AUTOS \& AUTO PARTS
Autos \& Auto Parts

## Initiation of Coverage

## SECTOR VIEW

New:<br>BULLISH<br>NOT RATED<br>Old:

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Analyst Certification
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Report accurately reflect our personal views about any or all of the subject securities or issuers referred to in this Industry Report and (2) no part of our compensation was, is or will be directly or indirectly related to the specific
recommendations or views expressed in this Industry Report.

November 12, 2008
Nomura Financial Advisory and Securities (India) Private Limited

## Cars and two-wheelers

## Slow but steady driving

We initiate coverage of the Indian car and two-wheeler segment with a BULLISH view. This segment depends on income growth, which we believe will be supported by: 1) salary hikes for government employees and 2) increasing incomes for rural India because of increased minimum support prices (MSP) for farm products. Affordability should also improve with a fall in interest rates and a possible fall in petrol prices. We estimate stronger growth in earnings because of improved margins resulting from falling commodity prices. Even after factoring in lower volume growth for the next two years, most of the stocks under our coverage are trading at $8-10 \times$ FY10E EPS, at the lower end of their trading bands, factoring in low earnings growth. Our top picks are Maruti Suzuki India Limited (MSIL), trading at $8.2 \times$ FY11E EPS and Hero Honda $(\mathrm{HH})$, trading at $9.2 \times$ FY11E EPS.

- We believe that following a slow 2H FYO9E (fiscal year ending March) volume growth will pick up in FY1OE. Interest rates have started coming off with the Reserve Bank of India (RBI) infusing liquidity into the system and cutting repo rates. We believe that credit availability will improve considerably by end-FYO9E.
- Volume growth should be supported by a $67 \%$ increase in salaries for 3.1 mn central government employees and expected hikes of a similar proportion for approximately 8 mn state government employees (see Appendix II). Increases in incomes in rural India should also continue with the increase in the MSP of food grains (see Appendix I).
- We believe that with falling commodity prices, margins will improve. The Indian auto market is highly consolidated with the two top two-wheeler companies commanding an $83 \%$ market share and the three top car companies commanding an $83 \%$ market share (end-FYO8). Hence, price wars seem unlikely, in our view.
- We estimate domestic car volume growth of $3 \%$ in 2 H FYO9E and $6 \%$ in FY1OE. We believe that recent credit availability issues will have a much greater impact on two-wheelers, and volumes in 2 H FYO9E will be flat, followed by $6 \%$ growth in FYIOE.
- We believe demographics still favour strong growth for the Indian auto sector over a long period, especially for cars. Only nine out of every 1,000 Indians own a car. We estimate that medium-term domestic car volume growth will be around $12 \%$. For two wheelers, we estimate medium-term growth rates of around $4 \%$.

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INDICATED.
PLEASE SEE IMPORTANT DISCLOSURES BEGINNING ON PAGE 41 [gl]

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## Coverage summary

Exhibit 1. Summary of ratings and price targets

| Company | Reuters | Bloomberg | Rating | Price target (INR) | Current price (INR) | Potential upside (\%) |
| :--- | :--- | :--- | :--- | ---: | ---: | ---: |
| Maruti Suzuki India Limited | MRTI.NS | MSIL IS | BUY | 775 | 594.3 | 30.4 |
| Hero Honda | HROH.NS | HH IS | BUY | 946 | 756.3 |  |
| Bajaj Auto | BAJA.NS | BJAUT IS | BUY | 544 | 425.9 |  |
| TVS Motor Company | TVSM.NS | TVSL IS | NEUTRAL | 30.4 | 27.7 |  |

Prices as of 10 November 2008. Source: Nomura estimates
Exhibit 2. Valuation summary

| Company | Ticker | Ticker | Rating | Price | EPS CAGR |  | Curren | nt P/E |  |  | Targe | P/E |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | (Reuters) | (Bloomberg) |  | (INR)* | FY09-FY11E (\%) | FY08 | FY09E | FY10E | FY11E | FY08 | FY09E | FY10E | FY11E |
| Maruti Suzuki | MRTI.NS | MSIL IS | BUY | 594.3 | 20.4 | 10.4 | 11.9 | 9.4 | 8.2 | 13.6 | 15.5 | 12.2 | 10.7 |
| Hero Honda | HROH.NS | HH IS | BUY | 756.3 | 16.1 | 15.6 | 12.4 | 10.4 | 9.2 | 19.5 | 15.5 | 13 | 11.5 |
| Bajaj Auto | BAJA.NS | BJAUT IS | BUY | 425.9 | 10.9 | 7.5 | 7.3 | 6.5 | 6.0 | 9.5 | 9.3 | 8.3 | 7.7 |
| TVS Motor Co | TVSM.NS | TVSL IS | NEUTRAL | 28.5 | 40.1 | 15.5 | 13.7 | 8.7 | 7.0 | 16.5 | 14.6 | 9.3 | 7.4 |
| Average |  |  |  |  | 21.9 | 12.2 | 11.3 | 8.7 | 7.6 | 14.8 | 13.7 | 10.7 | 9.3 |
| *Prices as of 10 November 2008. Source: Nomura estimates |  |  |  |  |  |  |  |  |  |  |  |  |  |

Exhibit 3. Valuation summary for other regions

| Stock | Ticker | Price <br> (local curr.) | Currency | Rating | Earnings CAGR <br> FY09-FY11E (\%) | Current P/E |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | 2007A | 2008A | 2009E | 2010E |
| China |  |  |  |  |  |  |  |  |  |
| Dongfeng Motor | 489 HK | 1.98 | RMB | REDUCE | -7.1 | 4.5 | 4.1 | 5.5 | 4.7 |
| Great Wall Motor | 2333 HK | 2.95 | RMB | REDUCE | -18.0 | 3.2 | 4.0 | 7.1 | 5.9 |
| Brilliance China | 1114 HK | 0.335 | RMB | REDUCE |  | 13.7 | 19.7 | -9.1 | -6.0 |
| Geely Auto | 175 HK | 0.41 | RMB | REDUCE | -35.7 | 5.9 | 3.0 | 7.5 | 7.2 |
| Denway Motors | 203 HK | 1.73 | RMB | BUY | -20.3 | 6.0 | 5.7 | 5.6 | 5.3 |
| Shanghai Auto | 600104 CH | 5.51 | RMB | REDUCE | -24.7 | 7.8 | 13.8 | 17.3 | 14.3 |
| Weichai Power | 2338 HK | 18.1 | RMB | NEUTRAL | -26.9 | 4.6 | 4.2 | 5.5 | 4.4 |
| Average |  |  |  |  | -22.1 | 6.5 | 7.8 | 5.6 | 5.1 |
| Korea |  |  |  |  |  |  |  |  |  |
| Hyundai Mobis | 012330 KS | 76,400 | KRW | BUY | 9.5 | 8.2 | 7.1 | 6.4 | 5.9 |
| Hyundai Motor | 005380 KS | 51,400 | KRW | NEUTRAL | 4.9 | 9.2 | 7.8 | 8.0 | 7.1 |
| Kia Motors | 000270 KS | 9,650 | KRW | REDUCE | 66.8 | 246.7 | 29.6 | 35.3 | 10.6 |
| Average(excl. Kia) |  |  |  |  | 7.2 | 8.7 | 7.4 | 7.2 | 6.5 |
| Japan |  |  |  |  |  |  |  |  |  |
| Nissan Motor | 7201 JP | 440 | JPY | REDUCE | -1.6 | 3.7 | 11.3 | 15.7 | 11.6 |
| Toyota Motor | 7203 JP | 3,520 | JPY | REDUCE | 1.5 | 6.5 | 11.6 | 12.3 | 11.3 |
| Mazda Motor | 7261 JP | 196 | JPY | REDUCE | 43.1 |  | 30.6 | 10.9 | 15.0 |
| Daihatsu Motor | 7262 JP | 877 | JPY | BUY | 8.9 | 10.7 | 10.7 | 9.8 | 9.0 |
| Honda Motor | 7267 JP | 2,365 | JPY | NEUTRAL | -2.6 | 7.2 | 8.8 | 10.1 | 9.3 |
| Suzuki Motor | 7269 JP | 1,470 | JPY | NEUTRAL | 6.5 | 8.3 | 10.1 | 9.2 | 8.9 |
| Fuji Heavy Industries | 7270 JP | 329 | JPY | REDUCE | 3.2 | 12.8 | 30.5 | 34.6 | 28.6 |
| Isuzu Motors | 7202 JP | 162 | JPY | NEUTRAL | -11.2 | 3.8 | 7.5 | 12.1 | 9.5 |
| Yamaha Motors | 7272 JP | 1,079 | JPY | NEUTRAL | -11.1\% | 4.3 | 7.2 | 10.0 | 9.1 |
| Hino Motors | 7205 JP | 231 | JPY | NEUTRAL | 133.6 | 6.0 | 66.0 | 17.2 | 12.1 |
| Mitsubishi Motors | 7211 JP | 148 | JPY | REDUCE | -27.0 | 38.9 | 98.7 | 370.0 | 185.0 |
| Average(excl. Mitsubishi) |  |  |  |  | 17.0 | 7.0 | 19.4 | 14.2 | 12.4 |
| Source: Company data, Nomura estimates (Korea analyst - Mike Oh, China analyst - Yankun Hou, Japan analyst - S. Naruse); pricing as of 10 November |  |  |  |  |  |  |  |  |  |

MSIL is trading at $9.4 \times$ FY1OE EPS. The stock is down $39 \%$ YTD, outperforming the BSE Sensex by $9.2 \%$. The market's primary concerns on the stock have been weak volume growth and declining margins. We believe that volume growth will improve next year with the start of MSIL's exports to Europe, improvements in finance availability and a fall in interest rates. Margins should also improve with the fall in commodity prices. We estimate earnings CAGR of $20.4 \%$ for MSIL and initiate coverage with a BUY rating and a 12month price target of INR775, representing $30.4 \%$ potential upside. MSIL is trading at the lower end of its trading band (Exhibit 3).

HH is trading at $10.4 \times$ FYIOE EPS. While the stock has outperformed the market by $56.4 \%$ because of strong volume growth and earnings upgrades, we believe that strong earnings growth should continue because of: 1) tax breaks available at its new plant, 2) improving margins because of a fall in commodity prices and 3) its strong competitive position in the market. We initiate coverage with a BUY rating and a 12 -month price target of INR946, representing $25.1 \%$ potential upside. It is also trading at the lower end of its trading band. In FY07, PAT growth was negative at $-11.7 \%$ and average one-year forward P/E was 16.7x (Exhibit 4). In FYO8 volumes were flat, but average P/E was 12.1x. We are expecting positive volume growth and earnings CAGR of $16 \%$ over FYO9E to FY1 1E.

We initiate coverage of Bajaj Auto with a BUY rating and a 12 -month price target of INR544 because it is trading at a steep discount to peers. Its export growth is likely to remain strong and the recent depreciation in the rupee should benefit margins next year. The stock is trading at $6.5 \times$ FYIOE EPS. The stock does not have enough trading history to make a P/E band comparison, but we believe that the approximately $30 \%$ discount to HH is fair value for the company.

We initiate coverage of TVS Motor Company (TVS) with a NEUTRAL rating and a 12month price target of INR30.4, because we believe that its weak position in the market and lower financial flexibility justifies a discount to its peers.

Exhibit 4. MSIL: P/E band


[^0]Exhibit 5. Hero Honda: P/E band


[^1]Exhibit 6. TVS: P/E band
TVS Suzuki
TVS at P/E 15
TVS at P/E 30
_ TVS at P/E 7
_ TVS at P/E 21
(x)

Source: Nomura estimates

Exhibit 8. MSIL vs BSE Sensex: past one year's performance
——Sensex
——Maruti Suzuki


Source: Nomura estimates

Exhibit 10. TVS vs BSE Sensex: past one-year's performance


[^2]Exhibit 7. Bajaj Auto: P/E band

| Bajaj Auto | - BJAUT at P/E 6 |
| :--- | :--- |
| BJAUTat P/E 8 |  |
| BJAUT at P/E 12 |  |$\quad$ BJAUT at P/E 10

(x)


Source: Nomura estimates

Exhibit 9. Hero Honda vs BSE Sensex: past one year's performance


Source: Nomura estimates

Exhibit 11. Bajaj Auto vs BSE Sensex: performance since listing


[^3]
## Sector outlook

## Near-term slowdown likely in line with GDP slowdown

Historically, growth in car sales in India has had a strong correlation with industrial growth. Exhibit 12 shows the growth in each sub-segment in automobiles over five four-year periods (from FY90 to FYO7). Car sales growth was strongest in 1993-97 when the capex cycle was on an upward trend - and this was despite high interest rates. In this period, car sales registered a CAGR of $26.4 \%$, the fastest in the 18 years we have analysed. Car growth was faster than the growth in commercial vehicles (CV) and two-wheelers.

Exhibit 12. Growth in index of industrial production (IIP) and automobile subsegments

| (\%) | IIP | Cars | CVs | Two-wheelers |
| :--- | ---: | ---: | ---: | ---: |
| FY90-FY93 | 3.8 | 7.9 | -4.1 | -4.6 |
| FY93-FY97 | 8.5 | 26.4 | 18.6 | 18.5 |
| FY97-FY01 | 5.6 | 9.4 | -10.3 | 6.1 |
| FY01-FY04 | 5.1 | 11.4 | 22 | 14.4 |
| FY04-FY07 | 9.3 | 15.6 | 23.8 | 14.6 |
| FY08 | 8.3 | 11.7 | 5.2 | -8 |
| Source: Nomura research |  |  |  |  |

Exhibit 12 also shows that the elasticity of car sales with industrial growth is significantly higher than 1. We believe this is due to income buoyancy in periods of high economic growth. With the slowdown in India's economic growth, we believe that domestic car and two-wheeler volume growth would also remain slow at 5-6\% in FY1 OE.

## Margin outlook - expansion likely

With the fall in aluminium prices from a high of US\$3,317/tonne (11 July 2008) to US\$2,039/tonne (7 November 2008) and steel prices also likely to fall, auto companies' margins are set to expand, in our view. The impact of the fall in aluminium prices is offset by our assumption of a US $\$ 1=1$ NR47 exchange rate. If the rupee appreciates against the US dollar, the impact of falling raw material prices could be much higher.

Exhibit 13. Two-wheelers: impact of raw material prices on margin expansion

| (INR/kg) | 2Q FY09 | Scenario A | Scenario B |
| :--- | ---: | ---: | ---: |
| Aluminium price (USD/tonne) | $2,882.20$ | 2,500 | 2,400 |
| Growth y-y (\%) |  | -13.3 | -16.7 |
| Margin expansion (\%) | 0.25 | 0.56 |  |
| Steel price (INR/tonne) | 45,224 | 42,000 | 39,000 |
| Growth y-y (\%) | -7.1 | -13.8 |  |
| Margin expansion (\%) | 0.59 | 1.17 |  |

Source: Nomura research

Exhibit 14. Four-wheelers: impact of raw material prices on margin expansion

| (INR/kg) | 2Q FY09 | Scenario A | Scenario B | Scenario C |
| :---: | :---: | :---: | :---: | :---: |
| Aluminium price (INR) | 2,882.20 | 2,500 | 2,400 | 2,200 |
| Growth y-y (\%) |  | -13.3 | -16.7 | -23.7 |
| Margin expansion (\%) |  | 0.08 | 0.17 | 0.36 |
| Steel price (INR) | 45,224 | 42,000 | 39,000 | 37,000 |
| Growth y-y (\%) |  | -7.1 | -13.8 | -18.2 |
| Margin expansion (\%) |  | 0.63 | 1.22 | 1.61 |
| Margin summary for coverage universe |  |  |  |  |
| OPM (\%) | FY07A | FY08A | FY09E | FY10E |
| Hero Honda | 11.7 | 13 | 13 | 13.8 |
| Bajaj Auto | 14.9 | 14 | 13.3 | 13.9 |
| TVSL | 3.6 | 1.3 | 3.5 | 4.1 |
| MSIL | 13.2 | 12.4 | 8.5 | 10.3 |
| Source: Nomura research |  |  |  |  |

Total domestic car volumes in India were 1.2 mn in $\mathrm{FYO8}$, according to data from the Society of Indian Automobile Manufacturers (SIAM). In addition, 200,000 units were exported in FYO8. The Indian car market is dominated by MSIL, which commands a $51 \%$ market share, according to FYO8 figures from SIAM. Before the entry of multinational players in the late 1990s (Exhibit 15), MSIL had about a $75 \%$ market share; thereafter it lost market share from FY98 to FYO2. While Hyundai has made a significant dent in MSIL's share, other foreign players such as Ford (F US, not rated), Fiat (F IM, not rated) and GM (GM US, not rated) have not been able to make much headway in the market. Another domestic player, Tata Motors (TTMT IS, not rated), has also been able to garner some market share with its diesel cars. However, since FYO3, MSIL has been able to maintain its market share at around $51 \%$.

Exhibit 15. Domestic market share of the Indian auto market


Source: SIAM, Nomura research

## Long-term growth potential is high because of low penetration

Globally, car sales are strongly related to GDP per capita (Exhibit 16). Only nine out of every 1,000 people in India own a car. This number is much lower than that in other emerging markets such as China (18), Brazil (90), Mexico (130) and South Korea (180). We estimate that with an expected GDP CAGR of $6.9 \%$ over the next seven years (as per estimates from Nomura's economics team), the CAGR for domestic car sales could be about $12 \%$ if India follows China in terms of car penetration.

Exhibit 16. Relationship of GDP to cars per thousand people


Source: Nomura research, hitp://www.econstats.com/weo/V011.htm

Exhibit 17. Estimated domestic CAGR for car sales

|  | FY08 | FY15 |
| :--- | ---: | ---: |
| GDP per capita (PPP) | 4,074 | 6,620 |
| Population (mn) | 1,103 | 1,279 |
| Cars (mn) | 10.2 | 22.7 |
| CAGR GDP (FY08-FY15) (\%) | 6.9 |  |
| CAGR cars (FY08-FY15) (\%) | 12.1 |  |

Source: Nomura estimates

## Addressable segment is growing

According to the estimates of the National Council of Applied Economic Research (NCAER), the number of households with an annual income greater than INR500,000 the addressable segment) is set to increase from 4.9 mn at the end of $\mathrm{FYO6}$ to 9.9 mn in $\mathrm{FY1O}$, or an average increase of 1.25 mn households annually. To put things in perspective, 1.2 mn cars were sold in the domestic market in 2008.

Exhibit 18. Income demographics should support car demand

| Annual household income ('000 INR) |  | Number of households in this income bracket ('000) |  |  | Average income <br> (INR '000) | +*Cost of ownership of car as \% of income |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | FY02 | FY06 | FY10E* |  |  |
| Deprived | <90 | 135,378 | 132,250 | 114,394 | 40 | 302.82 |
| Aspirers | 90-200 | 41,262 | 53,276 | 75,304 | 145 | 83.54 |
| Seekers | 200-500 | 9,034 | 13,813 | 22,268 | 350 | 34.61 |
| Strivers | 500-1,000 | 1,712 | 3,212 | 6,173 | 750 | 16.15 |
| Near rich | 1,000-2,000 | 546 | 1,122 | 2,373 | 1,500 | 8.08 |
| Clear rich | 2,000-5,000 | 201 | 454 | 1,037 | 3,500 | 3.46 |
| Sheer rich | 5,000-10,000 | 40 | 103 | 255 | 7,500 | 1.62 |
| Super rich | >10,000 | 20 | 53 | 141 | 10,000 | 1.21 |
| Households with income | $>$ INR 500,000 |  | 4,944 | 9,979 | 5,035 |  |
| New Households with income | > INR 500,000 annually until FY10 |  |  | 1,258 |  |  |
| *Assuming interest rate of 15\%annually. + Calculations done for MSIL's entry level Alto |  |  |  |  |  |  |
| Source: Nomura research, NCAER |  |  |  |  |  |  |

## Fall in fuel prices and interest rates should improve affordability

Until 1H FYO9E, interest rates have been rising and fuel prices were abnormally high. With the fall in oil prices, and in inflation and interest rates, we estimate that the affordability of cars will improve by the end of FYO9E. Therefore, even with the expected slowdown in GDP and income growth, we believe that car demand in India will increase by about 6\% in FYIOE.

Exhibit 19. Estimated cost of ownership of an entry level car

|  | End FY07 | End FY08 | End FY09E |
| :---: | :---: | :---: | :---: |
| Loan amount* (INR) | 252,500 | 255,025 | 257,575 |
| Increase y-y (\%) | 1.00 | 1.00 | 1.00 |
| Annual interest rate (\%) | 14.50 | 14.25 | 13.25 |
| EMI | 5,941 | 5,967 | 5,825 |
| Increase y-y (\%) | 8.10 | 0.40 | -2.40 |
| Annual payments (a) (INR) | 71,291 | 71,605 | 69,905 |
| Petrol price (Delhi) (INR) | 42.85 | 50.52 | 49.52 |
| Increase y-y (\%) | -1.50 | 17.90 | -2.00 |
| Annual fuel cost [ assuming 30Km/day ] ( b ) (INR) | 38,565 | 45,468 | 44,568 |
| Annual maintenance cost ( c ) (INR) | 5,500 | 6,050 | 6,655 |
| Increase in maintenance cost y-y (\%) | 10 | 10 | 10 |
| Actual cost of ownership in INR/year ( a )+( b )+( c ) | 115,356 | 123,123 | 121,128 |
| Increase in cost of ownership y-y (\%) | 4.80 | 6.70 | -1.60 |
| Increase in salaries y-y (\%) | 12.00 | 13.00 | 10.00 |

*Calculations for MSIL's entry-level Alto. Source: Nomura research

## Exports - India is emerging as a car manufacturing hub

Around $71 \%$ of total car exports from India are small cars. Hyundai Motors was India's leading car exporter, with an export market share of around 69\%, in FYO8. The Santro and i-10 accounted for $55 \%$ of total car exports from India. While Hyundai has increased its exports at a rapid rate, MSIL's export growth lost steam after FYO4.

Exhibit 20. MSIL and Hyundai: export volumes


[^4]MSIL stopped exporting the Alto model to Europe when Suzuki's Hungary plant began exports to the region. However, MSIL now targets annualised export sales of 200,000 units by end-FY10. Of these, 50,000 units will be contract manufactured for Nissan. These will be exported under the Nissan brand from 1H09.

Hyundai is also looking at further additions to its export volumes. In the next two to three years, it plans to export around 300,000 cars. Hyundai currently exports to 67 countries in Latin America, Europe, Africa and West Asia. Hyundai is set to export 50,000 completely knocked down (CKD) units to Russia, the CIS countries and Taiwan from India to capitalise on the Indian cost advantage. Given this strong thrust on exports, we believe India will be able to more than double its exports in the three years to FY10.

## Conclusions on demand forecasts

We expect the industry to grow at $13.1 \%$ y-y in FYO and $10.7 \%$ y-y in FY 10 . We expect growth to be slower in 1 H FY1 0 because of the slowdown in Indian GDP growth from 9\% in $\mathrm{FYO8}$ to $7.2 \%$ in FYO9E and $6.9 \%$ in FY1 OE. A sharp fall in interest rates and fuel prices in India could be a key positive to our estimates. While domestic growth is likely to be slower, we expect exports to remain strong because of the export plans of MSIL and Hyundai. We expect to see the benefits of exports from FYO9.

| Exhibit 21. Industry volume forecast (units) |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | FY01A | FY02A | FY03A | FY04A | FY05A | FY06A | FY07A | FY08A | FY09E | FY10E |
| Domestic car sales | 572,370 | 512,637 | 541,485 | 696,197 | 820,164 | 882,166 | 1,076,469 | 1,223,121 | 1,272,046 | 1,348,369 |
| Growth y-y (\%) | -10.2 | -10.4 | 5.6 | 28.6 | 17.8 | 7.6 | 22 | 13.6 | 4.0 | 6.0 |
| Export sales | 16,604 | 47,356 | 70,257 | 125,325 | 160,683 | 168,461 | 192,745 | 209,425 | 347,453 | 444,570 |
| Growth y-y (\%) | -12.2 | 185.2 | 48.4 | 78.4 | 28.2 | 4.8 | 14.4 | 8.7 | 65.9 | 28 |
| Total sales | 588,974 | 559,993 | 611,742 | 821,522 | 980,847 | 1,050,627 | 1,269,214 | 1,432,546 | 1,619,499 | 1,792,939 |
| Growth y-y (\%) | -10.3 | -4.9 | 9.2 | 34.3 | 19.4 | 7.1 | 20.8 | 12.9 | 13.1 | 10.7 |
| Source: SIAM, Nomura research |  |  |  |  |  |  |  |  |  |  |

## Motorcycles

The Indian two-wheeler market is dominated by motorcycles, which command approximately an $80 \%$ market share. Motorcycles have been gaining share consistently for the past eight years, except in FYO8. We believe that this trend will continue because motorcycles are more fuel-efficient and deliver more power. Mopeds have been losing market share because they deliver less power. Scooters were the dominant category a decade ago, but since then they have lost out to the more fuel-efficient motorcycles. We believe that motorcycles will continue to dominate the market.

Exhibit 22. Segmentation of the Indian two-wheeler market (FYO8A)


Source: SIAM

We expect steady growth amid increased consolidation
We expect volume growth in the domestic two-wheeler market to be flat for 2 H FYO9E as compared to $11.2 \%$ for 1 H FY09. With the recent credit crisis, credit availability is likely to emerge as a major issue in 2H FYO9E. Leading financers, such as Citibank (India), and Centurion Bank of Punjab [now merged with HDFC Bank (HDFC IS, not rated)] have exited the two-wheeler financing business because of high delinquency rates. Our channel checks suggest that other financers have also reduced their financing business.

A similar credit tightening situation resulted in $-8 \%$ volume growth in FYO8E, which was the largest fall in two-wheeler volumes in the past 15 years. With the low base for FYO8, volumes this year have registered $11 \%$ growth in 1 H . We believe that after a brief period of slow sales in 2 H FYO9E, an increase in income levels may result in a fall in motorcycle penetration levels in the addressable population, which would aid steady growth in the segment. We estimate that the growth rate will pick up to $6 \%$ y-y by FYIOE.

We believe Baiaj Auto will top the industry's volume growth because its export initiatives are paying off. We believe HH will continue to lead the domestic market. In our view, other marginal two-wheeler Indian players are likely to be left on the sidelines because they have neither the financial strength nor the product innovation skills to compete effectively.

Exhibit 23. Domestic motorcycle volume growth forecasts for major Indian two-wheeler players

|  | FY07A | FY08A | FY09E | FY10E | FY11E |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Hero Honda |  |  |  |  |  |
| Domestic motorcycle volumes (numbers) | 3,157,429 | 3,144,270 | 3,507,322 | 3,726,737 | 3,959,403 |
| Growth y-y (\%) | 9.1 | -0.4 | 11.5 | 6.3 | 6.2 |
| Market share (\%) | 48.2 | 54.5 | 57.6 | 57.7 | 57.8 |
| Export volumes (numbers) | 96,613 | 90,571 | 94,605 | 97,443 | 100,366 |
| Growth y-y (\%) | -10.3 | -6.3 | 4.5 | 3 | 3 |
| Total volumes (numbers) | 3,254,042 | 3,234,841 | 3,601,927 | 3,824,180 | 4,059,769 |
| Growth y-y (\%) | 8.4 | -0.6 | 11.3 | 6.2 | 6.2 |
| Bajaj Auto |  |  |  |  |  |
| Domestic motorcycle volumes (numbers) | 2,078,860 | 1,658,230 | 1,542,154 | 1,634,683 | 1,732,764 |
| Growth y-y (\%) | 18.9 | -20.2 | -7 | 6 | 6 |
| Market share (\%) | 31.7 | 28.7 | 25.3 | 25.3 | 25.3 |
| Export volumes (numbers) | 300,639 | 481,549 | 650,091 | 780,109 | 858,120 |
| Growth y-y (\%) | 82.8 | 60.2 | 35 | 20 | 10 |
| Total volumes (numbers) | 2,379,499 | 2,139,779 | 2,192,245 | 2,414,793 | 2,590,884 |
| Growth (\%) | 24.4 | -10.1 | 2.5 | 10.2 | 7.3 |
| TVSL |  |  |  |  |  |
| Domestic motorcycle volumes (numbers) | 844,174 | 510,455 | 562,825 | 592,003 | 617,423 |
| Growth y-y (\%) | 12.2 | -39.5 | 10.3 | 5.2 | 4.3 |
| Market share (\%) | 12.9 | 8.8 | 9.2 | 9.2 | 9.2 |
| Export volumes (numbers) | 80,966 | 100,000 | 114,780 | 126,258 | 143,934 |
| Growth y-y (\%) | 49.7 | 23.5 | 14.8 | 10 | 14 |
| Total volumes (numbers) | 922,936 | 610,455 | 677,605 | 718,261 | 761,357 |
| Growth y-y (\%) | 14.5 | -33.9 | 11 | 6 | 6 |
| Industry domestic volumes (numbers) |  | 6,557,405 | 5,768,881 | 6,091,938 | 6,457,455 |
| Volume growth y-y (\%) | 12.85 | -12.02 | 5.6 | 6 | 6 |

Source: SIAM, Nomura estimates

## A three-tier market structure

The Indian motorcycle market has changed from a monolithic structure with most models priced around $\operatorname{INR} 40,000$ to a market with three broad price segments: premium (INR50,000-plus), executive (INR40,000-50,000) and economy (INR30,000-40,000).

Exhibit 24.Price segmentation and models of each competitor

| (INR) |  | Hero Honda | Bajaj Auto | TVS | Suzuki | HMSI | Yamaha |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Premium | 55,000+ | CBZ Xtreme, Karizma; Glamour FI, Hunk | Pulsar 180, Avenger | Apache RTR |  | Unicorn ES |  |
|  | 50,000-55,000 | Achiever; Glamour | Discover, Pulsar 150 | Flame |  | Stunner |  |
| Executive | 45,000-50,000 | Super Splendor, |  | Victor upper end Zeus CD |  | Shine | Gladiator SS |
|  | 40,000-45,000 | Splendor, Passion, Glamour | Discover, XCD, Platina 125 | Victor Edge | Zeus DU | Aviator | Gladiator; Alba,G5 |
| Economy | 35,000-40,000 | CD Deluxe | Platina | Star; Star City ES | Heat, Access |  | Crux |
|  | 30,000-35,000 | CD Dawn | CT100 |  | - | - |  |

Source: Autocar Magazine, October 2007

## Competition

HH has been the star performer in the motorcycle segment for the past two years, improving its domestic market share from $48.2 \%$ at end FY 07 to $57.5 \%$ at end 1 H FYO9. Most of the gain in market share has come at the expense of Bajaj Auto, whose market share has fallen from $31.7 \%$ to $25.5 \%$ over the same period. Bajaj Auto has gained share in the economy segment against its stated plan of decreasing its share in this segment.

Exhibit 25. Domestic motorcycle market share

*till HI FYO9E
Source: SIAM, Nomura research

Baiaj Auto gained market share in the economy segment by undercutting prices, contrary to its stated plan of reducing its share in this segment.

Exhibit 26. Market share in the economy segment


Source: Crisinfac

HH improved its share in the executive segment, because Bajaj's XCD model did not do well.

Exhibit 27. Market share in the executive segment


Source: Crisinfac

Bajaj dominated the premium segment for many years, but HH has started to make inroads into this segment over the past two years.

Exhibit 28. Market share in the premium segment


Source: Crisinfac

## Bajaj Auto's XCD has not been successful so far

Bajaj Auto's new launch in the executive segment, the 'XCD,' has not done as well as the company hoped (Exhibit 29). There are three launches planned on this plafform; if these are unsuccessful, HH's market position is likely to continue to improve. Moreover, according to management HH is also planning 11 launches (including variants) over the next 13 months as against Bajaj's four launches (across all plafforms) over FYO9.

Exhibit 29. Market share in the economy segment (by model)


Source: Company data, Nomura estimates

## TVS's volumes have started to increase again

After a sharp fall in sales in FY08, TVS's volumes have started to grow again. TVS's new model, Apache, has been successful, although the Flame model has not done very well. We believe that the company's near-term margin outlook could improve if auto-grade steel prices were to correct. This would improve its ability to compete, in our view.

## Scooters

Scooters, which formed the mainstay of the two-wheeler market until the early 1990s, are now down to $15 \%$ of the market's volume sales (based on FYO8 sales). Since most buyers have shifted to motorcycles, scooter players have seen a significant shift in product focus.

## No USP remains ..

Originally, scooters gained popularity for the following reasons:

- Lower pricing. This is no longer true. Honda Motorcycle and Scooter India (HMSI)'s largest-selling scooter model is priced at INR37,000, higher than the typical entry-level motorcycle at INR33,000. In the past when scooters were the largest-selling twowheeler category, they were priced INR 10,000 less than motorcycles.
- Family vehicle. This positioning clearly does not work now because the slot has been taken over by small cars.

Given that these reasons no longer hold, the appeal of scooters as a mass-market product has also disappeared, in our view. In addition, the typical scooter's engine capacity of around 150 cc is a natural constraint on fuel efficiency, which is an important consideration in these times of high fuel prices.

## ... which rules out major volumes from this segment

Since customer preference has shifted to motorcycles, traditional leaders in the scooter business have withdrawn from the market, giving way to new leaders in a significantly smaller market. Yearly scooter sales in FYO8 were only 1 mn as against 6.5 mn for motorcycles.

Exhibit 30. Scooter market share by player


Source: SIAM, Nomura research

TVS's volume sales mainly come from the TVS Scooty, which at INR37,000, is priced about the same as a low-end motorcycle.

## Scooters would be a niche market

In our view, the market for scooters is confined to: 1) low-priced vehicles, such as the Scooty, which appeal to low-budget buyers, like youngsters. Yet, in this segment volumes are likely to remain low because buyers would have to stretch their budget to graduate to motorcycles; and 2) niche vehicles, such as HH's scooters, which are positioned as easy-toride vehicles for women.

We believe there will be no major change in the fortunes of the scooter market in the near future. Even if there was a major push by any company in the scooter segment, we do not expect this to translate into significant volumes.

## Mopeds

Sales of mopeds have shrunk radically over the years, owing to the drop in the prices of entry-level motorcycles and increased availability of inexpensive loans that have made motorcycles more affordable. The fuel-efficiency gap between motorcycles and mopeds has narrowed since the early 1990s.

Overall, we believe that mopeds will remain a small segment. Annual sales of mopeds were only 0.45 mn in $\mathrm{FYO8}$. Some growth could trickle down to mopeds. We estimate that the moped segment will record a CAGR of $4-5 \%$ over the next three years.

## Changing demographics to propel two-wheeler sales

To ascertain which łwo-wheeler stocks offer good investment opportunities, we believe it is important to examine the composition of growth in the market. We believe growth will shift from being affordability-led (i.e., via financing) to being led by the creation of new buyers, given the significant increase in the addressable segment.

Exhibit 31 shows that the middle-income group is growing at a robust rate, with strong growth seen in the INR90,000-200,000 and INR200,000-500,000 income brackets. Most bicycle owners, who desire to move up to owning motorcycles, fall in the INR90,000-200,000 range. The creation of new buyers in this group constitutes a significant opportunity for two-wheeler players because these new buyers will likely fuel growth in executive segment motorcycles.

Exhibit 31. Growth rate of income classes

| Income groups | Expected growth rate from | Growth rate from | No. of households |
| :---: | :---: | :---: | :---: |
| (INR '000) | 2005-06 to 2009-10 (\%) | 2001-02 to 2005-06 (\%) | (2001-02) (mn) |
| Up to 90 | -13.5 | -2.3 | 135.4 |
| 90-200 | 41.3 | 29.1 | 41.3 |
| 200-500 | 61.2 | 52.9 | 9 |
| 500-1000 | 92.2 | 87.6 | 1.7 |
| 1,000-2,000 | 111.5 | 105.5 | 0.5 |
| 2,000-5,000 | 128.4 | 125.9 | 0.2 |
| 5,000-10,000 | 147.6 | 157.5 | - |
| Above 10,000 | 166 | 165 | 0.02 |
| Total | 8.6 | 8.6 | 188.2 |

Source: Tata Statistical Outline of India, 2004-05

Exhibit 32. Credit crunch has affected financing-led growth


Source: Crisinfac

We believe that credit availability has been the primary demand dampener in FYO8. In the past, a number of banks lent aggressively to two-wheeler customers, pushing the penetration of financing in two-wheeler sales up from $40 \%$ in $\mathrm{FYO3}$ to $65 \%$ in $\mathrm{FYO7}$. With the rise in interest rates and credit availability issues, that number has come down to $45 \%$
in FYO9E, according to our channel checks with dealers. As long as credit availability remains tight, we estimate that growth in the economy segment will remain subdued.

## Margins likely to improve from 3Q FY09E

Commodity prices, especially those of aluminium, softened in 3Q FYO9E. We believe that this will translate into margin improvements for most two-wheeler companies. We also believe that steel prices could fall, improving the margins of two-wheeler companies.

## Bajaj Auto-HH price war has faded away

Given the tough environment and sharp increases in commodity prices in FYO8, players stopped offering discounts to consumers, which augurs well for margins. While another price war cannot be ruled out, given that it has not worked for Baiaj, we believe the likelihood of a price war is rather low.

## Bajaj's exports would pay rich dividends

Baiaj Auto is India's leading motorcycle exporter with more than a $60 \%$ market share in FYO8. Its export volumes registered a CAGR of $44 \%$ over the past five years. We expect the company to sustain this momentum. HH has global scale and is the world's largest manufacturer of two-wheelers, but it would need a no objection cerrificate (NOC) from Honda before exporting to a particular country. Given that Honda also has its own 100\%owned subsidiary in India, HMSI (Honda Motorcycles and Scooters India), we believe $H H^{\prime}$ s exports will remain limited.

## Smaller players may be gradually edged out

We believe smaller players will find it tougher to compete in the Indian market. One reason is their lack of financial strength (Exhibit 33). Apart from Bajaj Auto, HH is the only company that has managed to succeed in the two-wheeler space. HH's success can be attributed to Bajaj Auto's miscalculations in product offerings (its focus was on scooters), in our view. However, at present, we believe there is no such headroom.

Exhibit 33. Absolute profit differential between various players


Source: Company data, Nomura research

Another influential factor is changing market behaviour, characterised by shrinking product life cycles. This implies that a company's competitive quotient could be determined by its ability to keep churning out new products, which would be a tall order for financially weaker players.

We, therefore, believe that the two-wheeler market will remain consolidated, if it does not become more concentrated among the top players.

## Drop in penetration levels in addressable segment likely

We define the target segment as the number of households with an annual income less than INR500,000 but more than INR90,000. Because of a sharp increase in the number of households in the target segment and low growth rates due to the decreased availability of finance, we believe that penetration levels may decrease. Therefore, we expect positive volume growth to continue over the next few years, as there will be more people in the target segment

Exhibit 34. Two wheeler penetration in the addressable segment

| ('000) | FY02 | FY06 | FY10 | Replacement cycle |
| :--- | ---: | ---: | ---: | ---: |
| No. of households in target group | 50,296 | 67,089 | 97,572 |  |
| No. of two-wheelers in the market | 25,875 | 38,462 | 54,343 | 8 years |
| Penetration (\%) | 51.4 | 57.3 | 55.7 |  |
| No. of two wheelers in the market | 29,138 | 44,473 | 62,230 | 10 years |
| Penetration (base case) (\%) | 57.9 | 66.3 | 63.8 |  |
| No. of two-wheelers in the market | 21,012 | 31,349 | 44,143 | 6 years |
| Penetration (\%) | 41.8 | 46.7 | 45.2 |  |
| Source: Nomura research, National Council for Applied Economic Research |  |  |  |  |

## High base would result in a slowdown in long-term growth rates

We believe volume growth will remain steady at a $6 \%$ CAGR over FY09E-11E before slowing further to a $4 \%$ CAGR during FY11E-16E. We estimate long-term two-wheeler volume growth to be close to $2 \%$ thereafter.

## Company section

## Maruti Suzuki India Limited

Stock rating: BUY
Sector view: BULLISH
Ticker: MSIL IS
Price (INR) 10 Nov: 594.3
Price target (INR): 775
Potential upside/downside: 30.4\%

MSIL has held its market share steady at $51 \%$ for the past six years, despite intense competition. Trading at $9.4 \times$ FYIOE EPS, we believe that it is undervalued, given its earnings CAGR of 20\% over FYO9E to FY1 1E and its long-term growth potential.

MSIL's margins have been under pressure over the past one year, especially in 1 H FYO9 because of steep increases in raw material costs. While some of these costs have begun to decrease, Maruti indicated that the resulting benefits will be reflected in margins only by the last quarter of FYO9E. We are building in a 180bp improvement in margins in FY10E because of an expected decline in raw material costs and improvement in realisations.

We believe that MSIL's domestic volume growth will slow down in the near term because of a slowdown in GDP growth, but we estimate that overall volume growth will remain strong because of high export growth. MSIL will begin exporting its new model A Star to Europe, to be sold through the Suzuki dealership. MSIL will also contract manufacture 50,000 units of the same car for Nissan in FY1 OE.

| Exhibit 35. MSIL: volume growth estimates |  |  |  |  |  |  |
| :--- | :---: | ---: | ---: | ---: | ---: | ---: |
|  | FY07A | FY08A | FY09E | FY10E | FY11E | CAGR FY08-FY11E (\%) |
| Cars | 549,317 | 618,162 | 649,070 | 681,524 | 736,045 | 6.00 |
| Growth y-y (\%) |  | 12.50 | 5.00 | 5.00 | 8.00 | 4.00 |
| UVs | 86,312 | 93,656 | 93,656 | 98,339 | 10,5223 | 7.00 |
| Growth y-y (\%) |  | 8.50 | 0.00 | 5.00 | 196,271 | 54.70 |
| Exports | 39,294 | 53,024 | 80,978 | 150,978 | 30.00 | 10.70 |
| Growth y-y (\%) |  | 34.90 | 52.70 | 86.40 | $1,037,539$ | 11.50 |
| Total | 674,923 | 764,842 | 823,704 | 930,840 | 18.90 |  |
| Growth y-y (\%) |  | 13.30 | 7.70 | 13.00 | 16.20 |  |
| Exports (\% of total volumes) | 5.80 | 6.90 | 9.80 |  |  |  |
| Source: SIAM, Nomura estimates |  |  |  |  |  |  |

MSIL has increased its focus on investment in R\&D and this should start paying dividends in the form of better margins and lower royalty costs over the long term. Moreover, with support from Suzuki, MSIL may be able to increase its export volumes in some new markets. Suzuki's operating profit margin was $4.3 \%$ in FYO8 compared with $12.4 \%$ for MSIL. Hence, even after adjusting for Suzuki's $54 \%$ holding in MSIL, it makes sense for the parent to export from India.

## Valuation

On a discounted cash flow (DCF)-based valuation, our 12-month price target of INR775 builds in a terminal free cash flow to equity (FCFE) CAGR of 4\%, after an intermediate stage earnings CAGR of $9.3 \%$ from FY11E to FY2OE (Exhibit 36). The sales CAGR in volume terms for the past five years has been $16 \%$ and in value terms has been 19.7\%. Given our expectation of strong growth ahead, we believe there are upside risks to our estimates. At INR595.3 (as of 10 November 2008), MSIL is trading at $9.4 \times$ FY1OE and $8.2 \times$ FY 11 E EPS. We initiate coverage of the stock with a BUY rating.

Exhibit 36. MSIL: DCF-based valuation

| (INRmn) | FY08 | FY09E | FY10E | FY11E |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total revenues | 182,599 | 213,072 | 245,463 | 281,665 |  |  |  |  |  |  |
| Growth y-y (\%) | 22.1 | 16.7 | 15.2 | 14.7 |  |  |  |  |  |  |
| Operating profit | 26,174 | 22,300 | 29,852 | 33,931 |  |  |  |  |  |  |
| OPM (\%) | 14.3 | 10.5 | 12.2 | 12.0 |  |  |  |  |  |  |
| Interest | 596 | 619 | 620 | 629 |  |  |  |  |  |  |
| Depreciation | 5,682 | 6,964 | 8,578 | 10,149 |  |  |  |  |  |  |
| PBT | 19,896 | 14,717 | 20,654 | 23,153 |  |  |  |  |  |  |
| Tax | 6,496 | 4,415 | 6,506 | 7,293 |  |  |  |  |  |  |
| Tax rate (\%) | 32.6 | 30.0 | 31.5 | 31.5 |  |  |  |  |  |  |
| PAT | 1,300 | 1,002 | 1,448 | 1,560 |  |  |  |  |  |  |
| Growth y-y (\%) | -1.1 | -23.1 | 37.3 | 12.1 |  |  |  |  |  |  |
| Depreciation | 5,682 | 6,964 | 8,578 | 10,149 |  |  |  |  |  |  |
| Capex | 16,359 | 19,114 | 19,090 | 15,660 |  |  |  |  |  |  |
| delta WC | -10,748 | -692 | -993 | 493 |  |  |  |  |  |  |
| Debt issued - debt repaid | 2,694 | 53 | 22 | 159 |  |  |  |  |  |  |
| FCFE | 16,165 | -1,102 | 4,651 | 10,015 |  |  |  |  |  |  |
|  | FY12E | FY13E | FY14E | FY15E | FY16E | FY17E | FY18E | FY19E | FY20E | TV (INRmn) |
| PAT | 17,922 | 20,252 | 22,884 | 25,173 | 27,690 | 30,182 | 32,597 | 33,901 | 35,257 |  |
| Growth y-y (\%) | 13.0 | 13.0 | 13.0 | 10.0 | 10.0 | 9.0 | 8.0 | 4.0 | 4.0 |  |
| FCFE | 10,156 | 11,173 | 12,259 | 15,850 | 17,040 | 19,735 | 22,166 | 27,737 | 28,205 | 319,886 |
| ROE (\%) | 30 | 29 | 28 | 27 | 26 | 26 | 25 | 22 | 20 |  |
| Retention ratio (\%) | 43 | 45 | 46 | 37 | 38 | 35 | 32 | 18 | 20 |  |
| NPV of FCFE | 150,561 |  |  |  |  |  |  |  |  |  |
| No. of shares | 288.91 | Terminal | rowth | WACC |  |  |  |  |  |  |
|  |  |  | 4\% | 13.2\% |  |  |  |  |  |  |
|  | INR |  |  |  |  |  |  |  |  |  |
| Price per share (March 08) | 521 |  |  |  |  |  |  |  |  |  |
| Price per share (Nov 08) | 589.8 |  |  |  |  |  |  |  |  |  |
| Cash/share | 184.9 |  |  |  |  |  |  |  |  |  |
| Total value (Nov 09) | 774.6 |  |  |  |  |  |  |  |  |  |
| Source: Nomura estimates |  |  |  |  |  |  |  |  |  |  |

## Investment risks

- Car sales in India are linked to income growth, which is dependent on overall economic growth. We are assuming GDP growth of $6.9 \%$ for FYIOE. Any downturn in economic growth in India would have a significant negative impact on our growth assumptions and price target. A further rise in interest rates in India would also have a significant negative impact on our estimates.
- We have assumed that MSIL's future product launches will help it maintain steady growth rates. If many of its new launches are unsuccessful, our growth assumptions could be reduced sharply. We have also assumed improvements in operating margins. A sharp increase in raw material costs could have a negative impact on our margin assumptions.
- We have assumed that MSIL will be able to maintain its market share. However, if new or existing players are able to launch successful products, our growth forecasts would be affected negatively.

| Exhibit 37. MSIL: income statement |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Year-end 31 Mar (INRmn) | FY07 | FY08 | FY09E | FY10E | FY11E |
| Net sales | 145,922 | 178,603 | 208,510 | 240,308 | 275,919 |
| Growth (\%) | 21.6 | 22.4 | 16.7 | 15.2 | 14.8 |
| Operating expenses | -126,778 | -157,128 | -190,970 | -215,809 | -247,931 |
| Operating profit | 19,144 | 21,475 | 17,540 | 24,499 | 27,987 |
| Other income | 6,601 | 8,825 | 10,436 | 11,196 | 13,087 |
| EBITDA | 25,745 | 30,300 | 27,976 | 35,694 | 41,074 |
| Depreciation | -2,714 | -5,682 | -6,964 | -8,578 | -10,149 |
| Expenses capitalised | 143 | 198 | 198 | 198 | 198 |
| EBIT | 23,174 | 24,816 | 21,210 | 27,315 | 31,123 |
| Interest paid | -376 | -596 | -619 | -620 | -629 |
| Associates | 0 | 0 | 0 | 0 | 0 |
| Non-recurring items (net of taxes) | 0 | -1,160 | 0 | 0 | 0 |
| Pre-tax profit | 22,798 | 23,060 | 20,591 | 26,695 | 30,494 |
| Tax (current + deferred) | -7,178 | -7,722 | -6,177 | -8,409 | -9,606 |
| Profit after tax | 15,620 | 15,338 | 14,414 | 18,286 | 20,888 |
| Minority interests | 0 | 0 | 0 | 0 | 0 |
| Preference dividend | 0 | 0 | 0 | 0 | 0 |
| Net profit | 15,620 | 15,338 | 14,414 | 18,286 | 20,888 |
| Adjusted net profit | 15,620 | 16,498 | 14,414 | 18,286 | 20,888 |
| Growth (\%) | 37 | 5.6 | -12.6 | 26.9 | 14.2 |

Source: Company data, Nomura estimates

Exhibit 38. MSIL: balance sheet

| Year-end 31 Mar (INRmn) | FY07 | FY08 | FY09E | FY10E | FY11E |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Current assets | 38,459 | 30,909 | 36,219 | 45,440 | 52,157 |
| Investments | 34,092 | 51,807 | 53,407 | 60,407 | 73,407 |
| Associates | 0 | 0 | 0 | 0 | 0 |
| Net fixed assets | 28,986 | 40,328 | 52,477 | 62,989 | 68,500 |
| Other non-current assets | 0 | 0 | 0 | 0 | 0 |
| Total assets | 101,537 | 123,044 | 142,103 | 168,837 | 194,064 |
| Current liabilities | 22,784 | 26,608 | 32,611 | 42,825 | 49,048 |
| Total debt | 6,308 | 9,002 | 9,055 | 9,077 | 9,236 |
| Other liabilities | 3,906 | 3,280 | 3,280 | 3,280 | 3,280 |
| Total liabilities | 32,998 | 38,890 | 44,946 | 55,182 | 61,564 |
| Share capital | 1,445 | 1,445 | 1,445 | 1,445 | 1,445 |
| Reserves and surplus | 67,094 | 82,709 | 95,713 | 112,210 | 131,055 |
| Shareholders' funds | 68,539 | 84,154 | 97,158 | 113,655 | 132,500 |
| Minorities | 0 | 0 | 0 | 0 | 0 |
| Total equity and liabilities | 101,537 | 123,044 | 142,103 | 168,837 | 194,064 |
| Source: Company data, Nomura estimates |  |  |  |  |  |

Exhibit 39. MSIL: cash flow statement

| Year-end 31 Mar (INRmn) | FY07 | FY08 | FY09E | FY10E | FY11E |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Pre-tax profit | 22,798 | 23,060 | 20,591 | 26,695 | 30,494 |
| Depreciation | 2,714 | 5,682 | 6,964 | 8,578 | 10,149 |
| Tax paid | -6,023 | -8,452 | -6,262 | -8,286 | -9,540 |
| Chg in working capital | 2,885 | 292 | 1,601 | 1,711 | -73 |
| Other operating activities | 0 | 0 | 0 | 0 | 0 |
| Cash flow from operations (a) | 22,374 | 20,582 | 22,894 | 28,698 | 31,031 |
| Capital expenditure | -13,391 | -16,359 | -19,114 | -19,090 | -15,660 |
| Chg in investments | -13,580 | -17,715 | -1,600 | -7,000 | -13,000 |
| Chg in associates | 0 | 0 | 0 | 0 | 0 |
| Other investing activities | 0 | 0 | 0 | 0 | 0 |
| Cash flow from investing (b) | -26,971 | -34,074 | -20,714 | -26,090 | -28,660 |
| Free cash flow (a+b) | -4,597 | -13,492 | 2,181 | 2,608 | 2,371 |
| Equity raised/(repaid) | 0 | 0 | 0 | 0 | 0 |
| Chg in minorities | 0 | 0 | 0 | 0 | 0 |
| Debt raised/(repaid) | 5,591 | 2,694 | 53 | 22 | 159 |
| Dividend (incl. tax) | -1,153 | -1,521 | -1,691 | -1,410 | -1,789 |
| Other financing activities | 371 | 0 | 0 | 0 | 0 |
| Cash flow from financing (c) | 4,809 | 1,173 | -1,638 | -1,388 | -1,629 |
| Net chg in cash (a+b+c) | 212 | -12,319 | 543 | 1,220 | 741 |

Source: Company data, Nomura estimates

Exhibit 40. MSIL: key ratios

| Year-end 31 Mar (INRmn) | FY07 | FY08 | FY09E | FY10E | FY11E |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Adjusted EPS (INR) | 54 | 57.1 | 49.9 | 63.3 | 72.3 |
| Adjusted EPS growth (\%) | 37 | 5.6 | -12.6 | 26.9 | 14.2 |
| EBITDA growth (\%) | 28.7 | 17.7 | -7.7 | 27.6 | 15.1 |
| EBITDA margin (\%) | 17.6 | 17 | 13.4 | 14.9 | 14.9 |
| Pre-tax margin (\%) | 15.6 | 12.9 | 9.9 | 11.1 | 11.1 |
| ROE (\%) | 25.4 | 21.6 | 15.9 | 17.3 | 17 |
| ROCE (\%) | 33.5 | 28.3 | 20.6 | 23.2 | 23 |
| Net debt/equity (\%) | -61.3 | -54.7 | -49.5 | -49.6 | -52.8 |

Source: Company data, Nomura estimates

Exhibit 41. MSIL: valuations

| Year-end 31 Mar (INRmn) | FY07 | FY08 | FY09E | FY10E | FY11E |
| :---: | :---: | :---: | :---: | :---: | :---: |
| P/E (x) | 11.0 | 10.4 | 11.9 | 9.4 | 8.2 |
| PCE (x) | 9.4 | 7.7 | 8.0 | 6.4 | 5.5 |
| P/B (x) | 2.5 | 2.0 | 1.8 | 1.5 | 1.3 |
| Yield (\%) | 0.9 | 1.0 | 0.8 | 1.0 | 1.2 |
| EV/net sales (x) | 0.9 | 0.7 | 0.6 | 0.5 | 0.4 |
| EV/EBITDA (x) | 5.0 | 4.1 | 4.4 | 3.2 | 2.5 |

Source: Company data, Nomura estimates

## Hero Honda

Stock rating: BUY
Sector view: BULLISH
Ticker: HH IS
Price (INR) 10 Nov: 756.3
Price target (INR): 946
Potential upside/downside: 25.1\%

HH is India's leading two-wheeler manufacturer, with a domestic market share of $57.5 \%$ in motorcycles. Over the past year, HH has improved its market share from $48.2 \%$ at the end of $\mathrm{FYO7}$ to $57.5 \%$ at the end of 1 H FYO9. Although we expect volume growth to slow down to $3.4 \%$ in 2 H FYO9E, we believe that over the medium term, earnings will continue to register strong growth, because of tax breaks at its new plant in Haridwar. Trading at $10.4 \times$ FYO1OE EPS, we believe HH is undervalued given we estimate an earnings CAGR of $19 \%$ over FYO to FY1 1 E .

HH's new plant in Haridwar is eligible for a $100 \%$ income-tax benefit for the next five years and a $30 \%$ income tax benefit for five years thereafter. In addition, HH is also eligible for $100 \%$ excise duty benefit for the first ten years of operation. Since we expect volumes from the new plant to pick up from $16 \%$ of total volumes in FYO9E to $36 \%$ in FY1 1E, we estimate that HH's tax rate could come down to $22 \%$ in FY1 1E from $31.4 \%$ in FYO8, aiding strong earnings growth.

The stock has outperformed the BSE Sensex by $56 \%$ YTD, we believe primarily because of the continuous earnings upgrade by consensus over the past one year because of the strong volume growth in 1H FY09E. Consensus estimates (Bloomberg) for FY09E have increased approximately $15 \%$ over the past one year. Our EPS estimate for FY1OE is ahead of consensus by $5 \%$ for FY1OE, and there could be upsides to our estimates if the correction in commodity prices is sharper than our estimates.

## Valuation

We value HH based on DCF. For this purpose we have used an $11.8 \%$ discount rate (based on $\mathrm{Rf}=7.5 \%, \mathrm{Rp}=7 \%$ and beta $=0.614$ ) with a $5 \%$ earnings CAGR from FY 11 E to FY16E and terminal growth of $2 \%$ thereafter. The implied multiple on our target is $11.5 x$ FY 1 1E, which is near the lower end of HH's past five-year trading band.

Exhibit 42. Hero Honda: DCF-based valuation

|  | FY05A | FY06A | FY07A | FY08E | FY09E | FY10E | FY11E |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total revenues | 74551 | 87,515 | 99,482 | 103,729 | 123,346 | 131,410 | 140,673 |
| Growth y-y (\%) |  | 17.4 | 13.6 | 4.4 | 19.0 | 6.6 | 7.1 |
| Operating profit | 11,923 | 13,910 | 12,099 | 13,807 | 16,484 | 18,583 | 20,079 |
| OPM (\%) | 16.0 | 15.9 | 12.2 | 13.3 | 13.4 | 14.1 | 14.3 |
| Interest | -11 | -61 | -230 | -358 | 0 | 0 | 0 |
| Depreciation | 894 | 1,146 | 1,398 | 1,603 | 1,931 | 2,302 | 2,542 |
| PBT | 11,040 | 12,825 | 10,931 | 12,562 | 14,553 | 16,281 | 17,537 |
| Tax | 3,689 | 4,004 | 3,405 | 3,941 | 3,961 | 3,856 | 3,910 |
| Tax rate | 33.42 | 31.22 | 31.15 | 31.37 | 27.21 | 23.69 | 22.30 |
| PAT | 7,351 | 8,821 | 7,526 | 8,621 | 10,593 | 12,424 | 13,627 |
| Growth y-y (\%) | - | 20.00 | (14.69) | 14.56 | 22.86 | 17.29 | 9.68 |
| Depreciation | 894 | 1,146 | 1,398 | 1,603 | 1,931 | 2,302 | 2,542 |
| Increase in WC | -4,097 | 1,858 | 1,662 | -3,231 | -1,922 | -1,379 | -1,194 |
| Capex | 2,499 | 3,711 | 4,744 | 3,567 | 2,500 | 2,500 | 2,500 |
| Debt raised-debt repaid | 271 | -160 | -206 | -332 | 69 | -51 | 898 |
| Equity raised | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Free cash flow | 10,114 | 4,238 | 2,311 | 9,557 | 12,016 | 13,555 | 15,761 |
|  | FY12E | FY13E | FY14E | FY15E | FY16E |  |  |
| PAT | 14,445 | 15,311 | 16,077 | 16,881 | 17,387 |  |  |
| Growth y-y (\%) | 6.00 | 6.00 | 5.00 | 5.00 | 3.00 |  |  |
| FCFE | 11,556 | 12,249 | 13,397 | 13,504 | 14,779 |  |  |
| ROE | 30.00 | 30.00 | 30.00 | 25.00 | 20.00 |  |  |
| Retention ratio | 20.00 | 20.00 | 16.67 | 20.00 | 15.00 |  |  |
| NPV of FCFE | 135,395 |  |  |  |  |  |  |
|  |  |  | Terminal ROE <br> (\%) | Terminal growth (\%) | $\begin{array}{r} \text { Cost of } \\ \text { equity (\%) } \end{array}$ | TV (INRmn) |  |
| No. of shares | 200 |  | 20.0 | 2.0 | 11.8 | 162,904 |  |
| Price per share [Nov 2008] | 678 |  |  |  |  |  |  |
| Cash per share [March 2009] | 168.4 |  |  |  |  |  |  |
| Total | 846.4 |  |  |  |  |  |  |
| Price per share [Nov 2009] | 946.3 |  |  |  |  |  |  |

Source: Company data, Nomura estimates

## Investment risks

- We have assumed a moderate growth rate for motorcycles. If volume growth is lower than our expectations, there could be downside to our estimates.
- We have assumed that the prevailing tight monetary conditions will begin to ease off by end-FY09E. If credit availability remains tight, volume growth may be negatively affected.
- If the ramp-up at the new plant is slower than our estimates, margins could be lower than our forecasts; in which case, even the tax rate could be higher than our estimates.

We have assumed that commodity prices will soften in FY1 OE. If the prices do not fall, there would be downside risks to our margin estimates.

| Exhibit 43. Hero Honda: income statement |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Year-end 31 Mar (INRmn) | FY07 | FY08 | FY09E | FY10E | FY11E |
| Net sales | 99,000 | 103,318 | 122,926 | 131,013 | 140,268 |
| Growth (\%) | 13.6 | 4.4 | 19 | 6.6 | 7.1 |
| Operating expenses | -87,384 | -89,922 | -106,862 | -112,828 | -120,593 |
| Operating profit | 11,616 | 13,396 | 16,064 | 18,185 | 19,674 |
| Other income | 2,013 | 1,966 | 2,601 | 3,213 | 3,997 |
| EBITDA | 13,629 | 15,362 | 18,665 | 21,398 | 23,671 |
| Depreciation | -1,398 | -1,603 | -1,931 | -2,302 | -2,542 |
| Expenses capitalised | 0 | 0 | 0 | 0 | 0 |
| EBIT | 12,231 | 13,759 | 16,734 | 19,096 | 21,129 |
| Interest paid | 230 | 358 | 0 | 0 | 0 |
| Associates | 0 | 0 | 0 | 0 | 0 |
| Non-recurring items (net of taxes) | 0 | 0 | 0 | 0 | 0 |
| Pre-tax profit | 12,461 | 14,117 | 16,734 | 19,096 | 21,129 |
| Tax (current + deferred) | -3,882 | -4,424 | -4,554 | -4,523 | -4,711 |
| Profit after tax | 8,579 | 9,693 | 12,180 | 14,573 | 16,418 |
| Minority interests | 0 | 0 | 0 | 0 | 0 |
| Preference dividend | 0 | 0 | 0 | 0 | 0 |
| Net profit | 8,579 | 9,693 | 12,180 | 14,573 | 16,418 |
| Adjusted net profit | 8,579 | 9,693 | 12,180 | 14,573 | 16,418 |
| Growth (\%) | -11.7 | 13 | 25.7 | 19.6 | 12.7 |

Source: Company data, Nomura estimates

Exhibit 44. Hero Honda: balance sheet

| Year-end 31 Mar (INRmn) | FY07 | FY08 | FY09E | FY10E | FY11E |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Current assets | 28,837 | 35,001 | 44,780 | 54,469 | 66,293 |
| Investments | 35 | 35 | 35 | 35 | 35 |
| Associates | 0 | 0 | 0 | 0 | 0 |
| Net fixed assets | 13,555 | 15,648 | 16,216 | 16,414 | 16,372 |
| Other non-current assets | 14 | 52 | 52 | 52 | 52 |
| Total assets | 42,440 | 50,736 | 61,083 | 70,970 | 82,752 |
| Current liabilities | 14,429 | 17,753 | 21,454 | 23,522 | 25,540 |
| Total debt | 1,652 | 1,320 | 1,389 | 1,338 | 2,237 |
| Other liabilities | 1,658 | 1,801 | 1,801 | 1,801 | 1,801 |
| Total liabilities | 17,739 | 20,873 | 24,644 | 26,661 | 29,577 |
| Share capital | 399 | 399 | 399 | 399 | 399 |
| Reserves and surplus | 24,301 | 29,463 | 36,040 | 43,909 | 52,775 |
| Shareholders' funds | 24,701 | 29,862 | 36,439 | 44,309 | 53,174 |
| Minorities | 0 | 0 | 0 | 0 | 0 |
| Total equity and liabilities | 42,440 | 50,736 | 61,083 | 70,970 | 82,752 |
| Source: Company data, Nomura estimates |  |  |  |  |  |

Exhibit 45. Hero Honda: cash flow statement

| Year-end 31 Mar (INRmn) | FY07 | FY08 | FY09E | FY10E | FY11E |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Pre-tax profit | 12,461 | 14,117 | 16,734 | 19,096 | 21,129 |
| Depreciation | 1,398 | 1,603 | 1,931 | 2,302 | 2,542 |
| Tax paid | -3,884 | -4,399 | -4,554 | -4,523 | -4,711 |
| Chg in working capital | -2,402 | 3,681 | 1,013 | 381 | 463 |
| Other operating activities | 0 | 0 | 0 | 0 | 0 |
| Cash flow from operations (a) | 7,573 | 15,002 | 15,124 | 17,256 | 19,423 |
| Capital expenditure | -4,744 | -3,567 | -2,500 | -2,500 | -2,500 |
| Chg in investments | 880 | -5,930 | -8,000 | -9,000 | -11,000 |
| Chg in associates | 0 | 0 | 0 | 0 | 0 |
| Other investing activities | 0 | 0 | 0 | 0 | 0 |
| Cash flow from investing (b) | -3,864 | -9,497 | -10,500 | -11,500 | -13,500 |
| Free cash flow (a+b) | 3,709 | 5,506 | 4,624 | 5,756 | 5,923 |
| Equity raised/(repaid) | 0 | 0 | 0 | 0 | 0 |
| Chg in minorities | 0 | 0 | 0 | 0 | 0 |
| Debt raised/(repaid) | -206 | -332 | 69 | -51 | 898 |
| Dividend (incl. tax) | -4,554 | -3,972 | -4,439 | -5,603 | -6,704 |
| Other financing activities | -179 | 0 | 0 | 0 | 0 |
| Cash flow from financing (c) | -4,939 | -4,303 | -4,370 | -5,654 | -5,805 |
| Net chg in cash (a+b+c) | -1,230 | 1,202 | 254 | 102 | 118 |

Source: Company data, Nomura estimates

Exhibit 46. Hero Honda: key ratios

| Year-end 31 Mar (INRmn) | FY07 | FY08 | FY09E | FY10E | FY11E |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Adjusted EPS (INR) | 43 | 48.5 | 61 | 73 | 82.2 |
| Adjusted EPS growth (\%) | -11.7 | 13 | 25.7 | 19.6 | 12.7 |
| EBITDA growth (\%) | -10.4 | 12.7 | 21.5 | 14.6 | 10.6 |
| EBITDA margin (\%) | 13.8 | 14.9 | 15.2 | 16.3 | 16.9 |
| Pre-tax margin (\%) | 12.6 | 13.7 | 13.6 | 14.6 | 15.1 |
| ROE (\%) | 38.3 | 35.5 | 36.7 | 36.1 | 33.7 |
| ROCE (\%) | 47.5 | 45.1 | 46.1 | 43.9 | 40.4 |
| Net debt/equity (\%) | -74.5 | -85.8 | -92.8 | -97 | -100 |

Source: Company data, Nomura estimates

| Exhibit 47. Hero Honda: valuations |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Year-end 31 Mar (INRmn) | FY07 | FY08 | FY09E | FY10E | FY11E |
| P/E (x) | 17.6 | 15.6 | 12.4 | 10.4 | 9.2 |
| PCE (x) | 15.1 | 13.4 | 10.7 | 8.9 | 8.0 |
| P/B (x) | 6.1 | 5.1 | 4.1 | 3.4 | 2.8 |
| Yield (\%) | 2.6 | 2.9 | 3.7 | 4.4 | 5.0 |
| EV/net sales (x) | 1.3 | 1.2 | 1.0 | 0.8 | 0.7 |
| EV/EBITDA (x) | 9.6 | 8.2 | 6.3 | 5.0 | 4.1 |
| Source: Company data, Nomura estimates |  |  |  |  |  |

Stock rating: BUY
Sector view: BULLISH
Ticker: BJAUT IS
Price (INR) 10 Nov: 425.9
Price target (INR): 544
Potential upside/downside: $27.7 \%$

Bajaj's domestic two-wheeler business has been under some stress since its new model XCD is not doing well. Bajaj's market share in the domestic two-wheeler segment has fallen from $31.7 \%$ at the end of FYO to $25.5 \%$ in 1 H FYO9. However, its export volumes have grown rapidly at $61.8 \%$ in $\mathrm{FYO8}$ and $40.5 \%$ in $1 \mathrm{H} \mathrm{FYO9}$. continuing, we estimate Bajaj Auto's two-wheeler volumes will improve by $2.4 \%$ in FYO9 and $10 \%$ in FY 10 . We initiate coverage of Bajaj Auto with a BUY rating since it is trading at $6.0 \times \mathrm{FY} 11 \mathrm{E}$ compared with $9.2 \times$ for HH . We believe that it is undervalued even after accounting for the near-term weak business outlook.

However, its three-wheeler business is likely to decline. We estimate that Bajaj Auto's threewheeler volumes will fall $2 \%$ in FY1OE and $10 \%$ in FY11E, after the launch of its fourwheeler. We estimate that in FYO8, approximately $21 \%$ of Bajaj Auto's net sales and 33\% of its operating profit would have come from the three-wheeler business. We expect this to decline to $28 \%$ by FY1 1. There could be downside risks to this estimate if a regulatory change allows Tata Motors new car, Nano, to replace three-wheelers.

| Exhibit 48. Bajaj Auto: volume growth estimates |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | FY06A | FY07A | FY08A | FY09E | FY10E | FY11E |
|  | 2,029,176 | $2,399,996$ | $2,161,095$ | $2,213,561$ | $2,439,306$ | $2,617,849$ |
| Total two-wheelers | 35.3 | 18.3 | -10 | 2.4 | 10.2 | 7.3 |
| Growth y-y (\%) |  |  |  |  |  |  |
| Three wheelers | 176,745 | 181,133 | 153,986 | 146,287 | 138,972 | 118,127 |
| Domestic volumes | 13.1 | 2.5 | -15 | -5 | -5 | -15 |
| Growth y-y (\%) | 49.1 | 44.8 | 42.2 | 42.2 | 42.2 | 37.8 |
| Market share (\%) | 75,261 | 140,663 | 136,326 | 144,025 | 145,533 | 137,929 |
| Export volumes | 14.5 | 86.9 | -3.1 | 5.6 | 1 | -5.2 |
| Growth y-y (\%) | 252,054 | 321,828 | 290,312 | 290,312 | 284,506 | 256,055 |
| Total volumes | 13.5 | 27.7 | -9.8 | 0 | -2 | -10 |
| Growth y-y (\%) |  |  |  |  |  |  |
| Source: Company data, Nomura estimates |  |  |  |  |  |  |

## Valuation

We value Bajaj Auto based on DCF. Bajaj Auto does not have enough trading history to get a right sense on beta. (With its limited trading history, beta works out to 13.2\%). Given the risks to Bajaj's three wheeler business, we have assumed a discount rate of $15 \%$ for Bajaj Auto. We have built in a $4.2 \%$ earnings CAGR from FY $11 E$ to FY $16 E$ and terminal growth of $2 \%$ thereafter. The implied multiple on our target is $7.7 \times \mathrm{FY} 1 \mathrm{E}$, which is around a $30 \%$ discount to our target for HH . We believe this is a fair discount because of risks to Bajaj's three-wheeler business and its weak position in the domestic two-wheeler business.

Exhibit 49. Bajaj Auto: DCF-based valuation

|  |  | FY09E | FY10E | FY11E |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total revenues |  | 97,203 | 105,555 | 117,430 |  |  |
| Growth y-y (\%) |  | 7.8 | 8.6 | 11.3 |  |  |
| Operating profit |  | 12,940 | 14,352 | 15,293 |  |  |
| OPM (\%) |  | 13.3\% | 13.6\% | 13.0\% |  |  |
| Interest |  | 56 | 68 | 69 |  |  |
| Depreciation |  | 1,372 | 1,483 | 1,593 |  |  |
| PBT |  | 11,511 | 12,801 | 13,631 |  |  |
| Extraordinary income/(loss) |  | -3,515 | -1,833 | 0 |  |  |
| Tax |  | 2,633 | 3,615 | 4,499 |  |  |
| Tax rate |  | 32.9 | 33.0 | 33.0 |  |  |
| PAT |  | ,5362.4 | 7,353.3 | 9,131.8 |  |  |
| Growth y-y (\%) |  | -15.7 | 37.1 | 24.2 |  |  |
| Depreciation |  | 1,372 | 1,483 | 1,593 |  |  |
| Increase in WC |  | -317 | -286 | 54 |  |  |
| Capex |  | 2,500 | 2,500 | 2,500 |  |  |
| Debt raised-debt repaid |  | 12 | 20 | -17 |  |  |
| Equity raised |  | 0 | 0 | 0 |  |  |
|  | FY12E | FY13E | FY14E | FY15E | FY16E |  |
| PAT | 9,680 | 10,164 | 10,570 | 10,887 | 11,214 |  |
| Growth y-y (\%) | 6.0 | 5.0 | 4.0 | 3.0 | 3.0 |  |
| FCFE | 8,018 | 8,574 | 9,110 | 9,629 | 9,749 |  |
| ROE | 35.0 | 32.0 | 29.0 | 26.0 | 23.0 |  |
| Retention ratio | 17.2 | 15.6 | 13.8 | 11.6 | 13.1 |  |
|  |  |  | Terminal ROE (\%) | Terminal growth (\%) | Cost of equity (\%) | TV (INRmn) |
| NPV of FCFE | 62,403 |  | 20.00 | 2.00 | 15.0 | 79,188 |
| No. of shares | 144.68 |  |  |  |  |  |
| Per share[Nov 2008] | 431 |  |  |  |  |  |
| Investments | 41 |  |  |  |  |  |
| Total [Nov 2008] | 473 |  |  |  |  |  |
| Price target [Nov 2009] | 544 |  |  |  |  |  |

Source: Company data, Nomura estimates

## Investment risks

- Nano could replace passenger three-wheelers. If the volume decline in threewheelers is sharper than expected because of regulatory changes allowing products such as Nano to replace passenger three-wheelers, Bajaj Auto's volumes will fall sharply, resulting in a sharp earnings decline.
- Variants of XCD do not succeed. If variants of Bajaj Auto's XCD do not succeed, HH could continue to dominate the segment.
- Failure of new four-wheeler. Bajaj's new four-wheeler will face significant competition from players such as Tata Motors (TTMT IS, not rated), Mahindra \& Mahindra (MM IS, not rated), Ashok Leyland (AL IS, not rated) and Piaggio (India) (not listed). We believe the new four-wheeler might not be as successful as its three-wheeler or the profitability of the four-wheeler could be much lower.

Significant risks to new small car venture. Bajaj Auto plans to launch a small car around FY12. We believe that this product may not turn out to be a commercial success because 1) competition in this space is likely to increase further and 2) if the product competes with Tata Motors' 'Nano' the project may not be viable, given the limited payoff from the segment.

Exhibit 50. Bajaj Auto: income statement

| Year-end 31 Mar (INRmn) | FYo9E | FY10E | FY11E |
| :--- | ---: | ---: | ---: |
| Net sales | 93,840 | 101,855 | 113,360 |
| Growth (\%) | 8.3 | 8.5 | 11.3 |
| Operating expenses | $-84,494$ | $-91,434$ | $-102,367$ |
| Operating profit | 9,346 | 10,421 | 10,992 |
| Other income | 4,433 | 4,996 | 5,679 |
| EBITDA | 13,779 | 15,418 | 16,671 |
| Depreciation | $-1,372$ | $-1,483$ | $-1,593$ |
| Expenses capitalised | 230 | 230 | 230 |
| EBIT | 12,637 | 14,165 | 15,308 |
| Interest paid | -56 | -68 | -69 |
| Associates | 0 | 0 | 0 |
| Non-recurring items (net of taxes) | $-3,515$ | $-1,833$ | 0 |
| Pre-tax profit | 9,065 | 12,264 | 15,239 |
| Tax (current + deferred) | $-4,143$ | $-4,646$ | $-5,030$ |
| Profit after tax | 4,922 | 7,618 | 10,209 |
| Minority interests | 0 | 0 | 0 |
| Preference dividend | 0 | 0 | 0 |
| Net profit | 4,922 | 7,618 | 10,209 |
| Adjusted net profit | 8,437 | 9,451 | 10,209 |
| Growth (\%) | 2.4 | 12.0 | 8.0 |

Source: Company data, Nomura estimates

## Exhibit 51 . Bajaj Auto: balance sheet

| Year-end 31 Mar (INRmn) | FY09E | FY10E | FY11E |
| :--- | ---: | ---: | ---: |
| Current assets | 32,139 | 37,434 | 44,852 |
| Investments | 6,259 | 6,259 | 6,259 |
| Associates | 0 | 0 | 0 |
| Net fixed assets | 14,166 | 15,183 | 16,090 |
| Other non-current assets | 1,310 | 1,310 | 1,310 |
| Total assets | 53,874 | 60,186 | 68,511 |
| Current liabilities | 18,989 | 20,790 | 22,954 |
| Total debt | 13,355 | 13,376 | 13,359 |
| Other liabilities | 2,905 | 2,905 | 2,905 |
| Total liabilities | 35,250 | 37,071 | 39,218 |
| Share capital | 1,447 | 1,447 | 1,447 |
| Reserves and surplus | 17,177 | 21,668 | 27,846 |
| Shareholders' funds | 18,624 | 23,115 | 29,293 |
| Minorities | 0 | 0 | 0 |
| Total equity and liabilities | 53,874 | 60,186 | 68,511 |

Source: Company data, Nomura estimates

Exhibit 52. Bajaj Auto: cash flow statement

| Year-end 31 Mar (INRmn) | FYo9E | FY10E | FY11E |
| :--- | ---: | ---: | ---: |
| Pre-tax profit | 9,065 | 12,264 | 15,239 |
| Depreciation | 1,372 | 1,483 | 1,593 |
| Tax paid | $-3,747$ | $-4,210$ | $-4,551$ |
| Chg in working capital | -470 | -498 | -758 |
| Other operating activities | 0 | 0 | 0 |
| Cash flow from operations (a) | 6,220 | 9,039 | 11,523 |
| Capital expenditure | $-2,505$ | $-2,500$ | $-2,500$ |
| Chg in investments | $-1,950$ | $-3,780$ | $-5,200$ |
| Chg in associates | 0 | 0 | 0 |
| Other investing activities | 0 | 0 | 0 |
| Cash flow from investing (b) | $-4,455$ | $-6,280$ | $-7,700$ |
| Free cash flow (a+b) | 1,766 | 2,759 | 3,823 |
| Equity raised/(repaid) | 0 | 0 | 0 |
| Chg in minorities | 0 | 0 | 0 |
| Debt raised/(repaid) | 12 | 20 | -17 |
| Dividend (incl. tax) | $-2,894$ | $-3,332$ | $-3,732$ |
| Other financing activities | 0 | 0 | 0 |
| Cash flow from financing (c) | $-2,882$ | $-3,311$ | $-3,749$ |
| Net chg in cash (a+b+c) | $-1,116$ | -552 | 74 |

Source: Company data, Nomura estimates

Exhibit 53. Bajaj Auto: key ratios

| Year-end 31 Mar (INRmn) | FY09E | FY10E | FY11E |
| :--- | ---: | ---: | ---: |
| Adjusted EPS (INR) | 58.3 | 65.3 | 70.6 |
| Adjusted EPS growth (\%) | 2.4 | 12.0 | 8.0 |
| EBITDA growth (\%) | -1.1 | 11.9 | 8.1 |
| EBITDA margin (\%) | 14.7 | 15.1 | 14.7 |
| Pre-tax margin (\%) | 9.7 | 12.0 | 13.4 |
| ROE (\%) | 48.9 | 45.3 | 39.0 |
| ROCE (\%) | 37.7 | 38.1 | 36.0 |
| Net debt/equity (\%) | -8.1 | -23.0 | -36.2 |
| Source: Company data, Nomura estimates |  |  |  |

Exhibit 54. Bajaj Auto: valuations

| Year-end 31 Mar (INRmn) | FY09E | FY10E | FY11E |
| :--- | ---: | ---: | ---: |
| P/E (x) | 7.3 | 6.5 | 6.0 |
| PCE (x) | 6.3 | 5.6 | 5.2 |
| P/B (x) | 3.3 | 2.7 | 2.1 |
| Yield (\%) | 4.8 | 5.4 | 5.8 |
| EV/Net sales (x) | 0.4 | 0.4 | 0.3 |
| EV/EBITDA $(x)$ | 3.0 | 2.4 | 1.9 |

[^5]
## TVS Motor Company

Stock rating: NEUTRAL
Sector view: BULLISH
Ticker: TVSL IS
Price (INR) 10 Nov: 28.5
Price target (INR): 30.4
Potential upside/downside: 7\%

Trading at $8.7 \times$ FY1OE EPS, TVS appears undervalued when compared with its competitors. However, we believe that its business is more risky than that of its competitors. The company has always banked on a star product. In early 2000-01 it was 'Victor,' and in the past few years it has been 'Star'. However, it has not had a successful product since FYO7. TVS's competitors are also much stronger financially and can roll out multiple variants and models quickly.

We believe that even with raw material pressures easing off next year TVS's margins will remain under constant threat from the strong competitive environment and will remain far below those of its competitors. TVS's past successes in volumes came from the economy segment alone, where pricing power is rather low. To improve its performance, TVS must demonstrate success with high-end products, which it has not yet done. TVS has entered the three-wheeler business in 2008 when the market is in a structural decline. Hence, we are not optimistic about its three-wheeler volume growth.

TVS has the least financial flexibility among the three large two-wheeler players in India. It is the only two-wheeler company in our coverage which has positive net debt. It has made significant investments in Indonesia, which are yet to break even. We estimate that the company may just about break even in Indonesia in FYIOE and hence are not assigning any value to the venture at this stage.

## Valuation

We rate TVS NEUTRAL, with a 12 -month price target of INR30.4. We have valued TVS based on DCF. We have used a discount rate of $13.8 \%$ (beta=0.9, Rf=7.5, Rp=7) with a $3.2 \%$ earnings CAGR from FY1 1 E to FY16E and terminal growth of $2 \%$ thereafter. The implied multiple on our target is $7.4 \times \mathrm{FY} 11 \mathrm{E}$.

| Exhibit 55. TVS: DCF-based valuation |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | FY07A | FY08E | FY09E | FY10E | FY11E |  |
| Total revenues | 39,101 | 32,936 | 38,371 | 41,263 | 44,519 |  |
| Growth y -y (\%) | 19.2 | -16.5 | 17.2 | 7.5 | 7.9 |  |
| Operating profit | 1,924 | 1,154 | 1,960 | 2,356 | 2,551 |  |
| OPM (\%) | 4.9 | 3.5 | 5.1 | 5.7 | 5.7 |  |
| Interest | 321 | 22 | 378 | 355 | 276 |  |
| Depreciation | 876 | 946 | 1,054 | 1,097 | 1,141 |  |
| PBT | 728 | 186 | 527 | 903 | 1,135 |  |
| Tax | 243 | 36 | 153 | 275 | 346 |  |
| Tax rate | 27 | 10 | 29 | 31 | 31 |  |
| PAT | 485 | 150 | 374 | 628 | 788 |  |
| Growth y - y (\%) | -47.9 | -69.1 | 150.1 | 67.7 | 25.6 |  |
| Depreciation | 876 | 946 | 1,054 | 1,097 | 1,141 |  |
| Increase in WC | 820 | 107 | 576 | 213 | 271 |  |
| Capex | 2,835 | 1,287 | 750 | 750 | 750 |  |
| Debt raised-debt repaid | 2,485 | 328 | -28 | 34 | -195 |  |
| Equity raised | 0 | 0 | 0 | 0 | 0 |  |
| Free cash flow | 192 | 29 | 75 | 797 | 713 |  |
|  | FY12E | FY13E | FY14E | FY15E | FY16E |  |
| PAT | 828 | 853 | 878 | 905 | 923 |  |
| Growth y -y (\%) | 5.00 | 3.00 | 3.00 | 3.00 | 2.00 |  |
| FCFE | 478 | 653 | 688 | 722 | 798 |  |
| ROE | 11.84 | 12.84 | 13.84 | 14.84 | 14.84 |  |
| Retention ratio | 42.2 | 23.4 | 21.7 | 20.2 | 13.5 |  |
| NPV of FCFE | 5,489 |  |  |  |  |  |
|  |  |  | Terminal ROE (\%) | Terminal growth (\%) | Cost of equity (\%) | TV (INRmn) |
| No. of shares | 237.5 |  | 14.50 | 2.00 | 13.80 | 6,876 |
| Price per share[Nov 2008] | 23.1 |  |  |  |  |  |
| Cash per share | 3.6 |  |  |  |  |  |
| Total (Nov 2008) | 26.7 |  |  |  |  |  |
| Price per share[Nov 2009] | 30.4 |  |  |  |  |  |

Source: Company data, Nomura estimates

## Investment risks

- Key upside risks: We have assumed that TVS's new product launches will be moderately successful. If these are highly successful, there could be significant upside to our estimates. We have not included income from TVS's Indonesia operations in our estimates. IF TVS can make significant profits in Indonesia, its earnings could be higher than our estimates.
- Key downside risks: We have assumed that competitive intensity will not increase substantially from current levels. In case of a price war, of the top three TVS would likely suffer the most. We have assumed that there will be no significant increase in raw material costs beyond the current fiscal year. If raw material costs rise further, there could be downside risks to our margin estimates. We have assumed that TVS will improve its performance to start making higher returns on equity in the medium term. If higher returns do not materialise, there will be downside risks to our estimates.

| Exhibit 56. TVS: income statement |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Year-end 31 Mar (INRmn) | FY07A | FY08A | FY09E | FY10E | FY11E |
| Net sales | 38,724 | 33,196 | 38,371 | 41,263 | 44,519 |
| Growth (\%) | 15.8 | -14.3 | 15.6 | 7.5 | 7.9 |
| Operating expenses | -36,799 | -32,043 | -36,411 | -38,907 | -41,968 |
| Operating profit | 1,924 | 1,154 | 1,960 | 2,356 | 2,551 |
| Other income | 181 | 287 | 169 | 213 | 262 |
| EBITDA | 2,105 | 1,441 | 2,129 | 2,569 | 2,813 |
| Depreciation | -876 | -946 | -1,054 | -1,097 | -1,141 |
| Expenses capitalised | 0 | 0 | 0 | 0 | 0 |
| EBIT | 1,229 | 495 | 1,075 | 1,471 | 1,672 |
| Interest paid | -321 | -22 | -378 | -355 | -276 |
| Associates | 0 | 0 | 0 | 0 | 0 |
| Non-recurring items (net of taxes) | 0 | -119 | 0 | 0 | 0 |
| Pre-tax profit | 908 | 354 | 696 | 1,116 | 1,396 |
| Tax (current + deferred) | -243 | -36 | -202 | -340 | -426 |
| Profit after tax | 666 | 318 | 494 | 776 | 970 |
| Minority interests | 0 | 0 | 0 | 0 | 0 |
| Preference dividend | 0 | 0 | 0 | 0 | 0 |
| Net profit | 666 | 318 | 494 | 776 | 970 |
| Adjusted net profit | 666 | 437 | 494 | 776 | 970 |
| Growth (\%) | -43.1 | -34.4 | 13.2 | 56.9 | 25.1 |

Source: Company data, Nomura estimates

Exhibit 57. TVS: balance sheet

| Year-end 31 Mar (INRmn) | FY07A | FY08A | FY09E | FY10E | FY11E |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Current assets | 8,224 | 7,748 | 9,193 | 9,855 | 10,631 |
| Investments | 3,447 | 3,390 | 3,390 | 4,140 | 4,840 |
| Associates | 0 | 0 | 0 | 0 | 0 |
| Net fixed assets | 10,029 | 10,431 | 10,126 | 9,779 | 9,389 |
| Other non-current assets | 0 | 0 | 0 | 0 | 0 |
| Total assets | 21,701 | 21,568 | 22,709 | 23,774 | 24,859 |
| Current liabilities | 5,770 | 5,058 | 5,927 | 6,376 | 6,881 |
| Total Debt | 6,336 | 6,663 | 6,635 | 6,670 | 6,474 |
| Other liabilities | 2,087 | 2,159 | 2,159 | 2,159 | 2,159 |
| Total liabilities | 14,193 | 13,880 | 14,722 | 15,205 | 15,515 |
| Share capital | 238 | 238 | 238 | 238 | 238 |
| Reserves and surplus | 7,270 | 7,451 | 7,750 | 8,331 | 9,107 |
| Shareholders' funds | 7,507 | 7,688 | 7,988 | 8,569 | 9,345 |
| Minorities | 0 | 0 | 0 | 0 | 0 |
| Total equity and liabilities | 21,701 | 21,568 | 22,709 | 23,774 | 24,859 |

Source: Company data, Nomura estimates

| Exhibit 58. TVS: cash flow statement |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Year-end 31 Mar (INRmn) | FY07A | FY08A | FY09E | FY10E | FY11E |
| Pre-tax profit | 908 | 354 | 696 | 1,116 | 1,396 |
| Depreciation | 876 | 946 | 1,054 | 1,097 | 1,141 |
| Tax paid | -243 | -36 | -202 | -340 | -426 |
| Chg in working capital | -647 | -952 | -311 | -190 | -246 |
| Other operating activities | 350 | 58 | 0 | 0 | 0 |
| Cash flow from operations (a) | 1,244 | 369 | 1,237 | 1,683 | 1,865 |
| Capital expenditure | -2,835 | -1,287 | -750 | -750 | -750 |
| Chg in investments | -6 | 58 | 0 | -750 | -700 |
| Chg in associates | 0 | 0 | 0 | 0 | 0 |
| Other investing activities | 0 | 0 | 0 | 0 | 0 |
| Cash flow from investing (b) | -2,840 | -1,229 | -750 | -1,500 | -1,450 |
| Free cash flow (a+b) | -1,596 | -860 | 487 | 183 | 415 |
| Equity raised/(repaid) | 0 | 0 | 0 | 0 | 0 |
| Chg in minorities | 0 | 0 | 0 | 0 | 0 |
| Debt raised/(repaid) | 2,485 | 328 | -28 | 34 | -195 |
| Dividend (incl. tax) | -231 | -195 | -195 | -195 | -195 |
| Other financing activities | -36 | 0 | 0 | 0 | 0 |
| Cash flow from financing (c) | 2,218 | 133 | -223 | -160 | -390 |
| Net chg in cash (a+b+c) | 622 | -727 | 265 | 23 | 26 |

Source: Company data, Nomura estimates

| Exhibit 59. TVS: key ratios |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: |
| Year-end 31 Mar (INRmn) | FY07A | FY08A | FY09E | FY10E | FY11E

Exhibit 60. TVS: valuations

| Year-end 31 Mar (INRmn) | FY07A | FY08A | FY09E | FY10E | FY11E |
| :---: | :---: | :---: | :---: | :---: | :---: |
| PER (x) | 10.1 | 15.5 | 13.7 | 8.7 | 7.0 |
| PCE (x) | 4.4 | 4.9 | 4.4 | 3.6 | 3.2 |
| Price/book (x) | 0.9 | 0.9 | 0.8 | 0.8 | 0.7 |
| Yield (\%) | 3.4 | 2.9 | 2.9 | 2.9 | 2.9 |
| EV/net sales (x) | 0.3 | 0.4 | 0.3 | 0.3 | 0.2 |
| EV/EBITDA (x) | 5.2 | 8.7 | 5.7 | 4.5 | 3.8 |

[^6]
## Appendix I: Minimum support prices for agricultural products

The Government of India defines the MSP of agricultural commodities. There have been sharp increases in MSP this year, with wheat prices increasing $33 \%$, coarse cereals $19 \%$, maize $14.8 \%$ and paddy $11.2 \%$. We believe this will lead to sharp growth in the incomes of people living in rural India. According to the 2001 census, more than $70 \%$ of India's population lives in rural India.

Exhibit 61. MSP of agricultural products (INR per quintal)

| No. | Commodity | Variety | 2004-05 | 2005-06 | 2006-07 | 2007-08 | y-y (\%) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Paddy | Common | 560 | 570 | 580 | 645 | 11.2 |
|  |  | Grade "A" | 590 | 600 | 610 | 675 | 5.7 |
| 2 | Coarse Cereals |  | 515 | 525 | 540 | 600 | 19.4 |
|  | (Jowar, Bajra and Ragi) |  |  |  |  |  |  |
| 3 | Maize |  | 525 | 540 | 540 | 620 | 14.8 |
| 4 | Wheat |  | 640 | 650 | 750 | 1,000 | 33.3 |
| 5 | Barley |  | 540 | 550 | 565 | 650 | 15.0 |
| 6 | Gram |  | 1,425 | 1,435 | 1,445 | 1,600 | 10.7 |
| 7 | Arhar (Tur) |  | 1,390 | 1,400 | 1,410 | 1,550 | 9.9 |
| 8 | Moong |  | 1,410 | 1,520 | 1,520 | 1,700 | 11.8 |
| 9 | Urad |  | 1,410 | 1,520 | 1,520 | 1,700 | 11.8 |
| 10 | Masur (Lentil) |  | 1,525 | 1,535 | 1,545 | 1,700 | 10.0 |
| 11 | Sugarcane @ |  | 74.50 | 79.50 | 80.25 | 81.18 | 1.2 |
| 12 | Cotton | F-414/H-777/J-34 | 1,760 | 1,760 | 1,770 | 1,800 | 1.7 |
|  |  | H-4 | 1,960 | 1,980 | 1,990 | 2,030 | 2.0 |
| 13 | Groundnut-in-shell |  | 1,500 | 1,520 | 1,520 | 1,550 | 2.0 |
| 14 | Jute |  | 890 | 910 | 1,000 | 1,055 | 5.5 |
| 18 | Rapeseed/Mustard |  | 1,700 | 1,715 | 1,715 | 1,800 | 5.0 |
| 16 | Sunflower Seed |  | 1,340 | 1,500 | 1,500 | 1,510 | 0.7 |
| 17 | Soya bean | Black | 900 | 900 | 900 | 910 | 1.1 |
|  |  | Yellow | 1,000 | 1,010 | 1,020 | 1,050 | 2.9 |
| 18 | Safflower |  | 1,550 | 1,565 | 1,585 | 1,650 | 4.1 |
| 19 | Toria |  | 1,665 | 1,680 | 1,680 | 1,735 | 3.3 |
| 20 | Tobacco (VFC) | Black Soil (F2;Gr.) | 32.00 | 32.00 | 32.00 | 32 | 0.0 |
|  | (INR per kg) | Light Soil (L2;Gr.) | 34.00 | 34.00 | 34.00 | 34 | 0.0 |
| 21 | Copra | Milling | 3,500 | 3,570 | 3,590 | 3,620 | 0.8 |
|  |  | Ball | 3,750 | 3,820 | 3,840 | 3,870 | 0.8 |
| 22 | Sesame |  | 1,500 | 1,550 | 1,560 | 1,580 | 1.3 |
| 23 | Nigerseed |  | 1,180 | 1,200 | 1,220 | 1,240 | 1.6 |

[^7]
## Appendix II: Sixth Pay Commission

The Sixth Pay Commission recently recommended salary increases for approximately 3.1 mn central government employees. According to our estimates, the average increase in salary is $67 \%$. Since the increase is effective from 1 January 2006, employees will also receive arrears (on average $46 \%$ of earlier pay). The employees eligible for this salary hike and falling in the addressable segments form $32 \%$ of annual two-wheeler sales and $23 \%$ of annual car sales. More importantly, over the next one to two years, approximately 8 mn state government employees are also expected to receive a similar increase in salary.

Exhibit 62. Impact of Sixth Pay Commission

| Pay scale (INR) | \% of employees | \% increase in pay | Arrear as a \% of earlier pay |
| :--- | ---: | ---: | ---: |
| $2,550-3,050$ | 17.4 | 64.1 | 46.5 |
| $3,050-4,500$ | 37.3 | 74.7 | 43.7 |
| $4,500-5,500$ | 15.8 | 80.3 | 43.1 |
| $5,500-6,500$ | 11.3 | 71.7 | 46.0 |
| $6,500-8,000$ | 9.3 | 63.8 | 43.0 |
| $8,000-10,000$ | 5.0 | 57.8 | 42.7 |
| $10,000-14,300$ | 2.7 | 66.5 | 40.9 |
| $14,300-18,400$ | 0.8 | 67.4 | 59.2 |
| $18,400-$ | 0.4 | 60.6 | 48.1 |

Source: Nomura estimates

Exhibit 63. Impact of pay hike on auto market

|  | FY08 domestic | Addressable population (AP) | AP as a \% of |
| :--- | ---: | ---: | ---: |
| impacted (mn) | yearly sales |  |  |
| Two-wheeler | 7.2 | 2.3 | 32.4 |
| Car | 1.2 | 0.3 | 23.5 |

Source: Nomura estimates


## CHART IS NOT APPLICABLE

Risks Which May Impede the Achievement of the Price Target: 1) Nano could replace passenger three-wheelers. If the volume decline in three-wheelers is sharper than expected because of regulatory changes allowing products such as Nano to replace passenger three-wheelers, Bajia Auto's volumes will fall sharply, resulting in a sharp earnings dedine. 2) Variants of XCD do not succeed. If variants of Bajaj Auto's XCD do not succeed, HH could continue to dominate the segment. 3) Failure of new four-wheeler. Bajai's new four-wheeler will face significant competition. We believe the new four-wheeler might not be as successful as its three-wheeler or the profitability of the four-wheeler could be much lower.
4) Significant risks to new small car venture. Bajai Auto plans to launch a small car around FY12. We believe that this product may not turn out to be a commercial success because i) competition in this space is likely to increase further and ii) if the product competes with Tata Motors' 'Nano' the project may not be viable, given the limited payoff from the segment.

Hero Honda (HROH.NS)
INR 755.35 ( $10-$ Nov-2008)
Buy / Bullish
Rating and Price Target Chart:

## CHART IS NOT APPLICABLE

Risks Which May Impede the Achievement of the Price Target: We have assumed a moderate growth rate for motorcycles. If volume growth is lower than our expectations, there could be downside to our estimates. We have assumed that the prevailing tight monetary conditions will begin to ease off by end-FY09E. If credit availability remains tight, volume growth may be negatively affected. If the ramp-up at the new plant is slower than our estimates, margins could be lower than our forecassts; in which case, even the tax rate could be higher than our estimates. We have assumed that commodity prices will soften in FY 10 E . If the prices do not fall, there would be downside risks to our margin estimates.

Maruti Suzuki India Limited (MRTI.NS) INR 596.05 (10-Nov-2008)<br>Buy / Bullish<br>Rating and Price Target Chart:

## CHART IS NOT APPLICABLE

Risks Which May Impede the Achievement of the Price Target: Car sales in India are linked to income growth, which is dependent on overall economic growth. We are assuming GDP growth of $6.9 \%$ for FY1OE. Any downturn in economic growth in India would have a significant negative impact on our growth assumptions and price target. A further rise in interest rates in India would also have a significant negative impact on our estimates. We have assumed that MSIL's future product launches will help it maintain steady growth rates. If many of its new launches are unsuccessful, our growth assumptions could be reduced sharply. We have also assumed improvements in operating margins. A sharp increase in row material costs could have a negative impact on our margin assumptions. We have assumed that MSIL will be able to maintain its market share. However, if new or existing players are able to launch successful products, our growth forecasts would be affected negatively.

TVS Motor (TVSM.NS)
INR 28.55 (10-Nov-2008)
Neutral / Bullish
Rating and Price Target Chart:

## CHART IS NOT APPLICABLE

Risks Which May Impede the Achievement of the Price Target: Key upside risks: 1) We have assumed that TVS' new product launches will be moderately successful. If these are highly successful, there could be significant upside to our estimates. 2) We have not included income from TVS' Indonesia operations in our estimates. If TVS can make high profits in Indonesia, its earnings could be higher than our estimates.

Key downside risks: 1) We have assumed that comperitive intensity will not increase substantially from current levels. In case of a price war, TVS will be hurt the most among the top three. 2) We have assumed that there will be no significant increase in raw material costs beyond the current fiscal year. If raw material costs rise further, there could be downside risks to our margin estimates. 3) We have assumed that TVS will improve its performance to start making higher returns on equity in the medium term. If higher returns do not materialise, there will be downside risks to our estimates.

Important Disclosures Continued:

| Mentioned Company | Ticker | Price | Price Date | Stock / Sector Rating |
| :--- | :--- | :--- | :--- | :--- |
| Bajaj Auto | BAJA.NS | INR 426.35 | 10 Nov 2008 | Buy / Bullish |
| Hero Honda | HROH.NS | INR 755.35 | 10 Nov 2008 | Buy / Bullish |
| Maruti Suzuki India Limited | MRTI.NS | INR 596.05 | 10 Nov 2008 | Buy / Bullish |
| TVS Motor | TVSM.NS | INR 28.55 | 10 Nov 2008 | Neutral / Bullish |

All share prices mentioned are closing prices unless otherwise stated.

Bajaj Auto: We value Bajaj Auto based on DCF. We have used a discount rate of $13.2 \%$ (beta $=0.82, \mathrm{Rf}=7.5, \mathrm{Rp}=7$ ) with a $4.2 \%$ earnings CAGR from FY 11 E to FY 16 and terminal growth of $2 \%$ thereafter.
Hero Honda: We value HH based on DCF. For this purpose we have used $11.8 \%$ discount rate (based on $\mathrm{Rf}=7.5 \%, \mathrm{Rp}=7 \%$ and beta $=0.614$ ) with $5 \%$ earnings CAGR from FY11E to FY 16 E and terminal growth of $2 \%$ thereafter.
Maruti Suzuki India Limited: On a discounted cash flow (DCF)-based valuation, our target price of INR775 builds in a terminal FCFE [Free cash flow to Equity] CAGR of 4\%, after an intermediate stage earnings CAGR of $9.3 \%$ from FYIIE to FY2OE.
TVS Motor: Our 12-month price target of INR30.4 is based on DCF. We have used a discount rate of $13.8 \%$ (beta $=0.9, \mathrm{RF}=7.5, \mathrm{Rp}=7$ ). with a $3.2 \%$ earnings CAGR from FY11E to FY16E and terminal growth of $2 \%$ thereafter.

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Explanation of Nomura's equity research rating system in Japan (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 andlyst 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 andlyst 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 addifional 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 onalyst expects the sector to outperform the Benchmark during the next six months.
A "Neutral" stance, indicates that the andlyst expects the sector to perform in line with the Benchmark during the next six months.
A "Bearish" stance, indicates that the andlyst 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 after 30 October 2008:

Stocks:
Stock recommendations are based on absolute valuation upside (downside), which is defined as (Price Target - Current Price) / Current Price, subject to limited management discretion. In most cases, the Price Target will equal the analyst's 12-month intrinsic valuation of the stock, based on an appropiate 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 "RS" or "Rating 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.
- Stocks labelled as "Not rated" or shown as "No rating" are not in Nomura's regular research coverage.

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 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 (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. 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 valve 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 overage 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.

## Price targets

Price targets, if discussed, reflect in part the analyst's estimates for the company's earnings. The achievement of any price target 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.

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[^0]:    Source: Nomura estimates

[^1]:    Source: Nomura estimates

[^2]:    Source: Nomura estimates

[^3]:    Source: Nomura estimates

[^4]:    Source: SIAM, Nomura research

[^5]:    Source: Company data, Nomura estimates

[^6]:    Source: Company data, Nomura estimates

[^7]:    Source: Department of Agriculture \& Co-operation, India

