*.

10% have been assigned a Reduce rating which, for purposes of mandatory disclosures, are classified as a Sell rating; 20% of companies with this rating are investment banking clients of the Nomura Group*.

As at 30 September 2011. *The Nomura Group as defined in the Disclaimer section at the end of this report.

Explanation of Nomura's equity research rating system in Europe, Middle East and Africa, US and Latin America for ratings published from 27 October 2008

The rating system is a relative system indicating expected performance against a specific benchmark identified for each individual stock.

Analysts may also indicate absolute upside to target price defined as (fair value - current price)/current price, subject to limited management discretion. In most cases, the fair value will equal the analyst's assessment of the current intrinsic fair value of the stock using an appropriate valuation methodology such as discounted cash flow or multiple analysis, etc.

STOCKS

A rating of '**Buy**', indicates that the analyst expects the stock to outperform the Benchmark over the next 12 months. A rating of '**Neutral**', indicates that the analyst expects the stock to perform in line with the Benchmark over the next 12 months. A rating of '**Reduce**', indicates that the analyst expects the stock to underperform the Benchmark over the next 12 months. A rating of '**Suspended**', indicates that the rating, target price and estimates have been suspended temporarily to comply with applicable regulations and/or firm policies in certain circumstances including, but not limited to, when Nomura is acting in an advisory capacity in a merger or strategic transaction involving the company.

Benchmarks are as follows: **United States/Europe**: Please see valuation methodologies for explanations of relevant benchmarks for stocks (accessible through the left hand side of the Nomura Disclosure web page: <http://go.nomuranow.com/research/globalresearchportal>); **Global Emerging Markets (ex-Asia)**: MSCI Emerging Markets ex-Asia, unless otherwise stated in the valuation methodology.

SECTORS

A '**Bullish**' stance, indicates that the analyst expects the sector to outperform the Benchmark during the next 12 months. A '**Neutral**' stance, indicates that the analyst expects the sector to perform in line with the Benchmark during the next 12 months. A '**Bearish**' stance, indicates that the analyst expects the sector to underperform the Benchmark during the next 12 months.

Benchmarks are as follows: **United States**: S&P 500; **Europe**: Dow Jones STOXX 600; **Global Emerging Markets (ex-Asia)**: MSCI Emerging Markets ex-Asia.

Explanation of Nomura's equity research rating system for Asian companies under coverage ex Japan published from 30 October 2008 and in Japan from 6 January 2009

STOCKS

Stock recommendations are based on absolute valuation upside (downside), which is defined as (Target Price - Current Price) / Current Price, subject to limited management discretion. In most cases, the Target Price will equal the analyst's 12-month intrinsic valuation of the stock, based on an appropriate valuation methodology such as discounted cash flow, multiple analysis, etc.

A '**Buy**' recommendation indicates that potential upside is 15% or more. A '**Neutral**' recommendation indicates that potential upside is less than 15% or downside is less than 5%. A '**Reduce**' recommendation indicates that potential downside is 5% or more. A rating of '**Suspended**' indicates that the rating and target price have been suspended temporarily to comply with applicable regulations and/or firm policies in certain circumstances including when Nomura is acting in an advisory capacity in a merger or strategic transaction involving the subject company.

Securities and/or companies that are labelled as **'Not rated'** or shown as **'No rating'** are not in regular research coverage of the Nomura entity identified in the top banner. Investors should not expect continuing or additional information from Nomura relating to such securities and/or companies.

SECTORS

A **'Bullish'** rating means most stocks in the sector have (or the weighted average recommendation of the stocks under coverage is) a positive absolute recommendation. A **'Neutral'** rating means most stocks in the sector have (or the weighted average recommendation of the stocks under coverage is) a neutral absolute recommendation. A **'Bearish'** rating means most stocks in the sector have (or the weighted average recommendation of the stocks under coverage is) a negative absolute recommendation.

Explanation of Nomura's equity research rating system in Japan published prior to 6 January 2009 (and ratings in Europe, Middle East and Africa, US and Latin America published prior to 27 October 2008)

STOCKS

A rating of '1' or **'Strong buy'**, indicates that the analyst expects the stock to outperform the Benchmark by 15% or more over the next six months. A rating of '2' or **'Buy'**, indicates that the analyst expects the stock to outperform the Benchmark by 5% or more but less than 15% over the next six months. A rating of '3' or **'Neutral'**, indicates that the analyst expects the stock to either outperform or underperform the Benchmark by less than 5% over the next six months. A rating of '4' or **'Reduce'**, indicates that the analyst expects the stock to underperform the Benchmark by 5% or more but less than 15% over the next six months. A rating of '5' or **'Sell'**, indicates that the analyst expects the stock to underperform the Benchmark by 15% or more over the next six months.

Stocks labeled **'Not rated'** or shown as **'No rating'** are not in Nomura's regular research coverage. Nomura might not publish additional research reports concerning this company, and it undertakes no obligation to update the analysis, estimates, projections, conclusions or other information contained herein.

SECTORS

A **'Bullish'** stance, indicates that the analyst expects the sector to outperform the Benchmark during the next six months. A **'Neutral'** stance, indicates that the analyst expects the sector to perform in line with the Benchmark during the next six months. A **'Bearish'** stance, indicates that the analyst expects the sector to underperform the Benchmark during the next six months.

Benchmarks are as follows: **Japan:** TOPIX; **United States:** S&P 500, MSCI World Technology Hardware & Equipment; **Europe,** by sector - **Hardware/Semiconductors:** FTSE W Europe IT Hardware; **Telecoms:** FTSE W Europe Business Services; **Business Services:** FTSE W Europe; **Auto & Components:** FTSE W Europe Auto & Parts; **Communications equipment:** FTSE W Europe IT Hardware; **Ecology Focus:** Bloomberg World Energy Alternate Sources; **Global Emerging Markets:** MSCI Emerging Markets ex-Asia.

Explanation of Nomura's equity research rating system for Asian companies under coverage ex Japan published prior to 30 October 2008

STOCKS

Stock recommendations are based on absolute valuation upside (downside), which is defined as $(\text{Fair Value} - \text{Current Price}) / \text{Current Price}$, subject to limited management discretion. In most cases, the Fair Value will equal the analyst's assessment of the current intrinsic fair value of the stock using an appropriate valuation methodology such as Discounted Cash Flow or Multiple analysis etc. However, if the analyst doesn't think the market will revalue the stock over the specified time horizon due to a lack of events or catalysts, then the fair value may differ from the intrinsic fair value. In most cases, therefore, our recommendation is an assessment of the difference between current market price and our estimate of current intrinsic fair value. Recommendations are set with a 6-12 month horizon unless specified otherwise. Accordingly, within this horizon, price volatility may cause the actual upside or downside based on the prevailing market price to differ from the upside or downside implied by the recommendation.

A **'Strong buy'** recommendation indicates that upside is more than 20%. A **'Buy'** recommendation indicates that upside is between 10% and 20%. A **'Neutral'** recommendation indicates that upside or downside is less than 10%. A **'Reduce'** recommendation indicates that downside is between 10% and 20%. A **'Sell'** recommendation indicates that downside is more than 20%.

SECTORS

A **'Bullish'** rating means most stocks in the sector have (or the weighted average recommendation of the stocks under coverage is) a positive absolute recommendation. A **'Neutral'** rating means most stocks in the sector have (or the weighted average recommendation of the stocks under coverage is) a neutral absolute recommendation. A **'Bearish'** rating means most stocks in the sector have (or the weighted average recommendation of the stocks under coverage is) a negative absolute recommendation.

Target Price

A Target Price, if discussed, reflect in part the analyst's estimates for the company's earnings. The achievement of any target price may be impeded by general market and macroeconomic trends, and by other risks related to the company or the market, and may not occur if the company's earnings differ from estimates.

Disclaimers

This publication contains material that has been prepared by the Nomura entity identified at the top or bottom of page 1 herein, if any, and/or, with the sole or joint contributions of one or more Nomura entities whose employees and their respective affiliations are specified on page 1 herein or elsewhere identified in the publication. Affiliates and subsidiaries of Nomura Holdings, Inc. (collectively, the 'Nomura Group'), include: Nomura Securities Co., Ltd. ('NSC') Tokyo, Japan; Nomura International plc ('Nlplc'), United Kingdom; Nomura Securities International, Inc. ('NSI'), New York, NY; Nomura International (Hong Kong) Ltd. ('NIHK'), Hong Kong; Nomura Financial Investment (Korea) Co., Ltd. ('NFIK'), Korea (Information on Nomura analysts registered with the Korea Financial Investment Association ('KOFIA') can be found on the KOFIA Intranet at <http://dis.kofia.or.kr>); Nomura Singapore Ltd. ('NSL'), Singapore (Registration number 197201440E, regulated by the Monetary Authority of Singapore); Capital Nomura Securities Public Company Limited ('CNS'), Thailand; Nomura Australia Ltd. ('NAL'), Australia (ABN 48 003 032 513), regulated by the Australian Securities and Investment Commission ('ASIC') and holder of an Australian financial services licence number 246412; P.T. Nomura Indonesia ('PTNI'), Indonesia; Nomura Securities Malaysia Sdn. Bhd. ('NSM'), Malaysia; Nomura International (Hong Kong) Ltd., Taipei Branch ('NITB'), Taiwan; Nomura Financial Advisory and Securities (India) Private Limited ('NFASL'), Mumbai, India (Registered Address: Ceejay House, Level 11, Plot F, Shivsagar Estate, Dr. Annie Besant Road, Worli, Mumbai- 400 018, India; SEBI Registration No: BSE INB011299030, NSE INB231299034, INF231299034, INE 231299034); Banque Nomura France ('BNF'); Nlplc, Dubai Branch ('Nlplc, Dubai'); Nlplc, Madrid Branch ('Nlplc, Madrid') and OOO Nomura, Moscow ('OOO Nomura').

THIS MATERIAL IS: (I) FOR YOUR PRIVATE INFORMATION, AND WE ARE NOT SOLICITING ANY ACTION BASED UPON IT; (II) NOT TO BE CONSTRUED AS AN OFFER TO SELL OR A SOLICITATION OF AN OFFER TO BUY ANY SECURITY IN ANY JURISDICTION WHERE SUCH OFFER OR SOLICITATION WOULD BE ILLEGAL; AND (III) BASED UPON INFORMATION THAT WE CONSIDER RELIABLE.

NOMURA GROUP DOES NOT WARRANT OR REPRESENT THAT THE PUBLICATION IS ACCURATE, COMPLETE, RELIABLE, FIT FOR ANY PARTICULAR PURPOSE OR MERCHANTABLE AND DOES NOT ACCEPT LIABILITY FOR ANY ACT (OR DECISION NOT TO ACT) RESULTING FROM USE OF THIS PUBLICATION AND RELATED DATA. TO THE MAXIMUM EXTENT PERMISSIBLE ALL WARRANTIES AND OTHER ASSURANCES BY NOMURA GROUP ARE HEREBY EXCLUDED AND NOMURA GROUP SHALL HAVE NO LIABILITY FOR THE USE, MISUSE, OR DISTRIBUTION OF THIS INFORMATION.

Opinions expressed are current opinions as of the original publication date appearing on this material only and the information, including the opinions contained herein, are subject to change without notice. Nomura is under no duty to update this publication. If and as applicable, NSI's investment banking relationships, investment banking and non-investment banking compensation and securities ownership (identified in this report as 'Disclosures Required in the United States'), if any, are specified in disclaimers and related disclosures in this report. In addition, other members of the Nomura Group may from time to time perform investment banking or other services (including acting as advisor, manager or lender) for, or solicit investment banking or other business from, companies mentioned herein. Furthermore, the Nomura Group, and/or its officers, directors and employees, including persons, without limitation, involved in the preparation or issuance of this material may, to the extent permitted by applicable law and/or regulation, have long or short positions in, and buy or sell, the securities (including ownership by NSI, referenced above), or derivatives (including options) thereof, of companies mentioned herein, or related securities or derivatives. For financial instruments admitted to trading on an EU regulated market, Nomura Holdings Inc's affiliate or its subsidiary companies may act as market maker or liquidity provider (in accordance with the interpretation of these definitions under FSA rules in the UK) in the financial instruments of the issuer. Where the activity of liquidity provider is carried out in accordance with the definition given to it by specific laws and regulations of other EU jurisdictions, this will be separately disclosed within this report. Furthermore, the Nomura Group may buy and sell certain of the securities of companies mentioned herein, as agent for its clients.

Investors should consider this report as only a single factor in making their investment decision and, as such, the report should not be viewed as identifying or suggesting all risks, direct or indirect, that may be associated with any investment decision. Please see the further disclaimers in the disclosure information on companies covered by Nomura analysts available at <http://go.nomuranow.com/research/globalresearchportal> under the 'Disclosure' tab. Nomura Group produces a number of different types of research product including, among others, fundamental analysis, quantitative analysis and short term trading ideas; recommendations contained in one type of research product may differ from recommendations contained in other types of research product, whether as a result of differing time horizons, methodologies or otherwise; it is possible that individual employees of Nomura may have different perspectives to this publication.

NSC and other non-US members of the Nomura Group (i.e. excluding NSI), their officers, directors and employees may, to the extent it relates to non-US issuers and is permitted by applicable law, have acted upon or used this material prior to, or immediately following, its publication.

Foreign-currency-denominated securities are subject to fluctuations in exchange rates that could have an adverse effect on the value or price of, or income derived from, the investment. In addition, investors in securities such as ADRs, the values of which are influenced by foreign currencies, effectively assume currency risk. The securities described herein may not have been registered under the US Securities Act of 1933, and, in such case, may not be offered or sold in the United States or to US persons unless they have been registered under such Act, or except in compliance with an exemption from the registration requirements of such Act. Unless governing law permits otherwise, you must contact a Nomura entity in your home jurisdiction if you want to use our services in effecting a transaction in the securities mentioned in this material.

This publication has been approved for distribution in the United Kingdom and European Union as investment research by Nlplc, which is authorized and regulated by the UK Financial Services Authority ('FSA') and is a member of the London Stock Exchange. It does not constitute a personal recommendation, as defined by the FSA, or take into account the particular investment objectives, financial situations, or needs of individual investors. It is intended only for investors who are 'eligible counterparties' or 'professional clients' as defined by the FSA, and may not, therefore, be redistributed to retail clients as defined by the FSA. This publication may be distributed in Germany via Nomura Bank (Deutschland) GmbH, which is authorized and regulated in Germany by the Federal Financial Supervisory Authority ('BaFin'). This publication has been approved by NIHK, which is regulated by the Hong Kong Securities and Futures Commission, for distribution in Hong Kong by NIHK. This publication has been approved for distribution in Australia by NAL, which is authorized and regulated in Australia by the ASIC. This publication has also been approved for distribution in Malaysia by NSM. In Singapore, this publication has been distributed by NSL. NSL accepts legal responsibility for the content of this publication, where it concerns securities, futures and foreign exchange, issued by their foreign affiliates in respect of recipients who are not accredited, expert or institutional investors as defined by the Securities and Futures Act (Chapter 289). Recipients of this publication should contact NSL in respect of matters arising from, or in connection with, this publication. Unless prohibited by the provisions of Regulation S of the U.S. Securities Act of 1933, this material is distributed in the United States, by NSI, a US-registered broker-dealer, which accepts responsibility for its contents in accordance with the provisions of Rule 15a-6, under the US Securities Exchange Act of 1934.

This publication has not been approved for distribution in the Kingdom of Saudi Arabia or to clients other than 'professional clients' in the United Arab Emirates by Nomura Saudi Arabia, Nlplc or any other member of the Nomura Group, as the case may be. Neither this publication nor any copy thereof may be taken or transmitted or distributed, directly or indirectly, by any person other than those authorised to do so into the Kingdom of Saudi Arabia or in the United Arab Emirates or to any person located in the Kingdom of Saudi Arabia or to clients other than 'professional clients' in the United Arab Emirates. By accepting to receive this publication, you represent that you are not located in the Kingdom of Saudi Arabia or that you are a 'professional client' in the United Arab Emirates and agree to comply with these restrictions. Any failure to comply with these restrictions may constitute a violation of the laws of the Kingdom of Saudi Arabia or the United Arab Emirates.

No part of this material may be (i) copied, photocopied, or duplicated in any form, by any means; or (ii) redistributed without the prior written consent of the Nomura Group member identified in the banner on page 1 of this report. Further information on any of the securities mentioned herein may be obtained upon request. If this publication has been distributed by electronic transmission, such as e-mail, then such transmission cannot be guaranteed to be secure or error-free as information could be intercepted, corrupted, lost, destroyed, arrive late or incomplete, or contain viruses. The sender therefore does not accept liability for any errors or omissions in the contents of this publication, which may arise as a result of electronic transmission. If verification is required, please request a hard-copy version.

Additional information available upon request

Nlplc and other Nomura Group entities manage conflicts identified through the following: their Chinese Wall, confidentiality and independence policies, maintenance of a Restricted List and a Watch List, personal account dealing rules, policies and procedures for managing conflicts of interest arising from the allocation and pricing of securities and impartial investment research and disclosure to clients via client documentation.

Disclosure information is available at the Nomura Disclosure web page:

<http://go.nomuranow.com/research/globalresearchportal/pages/disclosures/disclosures.aspx>