Equities

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Auto sector investment strategy

Japan's automakers fight back

- **Structural innovations to counter weak demand and strong yen** — Shares of Japan's automakers have been languishing because of investor fears over weak global demand and a strong yen. However, we feel investors are at risk of missing the structural transformation in their earnings models owing to revolutionary changes in development and production. What we particularly want to stress is that most Japanese automakers can generate high earnings levels even at ¥80/$. Whilst we upgrade Honda and Fuji Heavy to Buy, among the Big 3 we still maintain our strongest preference for Nissan.
- **Structural change to determine ratings** —To determine our Buy-rated stocks, we select those companies that are making the most progress in 1) coming up with innovations in development and production, 2) transforming their earnings structures, especially in high-growth emerging markets, 3) building know-how in and commercializing low-cost vehicle production so that they can beat out the competition in emerging markets, and 4) establishing superiority through environmental performance in developed markets.
- **Sector recommendations** — Our order of preference in the sector is Isuzu, followed by Hino, Nissan, Fuji Heavy, and Honda. We also keep Buy ratings on Daihatsu, where there are near-term concerns of a slowdown in Indonesian demand, and Suzuki, where there are also near-term concerns about a deteriorating Indian economy. Although their share prices could fluctuate over the near term on these concerns we rate them Buy based on their longer term potential.
- **More cautious elsewhere** — We rate the following Neutral: Mazda, which has failed to see an earnings recovery materialize due to yen strength, Toyota, which has been slower than peers in reforming its earnings structure, Mitsubishi Motors, where the problem of the preferred shares remains, and Yamaha Motor, where Indonesian sales are plunging but the shares have pulled back sharply.

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	Rating		Target Price		Current Year Earnings Estimates		Next Year Earnings Estimates	
Ticker	Old	New	Old	New	Old	New	Old	New
7201	1	1	¥1,290	¥1,090	¥131	¥100	¥148	¥122
7202	1	1	¥480	¥630	¥45	¥51	¥46	¥55
7203	2	2	¥3,990	¥3,300	¥289	¥260	¥355	¥345
7205	1	1	¥660	¥810	¥41	¥58	¥54	¥70
7211	2	2	-	-	¥3	¥3	¥5	¥5
7261	2	2	¥160	¥110	¥10	¥3	¥21	¥11
7262	1	1	¥1,770	¥1,730	¥141	¥176	¥160	¥181
7267	2	1	¥3,530	¥3,350	¥297	¥280	¥366	¥333
7269	1	1	¥2,370	¥2,010	¥134	¥123	¥147	¥139
7270	2	1	¥750	¥800	¥74	¥72	¥80	¥72
7272	2	2	¥1,250	¥850	¥63	¥26	¥115	¥72

See Appendix A-1 for Analyst Certification, Important Disclosures and non-US research analyst disclosures.

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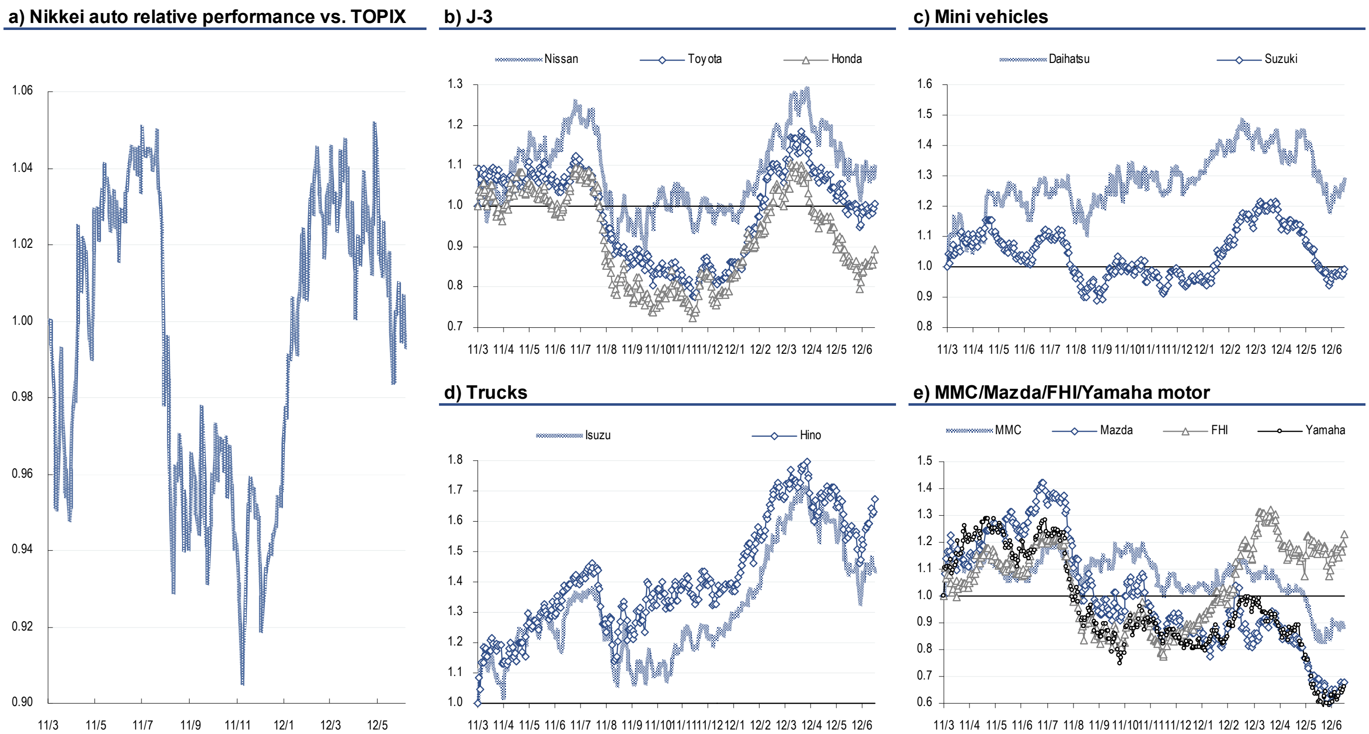
Buy the historical transformations that are allowing Japanese automakers to come back more powerfully than ever before, despite the strength of the yen

The time has come to change your take on Japan's automakers

The auto sector has been left languishing at low valuations. There are certainly negatives around: concerns over vulnerabilities to the strong yen and how far Western Europe will slump and worries about slowdowns in China and Indonesia. However, Japan's automakers are bidding for a new earnings revolution and time for the fruits of these bids to appear is ripe. We feel it would be a waste if investors failed to notice the monumental changes afoot and did not switch to a bullish stance on the automakers. We recommend buying automakers that are reviving as auto firms that are stronger than ever.

Figure 1. Share price performance



Source: Nikkei Amsus, Bloomberg. Citi Investment Research and Analysis.

Waking up to big changes at automakers

Our order of preference: Isuzu, then Hino, Nissan, Fuji Heavy, and Honda

As Figure 1 shows, auto sector share prices have fallen back markedly due to deterioration in the macro situation on factors such as the European financial crisis and the ultra-strong yen since last summer. However, automakers have been grappling with the urgent problems set out in Figure 2, aiming to generate earnings and deliver competitive superiority. Among them are companies that have discarded the measures that were successful in the past, pushed a variety of earnings structure innovations such as development and production revolutions, and made a quick and successful fist of them. We anticipate record earnings in FY3/13 for truck makers Isuzu and Hino and minivehicle maker Daihatsu, which have switched to a business model focused on emerging markets from one that was focused on developed markets.

However, the equity market still has an old-hat image of the automakers as vulnerable to earnings strength and have not woken up to the huge transformations at the automakers we rate Buy. As a consequence, even the stocks of automakers that have been pushing epochal transformations in their earnings structures and are enjoying the fruits of this have been beaten down to levels at which their future enterprise value is being underappreciated. We think there are now opportunities to buy into earnings recoveries driven by structural transformations ahead of time.

Figure 2. Urgent issues facing automakers

Excessive yen strength	→	1. Absorb through lower costs via production and development innovations. 2. Utilize global network, such as components used in overseas production. 3. Raise selling prices. 4. Shift production of unprofitable products overseas.
Rise in parts and material prices	→	Pass cost increases along to customers through new production revolution
Supply bottleneck of materials like non-ferrous and rare metals	→	Decrease usage ratio / develop alternative materials
Stricter fuel efficiency standards	→	Miniaturization, lightweight, hybrids and EVs, existing engine revolutions and shift to new packages
Recovery in auto demand	→	Review production system and improve efficiency, expand production capacity in areas like Asia
Improve profitability at local plants	→	Review cost cutting process (development / design and procuremment premised on local production)
Ensure sales	→	Foster sales strength (sell at high prices)
Deal with quality issues	→	Review processes, determine new quality standards and demand specifications

Source: Citi Investment Research and Analysis.

Conditions for the selection of Buy-rated stocks

To determine our Buy-rated stocks, we select those companies that are making the most progress in 1) coming up with innovations in development and production, 2) transforming their earnings structures, especially in high growth emerging markets, 3) building knowhow in and commercializing low-cost vehicle production so that they can beat out the competition in emerging markets, and 4) establishing superiority through environmental performance in developed markets.

Our order of preference is Isuzu, followed by Hino, Nissan, Fuji Heavy, and then Honda.

Daihatsu and Suzuki

As we note in the individual company sections inside, we also assign Buy ratings to Daihatsu, where there are concerns of a slowdown in Indonesian demand and to Suzuki, where there are concerns about a deteriorating Indian economy. Although their share prices could fluctuate over the near term on these concerns we rate them Buy based on their longer term potential.

Other names

We rate the following Neutral: Mazda, which has failed to see an earnings recovery materialize due to yen strength, Toyota, which has been slower than peers in reforming its earnings structure, Mitsubishi Motors, where the problem of the preferred shares remains, and Yamaha Motor, where Indonesian sales are plunging but the shares have pulled back sharply.

Ways to vanquish yen strength at ¥80/$

Our target is still equity market skepticism that automakers can generate high earnings levels at ¥80/$

What we particularly want to stress is that automakers are able to generate high earnings levels even when the yen/dollar rate is around ¥80/$. However, the equity market continues to have a mental picture of the old earnings structure of the automakers and has failed to notice that the automakers we rate Buy have transformed themselves.

Figure 3 shows the forex sensitivity of the automakers. CoGS cutting benefits from the introduction of new development and production method is beginning to allow them to display their strengths when they debut new vehicles and we are also upbeat about the prospects for volume benefits on global sales expansion. Selling price hikes in Asia and elsewhere are also offsetting yen strength and automakers like Nissan are having success with the proactive use of parts produced overseas.

Figure 3. Our forex sensitivity estimates

	Forex sensitivities (CIRA assumptions)					Company assumptions	
(Ybn)	USDJPY	EURJPY	GBPJPY	CADJPY	AUDJPY	USDJPY	EURJPY
Nissan	-20.0	-0.5	-0.5	-2.2	-1.6	82	105
Isuzu	-0.6	0.0	0.0	0.0	-0.3	80	-
Toyota	-35.0	-5.0	-0.5	-1.0	-4.0	80	105
Hino	-0.6	0.0	0.0	0.0	-0.2	80	-
MMC	-2.0	-1.0	-0.1	-0.5	-1.5	78	103
Mazda	-3.5	-1.2	-0.3	-1.2	-1.8	80	105
Daihatsu	-0.6	-0.1	0.0	0.0	0.0	80	100
Honda	-17.0	-0.7	-0.3	-0.5	-0.5	80	105
Suzuki	-0.8	-0.8	-0.1	-0.1	-0.2	75	105
Fuji Heavy	-7.8	-0.3	0.0	-0.3	0.0	80	105
Yamaha Motor	-2.3	-0.8	0.0	-0.2	-0.1	77	100

Source: Company data, Citi Investment Research and Analysis.

Figure 4 shows earnings forecasts by forex scenario. In our main scenario the rates are ¥80/$ and ¥100/€, in our strong-yen scenario they are ¥75/$ and ¥95/€, and in our weak-yen scenario they are ¥85/$ and ¥105/€. If the yen were to weaken in line with the weak-yen scenario, it goes without saying that share prices would likely surge. We note that in our strong-yen scenario, the only company that would post an operating loss in FY3/13 would be Mazda. We think truck makers and minivehicle makers, who are strong in Asia and Japan, can generate high levels of earnings even at these levels.

Figure 4. Forex scenario analysis

(Ybn)		a) CIRA estimate USDJPY 80 EURJPY 100				b) Scenario.1 USDJPY 75 EURJPY 95				c) Scenario.2 USDJPY 85 EURJPY 105			
		OP	NP	EPS	PER	OP	NP	EPS	PER	OP	NP	EPS	PER
Nissan	FY12	770.0	420.0	¥100	7.5x	646.0	339.7	¥81	9.2x	894.0	500.3	¥119	6.3x
	FY13	890.0	512.0	¥122	6.1x	766.0	430.6	¥103	7.3x	1,014.0	593.4	¥142	5.3x
Isuzu	FY12	131.0	86.0	¥51	8.1x	126.1	82.5	¥49	8.5x	135.9	89.5	¥53	7.8x
	FY13	148.0	92.5	¥55	7.5x	143.1	89.2	¥53	7.8x	152.9	95.8	¥57	7.3x
Toyota	FY12	1,160.0	823.0	¥260	11.7x	932.5	704.7	¥223	13.7x	1,387.5	941.3	¥297	10.3x
	FY13	1,380.0	1,093.0	¥345	8.8x	1,152.5	956.5	¥302	10.1x	1,607.5	1,229.5	¥388	7.9x
Hino	FY12	60.0	33.0	¥58	9.4x	56.0	30.4	¥53	10.3x	64.0	35.6	¥62	8.7x
	FY13	70.0	40.0	¥70	7.8x	66.0	37.4	¥66	8.3x	74.0	42.6	¥75	7.3x
MMC	FY12	76.0	30.0	¥3	25.9x	50.3	14.6	¥1	53.3x	101.7	45.4	¥5	17.1x
	FY13	95.0	50.0	¥5	15.6x	69.3	34.0	¥3	22.9x	120.7	66.0	¥7	11.8x
Mazda	FY12	27.0	8.0	¥3	39.2x	-13.0	-14.9	¥-5	n.m.	67.0	30.9	¥10	10.2x
	FY13	71.0	34.0	¥11	9.2x	31.0	10.6	¥4	29.7x	111.0	57.4	¥19	5.5x
Daihatsu	FY12	128.0	75.0	¥176	7.7x	124.5	72.7	¥171	7.9x	131.5	77.3	¥181	7.5x
	FY13	133.0	77.0	¥181	7.5x	129.5	74.7	¥175	7.7x	136.5	79.3	¥186	7.3x
Honda	FY12	670.0	505.0	¥280	9.2x	575.0	449.3	¥249	10.3x	765.0	560.7	¥311	8.3x
	FY13	780.0	600.0	¥333	7.7x	685.0	541.2	¥300	8.6x	875.0	658.8	¥366	7.0x
Suzuki	FY12	138.0	75.0	¥123	13.2x	128.0	69.0	¥113	14.4x	148.0	81.1	¥133	12.2x
	FY13	160.0	85.0	¥139	11.7x	150.0	78.8	¥129	12.6x	170.0	91.2	¥149	10.9x
FHI	FY12	78.0	56.0	¥72	8.7x	36.0	22.9	¥29	21.3x	120.0	89.1	¥114	5.5x
	FY13	88.0	56.0	¥72	8.7x	46.0	27.3	¥35	17.8x	130.0	84.7	¥109	5.8x
Yamaha	FY12	30.0	9.0	¥26	30.4x	13.0	0.1	¥0	2467.6x	47.0	17.9	¥51	15.3x
Motor	FY13	53.0	25.0	¥72	10.9x	36.0	15.1	¥43	18.1x	70.0	34.9	¥100	7.8x

Note: Yamaha Motor has a December year-end (FY12 = FY12/12) and others have March year-ends (FY12 = FY3/13).
Share prices as of the June 20 close.
Source: Citi Investment Research and Analysis.

Record earnings in sight for Isuzu, Hino, Daihatsu, Nissan, and Suzuki even at ¥80/$

Figure 5 shows our OP forecasts under our main scenario and makes it easy to see what level of earnings we are forecasting versus the historical highs. We think that investors will come to realize that many firms will be able to log new earnings records through FY3/13 and FY3/14 every time results announcements are made. We see these earnings records coming on expansion in global demand and CoGS cuts on the fruits of unprecedented development and production revolutions.

Figure 5. Automakers: OP versus the peak

(Ybn)	Historical high OP	Actual/CIRA estimate OP FY11	FY12E	FY13E	FY14E	vs. Historical high OP FY11	FY12E	FY13E	FY14E
Nissan	871.8 (FY05)	545.8	770.0	890.0	1,000.0	63%	88%	102%	115%
Isuzu	109.6 (FY07)	97.4	131.0	148.0	162.0	89%	120%	135%	148%
Toyota	2,270.4 (FY07)	355.6	1,160.0	1,380.0	1,650.0	16%	51%	61%	73%
Hino	45.9 (FY07)	37.5	60.0	70.0	82.0	82%	131%	153%	179%
MMC	108.6 (FY07)	63.7	76.0	95.0	118.0	59%	70%	87%	109%
Mazda	162.1 (FY07)	-38.7	27.0	71.0	105.0	n.m.	17%	44%	65%
Daihatsu	115.5 (FY11)	115.5	128.0	133.0	148.0	100%	111%	115%	128%
Honda	953.1 (FY07)	231.4	670.0	780.0	940.0	24%	70%	82%	99%
Suzuki	149.4 (FY07)	119.3	138.0	160.0	185.0	80%	92%	107%	124%
Fuji Heavy	91.4 (FY99)	44.0	78.0	88.0	110.0	48%	85%	96%	120%
Yamaha Motor	127.0 (FY07)	53.4	30.0	53.0	75.0	42%	24%	42%	59%

Source: Company data, Citi Investment Research and Analysis.

Figures 6 and 7 show valuations from FY3/00 and out. It should be apparent from these figures that current share price levels exhibit extreme undervaluation. We think that this shows beyond much doubt that there are buying opportunities now.

Figure 6. Automakers: Valuations

		FY99	FY00	FY01	FY02	FY03	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11	FY12E
Nissan															
PER	Max	n.m.	11.0x	10.4x	8.8x	11.9x	10.3x	11.2x	13.8x	11.7x	n.m.	**79.1x**	11.7x	10.9x	9.0x
	Min	n.m.	5.1x	**4.6x**	6.6x	6.6x	8.6x	8.2x	10.3x	6.7x	n.m.	37.0x	7.9x	7.6x	7.1x
PCFR	Max	n.m.	6.7x	6.8x	6.2x	8.1x	6.9x	7.0x	7.8x	6.6x	**21.3x**	8.3x	5.4x	5.5x	4.8x
	Min	n.m.	3.2x	**3.0x**	4.7x	4.5x	5.7x	5.1x	5.8x	3.8x	5.7x	3.9x	3.7x	3.8x	3.8x
PBR	Max	2.99x	**3.61x**	2.68x	2.36x	2.91x	2.11x	1.87x	1.79x	1.61x	1.52x	1.24x	1.27x	1.19x	1.08x
	Min	1.52x	1.70x	1.17x	1.77x	1.62x	1.77x	1.37x	1.34x	0.92x	**0.40x**	0.58x	0.86x	0.83x	0.85x
Isuzu															
PER	Max	n.m.	n.m.	n.m.	n.m.	3.2x	5.7x	10.3x	10.2x	16.1x	n.m.	**51.0x**	13.4x	9.1x	9.6x
	Min	n.m.	n.m.	n.m.	n.m.	**3.5x**	8.4x	7.7x	6.5x	8.1x	n.m.	25.2x	8.0x	5.4x	7.5x
PCFR	Max	n.m.	10.3x	12.1x	n.m.	7.5x	8.6x	11.2x	9.8x	10.4x	**79.0x**	8.9x	7.9x	6.5x	6.8x
	Min	n.m.	6.7x	2.5x	n.m.	**0.7x**	2.7x	3.5x	4.0x	5.2x	12.0x	4.4x	4.7x	3.9x	5.3x
PBR	Max	3.32x	4.18x	6.06x	n.m.	**21.04x**	3.95x	3.30x	3.71x	3.37x	3.59x	1.44x	2.11x	1.99x	1.69x
	Min	1.60x	2.71x	1.25x	n.m.	6.65x	2.66x	1.60x	1.88x	1.68x	**0.54x**	0.71x	1.27x	1.19x	1.31x
Toyota															
PER	Max	48.8x	44.4x	25.9x	13.6x	11.5x	12.6x	15.3x	16.3x	14.5x	n.m.	**62.9x**	30.0x	40.3x	13.6x
	Min	29.4x	26.6x	16.2x	9.7x	**7.2x**	10.5x	9.0x	10.8x	8.9x	n.m.	49.0x	21.6x	26.3x	11.1x
PCFR	Max	18.1x	18.3x	12.1x	7.9x	6.9x	7.6x	9.3x	10.3x	9.0x	**28.0x**	10.6x	10.0x	11.2x	7.2x
	Min	10.9x	11.0x	7.6x	5.6x	**4.3x**	6.3x	5.5x	6.9x	5.6x	13.1x	8.3x	7.2x	7.3x	5.9x
PBR	Max	**2.92x**	2.90x	2.15x	1.67x	1.61x	1.62x	1.99x	2.25x	2.08x	1.77x	1.27x	1.19x	1.09x	1.01x
	Min	1.75x	1.74x	1.34x	1.18x	1.01x	1.35x	1.17x	1.49x	1.28x	0.83x	0.99x	0.85x	**0.71x**	0.82x
Hino															
PER	Max	n.m.	n.m.	39.0x	**62.6x**	13.6x	28.0x	16.0x	21.1x	23.5x	n.m.	n.m.	n.m.	20.9x	10.4x
	Min	n.m.	n.m.	20.1x	31.5x	8.7x	20.3x	11.9x	16.1x	15.2x	n.m.	n.m.	n.m.	13.2x	**8.5x**
PCFR	Max	10.4x	**10.6x**	8.1x	8.9x	7.3x	9.9x	7.2x	7.3x	7.9x	n.m.	5.7x	8.3x	5.7x	4.6x
	Min	4.1x	4.0x	4.2x	4.5x	4.7x	7.2x	5.4x	5.5x	5.1x	n.m.	**3.1x**	5.4x	3.6x	3.7x
PBR	Max	2.68x	**3.14x**	1.99x	1.68x	2.09x	2.06x	1.64x	1.47x	1.79x	2.07x	1.15x	1.54x	1.63x	1.46x
	Min	1.06x	1.18x	1.02x	0.84x	1.34x	1.49x	1.22x	1.11x	1.16x	**0.45x**	0.62x	0.99x	1.03x	1.18x
Mazda															
PER	Max	34.4x	n.m.	49.5x	22.8x	15.0x	11.9x	15.2x	16.1x	11.0x	n.m.	n.m.	n.m.	n.m.	**54.6x**
	Min	13.7x	n.m.	20.3x	11.3x	8.5x	9.5x	7.4x	11.6x	**5.2x**	n.m.	n.m.	n.m.	n.m.	33.3x
PCFR	Max	11.5x	n.m.	8.2x	9.0x	7.1x	6.4x	9.0x	9.8x	6.4x	**243.9x**	6.4x	43.2x	n.m.	6.1x
	Min	4.6x	n.m.	3.3x	4.5x	4.0x	5.1x	4.4x	7.1x	**3.0x**	43.6x	3.8x	23.9x	n.m.	3.7x
PBR	Max	**3.66x**	2.77x	2.53x	2.63x	1.97x	1.76x	2.52x	2.50x	1.83x	2.10x	1.02x	1.16x	1.42x	0.92x
	Min	1.46x	1.55x	1.04x	1.31x	1.11x	1.40x	1.23x	1.79x	0.86x	**0.37x**	0.60x	0.64x	0.77x	0.56x

Note: PERs and PBRs calculated using period-end actual and our forecast EPS/BPS and share price highs and lows within the fiscal period.
Source: Company data, Bloomberg, Citi Investment Research and Analysis.

Figure 7. Automakers: Valuations continued

		FY99	FY00	FY01	FY02	FY03	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11	FY12E
Daihatsu															
PER	Max	27.0x	26.0x	**39.3x**	18.3x	17.5x	14.9x	17.1x	15.8x	15.2x	26.7x	21.4x	11.0x	10.3x	8.7x
	Min	16.8x	16.0x	21.9x	10.1x	9.2x	10.1x	9.9x	11.2x	10.5x	12.0x	15.5x	**6.4x**	7.3x	7.1x
PCFR	Max	6.1x	7.0x	**7.4x**	4.2x	4.8x	5.0x	6.7x	5.5x	5.2x	5.6x	4.8x	5.0x	5.3x	4.8x
	Min	3.8x	4.3x	4.1x	**2.3x**	2.5x	3.4x	3.9x	3.9x	3.6x	2.5x	3.5x	2.9x	3.8x	3.9x
PBR	Max	1.98x	**1.98x**	1.87x	1.34x	1.31x	1.59x	1.88x	1.72x	1.62x	1.84x	1.32x	1.51x	1.56x	1.35x
	Min	1.23x	1.22x	1.04x	0.75x	**0.69x**	1.08x	1.09x	1.22x	1.12x	0.83x	0.96x	0.88x	1.10x	1.10x
Honda															
PER	Max	21.2x	22.4x	15.6x	13.5x	11.3x	10.9x	11.4x	15.1x	13.9x	**51.1x**	23.0x	12.5x	28.1x	11.5x
	Min	12.7x	14.2x	8.9x	8.9x	**7.5x**	8.4x	7.8x	10.4x	8.0x	21.9x	15.7x	8.4x	18.3x	8.5x
PCFR	Max	12.8x	**13.0x**	10.1x	8.1x	7.9x	7.5x	7.9x	9.4x	8.2x	12.8x	9.7x	7.8x	11.8x	7.3x
	Min	7.7x	8.2x	5.8x	5.3x	5.2x	5.7x	5.4x	6.4x	**4.7x**	5.5x	6.6x	5.2x	7.7x	5.4x
PBR	Max	**2.88x**	2.34x	2.19x	2.18x	1.80x	1.60x	1.64x	1.98x	1.83x	1.75x	1.43x	1.50x	1.35x	1.21x
	Min	1.73x	1.48x	1.25x	1.43x	1.19x	1.23x	1.12x	1.37x	1.05x	**0.75x**	0.97x	1.01x	0.88x	0.90x
Suzuki															
PER	Max	39.3x	42.3x	41.2x	29.7x	22.7x	18.1x	22.7x	23.9x	24.1x	**54.1x**	43.8x	28.9x	22.9x	16.5x
	Min	26.1x	25.7x	23.1x	21.4x	17.4x	14.5x	13.4x	15.1x	14.9x	19.3x	31.0x	21.5x	16.8x	**12.7x**
PCFR	Max	**9.7x**	9.0x	9.5x	8.0x	7.5x	6.9x	7.8x	8.0x	8.0x	8.8x	7.4x	7.1x	7.9x	6.4x
	Min	6.5x	5.5x	5.3x	5.8x	5.8x	5.5x	4.6x	5.0x	4.9x	**3.1x**	5.2x	5.3x	5.8x	5.0x
PBR	Max	2.14x	1.55x	1.48x	1.37x	1.39x	1.42x	1.99x	**2.20x**	2.18x	1.98x	1.42x	1.24x	1.15x	1.08x
	Min	1.42x	0.94x	0.83x	0.98x	1.07x	1.14x	1.17x	1.39x	1.34x	**0.71x**	1.00x	0.92x	0.84x	0.83x
FHI															
PER	Max	21.9x	31.7x	24.3x	16.5x	13.1x	26.8x	**33.9x**	16.7x	24.9x	n.m.	n.m.	11.6x	14.0x	9.5x
	Min	13.4x	21.0x	12.3x	8.5x	8.4x	20.0x	21.2x	13.1x	14.7x	n.m.	n.m.	**6.9x**	8.2x	7.8x
PCFR	Max	9.6x	**10.6x**	9.8x	6.7x	5.5x	7.1x	7.2x	5.9x	5.5x	n.m.	9.3x	5.9x	5.8x	4.6x
	Min	5.9x	7.0x	5.0x	3.4x	3.5x	5.3x	4.5x	4.6x	**3.2x**	n.m.	6.1x	3.5x	3.4x	3.8x
PBR	Max	**3.13x**	1.92x	1.77x	1.28x	1.12x	1.03x	1.08x	1.08x	0.93x	1.25x	1.00x	1.42x	1.19x	1.07x
	Min	1.92x	1.27x	0.90x	0.66x	0.72x	0.77x	0.68x	0.84x	0.55x	**0.45x**	0.65x	0.84x	0.70x	0.88x
Yamaha															
PER	Max	28.1x	32.3x	31.8x	11.7x	10.5x	12.8x	13.8x	13.9x	15.3x	**405.7x**	n.m.	25.9x	22.1x	43.5x
	Min	15.2x	23.3x	20.9x	8.8x	**5.8x**	10.1x	6.9x	9.3x	10.8x	119.5x	n.m.	19.1x	11.7x	27.0x
PCFR	Max	6.6x	5.7x	7.0x	4.8x	5.6x	7.1x	8.5x	8.6x	8.6x	**12.2x**	n.m.	8.6x	9.8x	8.2x
	Min	3.6x	4.1x	4.6x	3.6x	**3.1x**	5.6x	4.3x	5.8x	6.1x	3.6x	n.m.	6.4x	5.2x	5.1x
PBR	Max	2.10x	1.54x	1.51x	1.34x	1.62x	1.63x	**2.29x**	2.27x	2.05x	1.91x	1.69x	1.83x	2.12x	1.40x
	Min	1.14x	1.11x	0.99x	1.01x	0.90x	1.29x	1.15x	1.53x	1.45x	**0.56x**	0.99x	1.35x	1.12x	0.87x
USS															
PER	Max	**39.6x**	17.4x	25.8x	24.3x	31.2x	26.3x	21.2x	19.3x	17.1x	19.8x	15.2x	14.5x	13.8x	13.2x
	Min	26.0x	13.4x	15.0x	17.9x	20.2x	21.3x	16.8x	15.6x	11.7x	9.7x	10.2x	12.0x	**9.4x**	11.7x
PCFR	Max	**27.3x**	12.6x	19.5x	19.9x	26.1x	21.1x	16.1x	14.2x	12.6x	13.4x	10.6x	11.0x	11.2x	11.2x
	Min	17.9x	9.7x	11.3x	14.6x	16.9x	17.1x	12.8x	11.5x	8.6x	**6.6x**	7.1x	9.0x	7.6x	9.9x
PBR	Max	**7.84x**	2.42x	3.81x	3.69x	3.96x	3.63x	2.86x	2.62x	2.22x	2.02x	1.60x	1.65x	1.96x	1.84x
	Min	5.15x	1.86x	2.20x	2.72x	2.57x	2.94x	2.26x	2.12x	1.53x	**0.99x**	1.07x	1.36x	1.33x	1.64x

Note: PERs and PBRs calculated using period-end actual and our forecast EPS/BPS and share price highs and lows within the fiscal period.
Source: Company data, Bloomberg, Citi Investment Research and Analysis.

Global auto demand continues to grow, driven by emerging markets

Equity markets remain concerned about China, and view India and Indonesia with suspicion

As shown in Figure 8, global auto demand continues to expand. In Western Europe, where population growth is stagnant, earnings growth remains negative due to the impact of the economic crisis, but recovery in the US and growth in developing nations is driving global demand.

We expect demand to expand further, albeit at a slower pace, in China, where the expectations of the equities market were perhaps exaggerated in the past, as well as in India, where there is a sense of macroeconomic unease, and in Indonesia, where down-payments for automobile loans are increasing. Already cowed by economic uncertainties, the equity market tends to view these markets with deep suspicion. For example, while the effects of the economic slowdown in China have

dampened automobile sales growth rates, looking at individual companies we find that Nissan has sustained strong sales for more than a year; nevertheless, the equity market still seems to view Nissan's China sales as a source of concern. We think similar phenomena could occur with India and Indonesia, and caution is needed here.

Figure 8. Global market outlook

(,000 units)	2007	2008	2009	2010	2011	2012E	2013E	2014E	2015E
USA	16,115	13,228	10,402	11,555	12,735	14,300	14,900	15,500	16,000
Canada	1,658	1,634	1,459	1,555	1,582	1,660	1,740	1,830	1,920
North America total	**18,860**	**15,877**	**12,693**	**13,928**	**15,221**	**16,940**	**17,700**	**18,475**	**19,150**
Brazil	2,380	2,722	3,076	3,363	3,476	3,320	3,560	3,810	4,070
South America total	**3,996**	**4,220**	**4,178**	**4,933**	**5,300**	**5,200**	**5,520**	**5,850**	**6,190**
Western Europe total	**16,853**	**15,379**	**14,989**	**14,431**	**14,384**	**12,950**	**13,390**	**13,930**	**14,500**
Russia	2,594	2,916	1,460	1,905	2,700	2,950	3,160	3,360	3,550
Eastern Europe total	**5,342**	**5,643**	**3,295**	**3,857**	**4,763**	**5,180**	**5,540**	**5,880**	**6,210**
Japan	5,354	5,082	4,609	4,956	4,210	5,200	4,300	4,800	4,800
China	8,078	8,768	12,960	17,213	17,650	18,000	19,500	21,200	23,200
India	1,710	1,747	2,065	2,713	2,950	3,220	3,640	4,120	4,660
Malaysia	483	543	533	600	595	610	635	660	685
Indonesia	391	541	437	680	794	900	1,050	1,180	1,320
Thailand	615	599	534	779	775	1,080	1,160	1,270	1,390
Asia total	**18,292**	**18,792**	**22,971**	**28,940**	**29,011**	**31,120**	**32,485**	**35,480**	**38,335**
Other total	**7,004**	**6,076**	**5,766**	**6,227**	**6,489**	**6,910**	**7,335**	**7,750**	**8,165**
Global total	**70,348**	**65,987**	**63,892**	**72,316**	**75,167**	**78,300**	**81,970**	**87,365**	**92,550**

(YoY)	2007	2008	2009	2010	2011	2012E	2013E	2014E	2015E
USA	-2.4%	-17.9%	-21.4%	11.1%	10.2%	12.3%	4.2%	4.0%	3.2%
Canada	2.7%	-1.5%	-10.7%	6.6%	1.8%	4.9%	4.8%	5.2%	4.9%
North America total	**-2.1%**	**-15.8%**	**-20.1%**	**9.7%**	**9.3%**	**11.3%**	**4.5%**	**4.4%**	**3.7%**
Brazil	29.1%	14.4%	13.0%	9.3%	3.3%	-4.5%	7.2%	7.0%	6.8%
South America total	**28.4%**	**5.6%**	**-1.0%**	**18.1%**	**7.4%**	**-1.9%**	**6.2%**	**6.0%**	**5.8%**
Western Europe total	**0.8%**	**-8.7%**	**-2.5%**	**-3.7%**	**-0.3%**	**-10.0%**	**3.4%**	**4.0%**	**4.1%**
Russia	35.4%	12.4%	-49.9%	30.5%	41.7%	9.3%	7.1%	6.3%	5.7%
Eastern Europe total	**23.8%**	**5.6%**	**-41.6%**	**17.1%**	**23.5%**	**8.8%**	**6.9%**	**6.1%**	**5.6%**
Japan	-6.7%	-5.1%	-9.3%	7.5%	-15.1%	23.5%	-17.3%	11.6%	0.0%
China	20.0%	8.5%	47.8%	32.8%	2.5%	2.0%	8.3%	8.7%	9.4%
India	17.3%	2.1%	18.2%	31.4%	8.8%	9.2%	13.0%	13.2%	13.1%
Malaysia	-0.7%	12.3%	-1.9%	12.6%	-0.8%	2.5%	4.1%	3.9%	3.8%
Indonesia	35.3%	38.4%	-19.1%	55.5%	16.7%	13.4%	16.7%	12.4%	11.9%
Thailand	-7.6%	-2.7%	-10.9%	46.0%	-0.5%	39.4%	7.4%	9.5%	9.4%
Asia total	**7.7%**	**2.7%**	**22.2%**	**26.0%**	**0.2%**	**7.3%**	**4.4%**	**9.2%**	**8.0%**
Other total	**9.9%**	**-13.3%**	**-5.1%**	**8.0%**	**4.2%**	**6.5%**	**6.1%**	**5.7%**	**5.3%**
Global total	**5.4%**	**-6.2%**	**-3.2%**	**13.2%**	**3.9%**	**4.2%**	**4.7%**	**6.6%**	**5.9%**

Source: Wards, Anfavea, AEB, JAMA, CAAM, SIAM, GAIKINDO, TMT, Marklines, Citi Investment Research and Analysis.

Japanese auto industry emerged from crisis stronger on both supply and demand sides

Demand trends have changed since the Lehman collapse, accelerating shift to developing countries

The financial crisis triggered by the collapse of Lehman Brothers in September 2008 was called a "once-in-a-century" event, but it was compounded by the devastating eastern Japan earthquake on March 11, 2011, and excessive yen appreciation spurred by the European financial crisis, leading to structural changes of historical proportions for the automobile industry. While the crisis that followed the Lehman collapse hit the industry on the demand side, the aftereffects of the earthquake mainly resulted in problems on the supply side for auto production.

The Lehman shock thus led to structural changes in global auto demand, and the industry's profit base started to shift rapidly from developed countries, where growth slowed, to high-growth emerging markets in Asia and elsewhere. Meanwhile, the soaring yen broke the ¥80/$ mark, hurting the profitability of CBU vehicles and of parts used in overseas assembly operations that are exported from Japan, and adding impetus to the shift to overseas production of lower-margin products. Yen strength also encouraged greater use of parts from overseas in Japanese production activities.

Earthquake and Thai floods enhanced automakers' crisis management abilities

The eastern Japan earthquake and the Thai floods of October 2011 led automakers and auto parts makers to start to rethink their supply chains and seek out new responses to prepare for the risk that they would not be able to manufacture. In strategically key areas such as electronic components, new concepts like "safe inventory" were brought in and firms have come to hold more inventory than they would have done in the past. There has been a remarkable departure from the old ways of inventory management, which was to focus solely on production efficiency. Companies have prepared production recovery maps and production recovery manuals. It has become vital for them to carry out prior simulations, so that in the event that they become unable to produce, they can answer the question of how and where bottleneck components can be swiftly produced. In particular, dual storage for design data for specialty components and molds has become a matter of course.

This experience of crisis both on the demand and supply sides has proved instrumental in retraining Japan's auto industry and making it stronger.

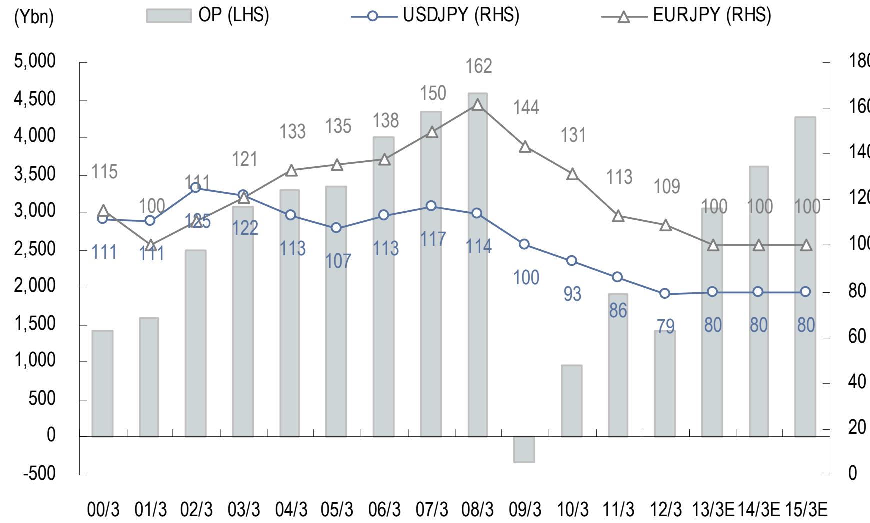
Japan's auto industry flourished on weak yen

Record earnings prior to the global financial crisis propelled by yen weakness

As Figure 9 shows, Japan's automakers were steadily expanding OP through to FY3/08, prior to the bankruptcy of Lehman Brothers. In FY3/09, however, they fell into their worst ever losses, as demand for autos fell off a cliff due to the global economic crisis. Then through FY3/10 and FY3/11 it looked as if OP was on a recovery track as global demand recovered, but earnings fell again in FY3/12, on the March 11, 2011, eastern Japan earthquake and the Thai floods in October, which forced automakers to idle or reduce production.

The forex impact has also been significant. In FY3/08, when Japan's automakers were reporting all-time OP highs, the key forex rates were ¥114.3/$ and ¥161.6/€, with the euro having strengthened consistently against the yen since ¥100.4/€ in FY3/01. The yen strengthened off a low of ¥125.0/$ in FY3/02 but stayed fairly consistently above the ¥110/$ mark, a level at which adequate profits were to be had. Looking back, it is clear that the halcyon days for Japanese automakers in the 2000s were due to production volume growth driven by global demand expansion and forex levels at which more than adequate profitability could be delivered. However, after the Lehman Brothers bankruptcy, automakers were hit by the double whammy of declining global demand and rapid yen appreciation and their earnings structures deteriorated at a stroke.

Figure 9. Aggregate OP for eight Japanese automakers



Note: Bar graph is the simple aggregate OP for eight automakers (Hino and Daihatsu included in Toyota's consolidated numbers).
Source: Company data, Bloomberg, Citi Investment Research and Analysis.

These days, innovation is more important than *kaizen*

That earnings are recovering even in the face of the most adverse—¥80/$ and ¥100/€—forex assumptions since FY3/00 is down to the innovations of the development and production revolutions. In the past, the *kaizen* approach pioneered by Toyota was also effective, but cost improvements of a few percent are no longer enough to overcome the ultra-strong yen. We reserve our praise for automakers that carry out mold-breaking innovation activities and enjoy the rewards.

Earnings structure revolutions needed to overcome ultra-strong yen

Rethinks of slavish devotion to quality and realization of quality "in the right place in the right time" set to be the generator of big profits

We believe that from FY3/13 out, greater CoGS cutting benefits from new production revolutions and switches in the territorial focus of earnings to emerging markets will determine the fate of automakers. If they are to overcome the impact of the ultra-strong yen, which is brutal on export profitability, there are limits on how much can be achieved by the traditional method and Japanese forte of *kaizen*. Automakers need to employ mold-breaking production methods not seen in the past. In some cases, they need to switch over to new production facilities from old ones and the management resolve to make decisive capex commitments is indispensible.

We are already seeing instances in which rethinks of excessive component quality and efforts to optimize quality to meet local needs have brought automakers, auto parts makers, and materials makers together to act and achieve big CoGS cuts. There have also been cases of major improvements in profitability resulting from switchovers of production facilities to smaller and lightweight ones. What is required now are revolutions in design and production of the sort we have never seen before.

Global demand to continue to grow but emerging markets such as Southeast Asia hold the key

Global demand is on an expansionary track (except in Europe). There are even signs of a recovery in US auto sales, while sales continue to grow in emerging markets. Be that as it may competition grows ever fiercer in developed markets. For instance, in the US competition is intensifying with US automakers, which are

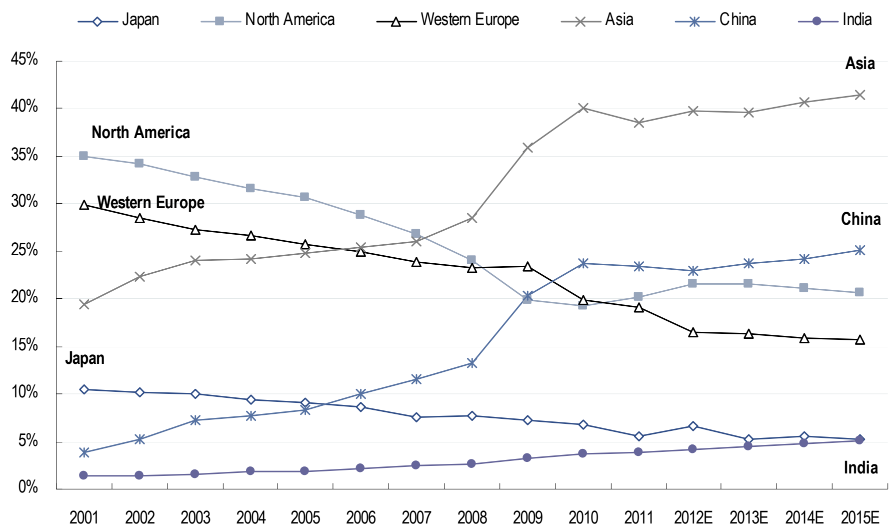
staging a revival, and with automakers from South Korea and Germany, which are reaping the benefits of currency weakness. Sales volumes are recovering but they are no longer able to contribute to earnings in the way they did in the past. In contrast, in Southeast Asia, where Japanese vehicles have lofty market shares, demand is expanding and earnings are rapidly rising. Truck makers Isuzu and Hino and minivehicle maker Daihatsu are seeing contributions from earnings expansion in emerging markets, especially in Asian nations such as Thailand and Indonesia, and we expect them to set earnings records in FY3/13. What this suggests is that automakers and auto parts makers urgently need to slough off their traditional business models, which focused on developed markets, and make structural transformations to business models focused on emerging markets. We believe the launch of low-cost new models suited to emerging markets is an absolute precondition for survival.

Business models that earn money in emerging markets needed

Know-how in low-cost vehicles and components needed in emerging markets can also be applied to developed markets

While growth in developed markets is slowing, demand in emerging markets in Asia and elsewhere is set to expand rapidly. Global demand should remain on an expansionary trend but, as Figure 10 shows, the auto sales weightings of North America, Europe, and Japan are on a downtrend, while the weighting of Asia is rising rapidly. As a result, the earnings structures of automakers and auto parts makers need to be transformed so that the can earn more in emerging markets. Demand in emerging markets is focused on cheap vehicles, so the most important issue is the production of components at lower costs. We are witnessing the emergence of a new global networking strategy, in which low-cost components are used not only in emerging markets but also in auto production in developed markets.

Figure 10. Global sales by region



Source: Wards, Anfavea, AEB, JAMA, CAAM, SIAM, GAIKINDO, TMT, Marklines, Citi Investment Research and Analysis.

We anticipate rapid changes in the operating environment in which the auto industry finds itself, with measures being taken to deal with the hollowing out of domestic production on the shift overseas and to secure employment on the shift to EVs.

There are no magic formulas for survival here and we see no route to success other than the implementation of production revolutions that realize overwhelming cost competitiveness. Also, events are unfolding to the advantage of German automakers, who benefit from euro weakness, in the luxury vehicle arena, and South Korean automakers, who benefit from won weakness, are making great strides in the US and elsewhere. As long as there are no major changes in forex rates, we expect these conditions to continue. We expect automakers to further beef up their local production but also feel that improvement in the diplomatic abilities of the Japanese government in areas such as the early conclusion of FTAs is a minimum requirement if the auto industry is to maintain production in Japan.

Global networking increasingly important

Progress with the use of overseas components to overcome yen strength

We expect the world's automakers to increasingly globalize their production, sales, and procurement methods. We see it becoming a matter of course that in the future, vehicles manufactured around the world will use high-quality but cheap components produced globally. The use of global networking will be important for both automakers and auto parts makers in their future survival strategies, in our view.

Figure 11 shows progress with global networking. In the first stage, automakers expand local production and lift local content rates in emerging markets. In the second stage, they expand exports from emerging markets. In the third stage, they counter yen strength through the use of low-cost components manufactured in emerging markets. We see moves in this third stage as intensifying rapidly moving forward. This represents a big opportunity for auto parts makers. If they take demand growth in emerging markets as a good opportunity, grow sales volumes, and succeed in delivering quality, their component brand image will be buffed and they will be able to win orders from around the world. However, hurrying cost cuts and causing too many quality issues would do more harm than good, so caution needs to be paid to quality risk.

Figure 11. Global networking

1. Accelerating the transfer of production of low-priced autos from Japan to developing countries

Respond to growth in auto markets in China and India, rapidly expand local production of low-cost autos via policies to promote eco-cars in Thailand, etc.
First, start with production to capture emerging market domestic demand
Development to realize low costs (common-use components, reduction in the number of parts, specs that meet local market needs, etc.)
Develop a parts procurement strategy to realize low costs: raise the ratio of parts procured locally in emerging markets
(in the case of Nissan, over 90% in China and Thailand and over 80% in India)

2. Expand exports of low-priced autos made in emerging markets: Use plants as global export bases, even for exports to developed markets
India (Suzuki is exporting the A-Star to Europe)
Thailand (Isuzu and Toyota pick-ups, Nissan Micra, Mazda Demio, etc.)
China (Honda Jazz)
Indonesia (Toyota IMVs, Hino's light trucks)

3. Utilize low-cost parts made in developing countries in advanced countries

Strengthen cost competitiveness by utilizing global production of low-cost parts designed for low-priced autos made overseas
Increase resistance to yen strength (balance dollar-dominated sales with dollar-denominated costs, cut costs)
Quality issues are risks (responsibility of parts makers has increased but success clears a path for establishing brand strength)

4. How to cut domestic production has become an important issue

Shift to overseas production, phased in cutbacks of parts surplus to requirements in the EV era, declining domestic demand and vehicle PARC

Source: Citi Investment Research and Analysis.

Systems needed to unify development, production, and procurement

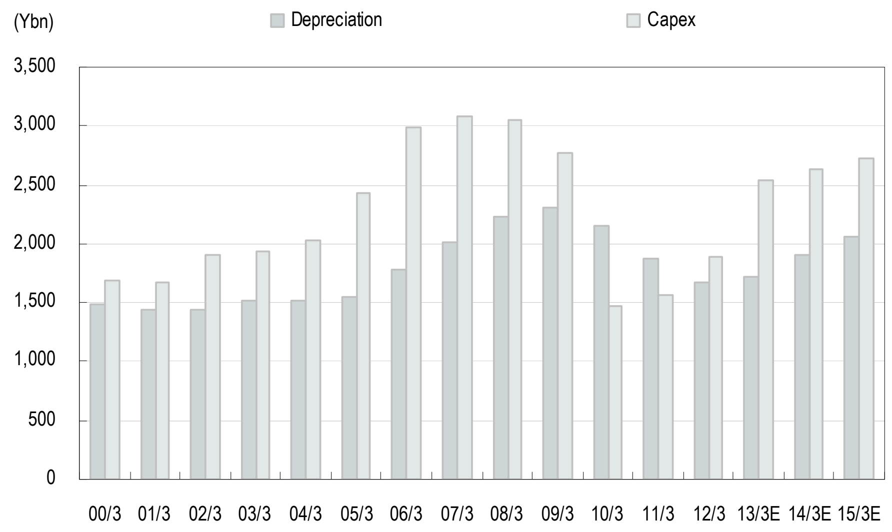
We think there is a very good chance that the use of global networking can provide the motive power for rapid advances overseas. However, these kinds of moves lead to the hollowing out of domestic production, so automakers not only need to work to halve the manufacturing costs of existing product but they also have to work to secure employment through new product. This is because the core of R&D activity is in Japan, and any weakening of Japan would ultimately lead to the weakening of the whole. However, firms will not be able to lift earnings in Japan by employing the same methods as they did in the past. What is critical is that firms unite their development, production, and procurement divisions and from an early stage look into and execute on the questions of what kind of designs are needed to halve costs, what kind of transformations in materials are needed, and what kind of production format would be best. Then, once the design is decided on, firms need to have the resolve to absolutely forbid design changes that would cost money. Moreover, they will make great progress with cutting CoGS if they implement integrated product planning, cut back on R&D and other expenses that are additionally incurred by sharing components and other basic structural items across vehicles, and are able to manufacture various components via flexible production processes. Indeed, there are component makers who are steadily executing these approaches and we see the fruits of the efforts made over the coming few years as leading to gaps opening up between companies. We also expect automakers to enjoy the fruits of these kinds of production revolutions at auto parts makers.

Decisive capex moves and the installation of new production facilities that are lighter, more compact, and faster the key to survival

Industry firms also need to rethink their production facilities. They also need to respond via *kaizen*, as they did in the past, but if mold-breaking CoGS cuts are being called for, it will be indispensible for them to bring in production facilities that realize new production methods at low costs. Firms will be tested as to whether or not they have the ability to bear the capex burden necessary to bring in lightweight, compact, faster, and more versatile facilities globally and whether their managers have the decisiveness to make decisions on this score.

Figure 12 shows automakers' capex and depreciation; recently capex has begun to rise again. Expansion in production capacity in emerging markets has been the driver of this. There have been many instances of decisive capex moves to construct plants in Asia and Mexico to increase future production capacity. Automakers who do not engage in this kind of capex do not have a future. We like the attitudes of Nissan and Suzuki, in that they are announcing and implementing resolute investments in increased capacity of a sort not witnessed in the past, based on the medium-term management plans.

Figure 12. Aggregate depreciation and capex for eight automakers



Note: Simple aggregates of depreciation and capex for eight automakers (Hino and Daihatsu included in Toyota's consolidated numbers).
Source: Company data, Citi Investment Research and Analysis.

Edge in environmental tech key to survival

Powertrain innovation starting

As Figure 13 shows, recently the competitive arenas and earnings arenas in automotive technology have been moving into a different dimension, which is a major departure from past changes, and it fair to say that the auto industry is hurtling towards a major turning point.

Figure 13. Auto industry at a turning point

- Power train innovation
(1) Shift from gasoline engines to electric cars
(2) The era of the hybrid car as a transitional phase is lengthening
(3) Gasoline and diesel engine innovations usher in the 30km/litre engine

- New materials and IT innovation
(1) Increasing demand for lighter vehicles → use of carbon fiber and other new materials widening
(2) IT support to cover for inadequate running performance of electric cars (charging stations, etc) → car navigation revolution

- Earnings breakdown (geography) changing
(1) Protracted demand stagnation in advanced economies
(2) Accelerating demand growth in emerging markets
(3) Earnings structure reforms through the use of low-priced models

- Competitive environment changing
(1) Natural selection of automakers → Prices, technology and quality that meets market needs is key to survival
(2) Electrical machinery and materials industries moving into auto areas → selecting partners
(3) Makers in emerging markets (China, India, Russia, etc) becoming more prominent

- IT development accelerating
(1) Rapid advances in the collection an analysis of information → taking less and less time for latecomers to catch up with market front runners
(2) Intellectual property strategies becoming more important → black boxing of patents, production, technologies

Source: Citi Investment Research and Analysis.

Gasoline engines, which spread thanks to the low-cost, mass-production Ford Model-T, which appeared a century ago, and diesel engines, which are used in large vehicles, have preserved their leading roles as the core automotive technologies thanks to their consumption of gasoline or diesel, liquid fuels with impressive combustion efficiency. However, their absolute advantages are beginning to change greatly, due to the problems of global warming and future oil depletion. Of course, these resources are not going to disappear anytime soon, but the surge in the price of crude demands diversification of energy resources and further improvement in energy efficiency.

For instance, recent power train innovation has been remarkable. The shift from gasoline engines and diesel engines to hybrid vehicles and plug-in hybrids has begun and in the future it is possible that we will see a shift to electric vehicles (EVs), fuel cell vehicles that use hydrogen as energy, and hydrogen-engine vehicles. In 20 years' time, when low-cost, high-performance, next-generation batteries will likely be on the scene, there could well be a wholesale shift to EVs from gasoline ones, but as things stand the inadequate performance and high costs of lithium-ion batteries is a bottleneck. However, if usage is confined to driving no more than just over 100km on a single charge, then the commercialization of EVs will be worthwhile, so a niche role for EVs according to distance traveled is coming into the spotlight. For instance, the use of EVs in a given area as delivery vehicles could be extremely effective. In Japan, hybrid vehicles, which Toyota and Honda have succeeded in commercializing, have rapidly taken center stage and with the surge in gasoline prices they are growing even more popular. In 2012, plug-in hybrids, which can be driven for around 30km as EVs, are appearing and we think they will serve to prolong the HV era as a transition phase. However, gasoline vehicles and diesel vehicles that offer radically improved fuel efficiency are also a growing presence as a third variety of eco-car. We see a good chance that gasoline and diesel vehicles will heighten their competitiveness through the use of lighter bodies, energy recovery systems, idle-stop systems, CVTs, and other technologies that enhance fuel economy and performance. Automakers will likely need to continue technology development on all fronts for the next decade. The competition to develop these environmental technologies is getting fiercer and fiercer and we expect automakers to increasingly move to make up for technologies they lack in-house with alliances.

Structural transformation: Radical changes in development and production methods

Automakers need development and production revolutions in order to win

The issue in the transformation of the earnings structure is how to generate edges in earnings and competitiveness. Automakers need to change their structures so that they can generate profits with small cars that are designed with an awareness of emerging markets, and they also have to cope with yen strength, so they now need development and production revolutions that can halve costs. Moreover, automakers need to respond to supply concerns about inputs such as non-ferrous metals and rare metals over the long run by reducing their usage and developing substitutes, while over the near term they need to secure absolute volumes—an era has come in which Japan must build a national stockpile of rare metals. The recent China risk with regard to rare earths is a textbook example of this and while there may be limits to what individual companies can do, respond they must.

Scalpels need to be taken to casting and forging, where cost innovations have been inadequate

The Japanese auto industry scrapped excess production capacity around the year 2000 and at the same time brought in new production systems to remaining plants. They switched from dedicated facilities to versatile ones, brought in kit supply systems, and in these and other ways shortened distribution lines. However, they have been losing the flexibility and the positives from component sharing and reduction in the number of components that they should have built in back then, due to the subsequent substantially increase in production volumes. This time around, automakers have to leverage the lessons from the previous round of changes, induce revolutions in the upstream casting and forging processes, where cost innovations have been inadequate and realize substantial CoGS cuts. In the future, they will probably need to reduce their usage rates of high-price rare metals and develop substitute materials so as to cut costs and ensure stable supplies.

Looking at trends in the operating margin by geography, we note that margins are overwhelmingly high in the other regions category, which includes Asia. The strategy of growing production and sales volumes in regions where margins have long been high has assumed even greater importance, while at the same earnings recoveries in Japan, the US, and Europe, where there will be little growth in demand, is simultaneously an important strategy. We see the key to this as the reduction in production costs through the localization of production and the establishment of flexible production systems.

Nissan, Isuzu, Hino, Daihatsu, and Honda pushing innovation

As we discuss in the individual company section below, Nissan is pushing platform integration and powertrain concentration and has already started making vehicles that use common module families, new low-cost modules. We expect it to see the fruits of this in 2013 or thereabouts. Hino and Isuzu have reformed their traditional truck development and production systems and switched to new module structures that bring together core components manufactured in Japan and low-cost components manufactured overseas. Daihatsu is manufacturing new minivehicles at its dedicated minivehicle Nakatsu No. 2 plant, built based on new concepts and which it would be no exaggeration to call the most production-efficient in the world, thereby boosting its earnings power. Honda has shifted new minivehicle production to its Suzuka plant, improved efficiency through a new production format, and is trying to replicate its success there at the new Mexico plant and around the world.

In these ways, Japan's automakers have made big changeovers in their development and production methods over the last few years and the fruits of these changeovers are coming to be reflected in their earnings.

Era of big industry reorganization coming, centered on environmental technologies

Rule the environment and you will rule the world

The big auto industry reorganization of the 1990s ended in failure, as the strong among the US Big 3 and the European makers simply saved the weak. However, moving forward, we expect swift progress with strategy alliances and industry reorganization, focused on environmental technology. This is because we have entered an environment in which they who rule the environment will rule the world. Be that as it may, we do not see capital alliances as necessarily being required. Governments of many countries are bolstering fuel economy regulations because of the problem of global warming, so vehicles with fuel-efficient new engines, hybrids, and EVs are needed, and we expect some firms to fall by the wayside as competition between automakers heats up further. We foresee the same for component makers. From now on, we see environmental technologies and low-cost vehicle manufacture as being the watchwords for the reorganization of the auto industry, but with partial technology alliances to make up for an automaker's own weakness being at the heart of the reorganization.

We think emerging markets such as China, India, and Russia, which want to boost their own auto industries, are likely to be involved in this reorganization. They are eager to bring "loser" automakers and parts makers into their fold and absorb their technologies. Jaguar and Land Rover, once owned by Ford, have been acquired by Tata of India, and Volvo has been acquired by Geely Automotive. We expect to see more cases like this among automakers and auto parts makers moving forward.

In addition, if EVs are in widespread use 20 years from now, it is possible that current engines and transmissions will no longer be needed. In our view, parts makers, who would suffer from a decline in sales of existing cars, either need to begin developing next-generation EV products to secure future sales, or else look to tie up in some manner with companies that already have next-generation parts or are seeing sales grow in developing markets. We believe the auto parts sector will enter a phase of major reorganization due to technological innovation and a shift to developing markets as the main profit drivers. There is still time, but we believe companies need to think carefully about what they need to do and then act boldly.

New development approach needed for future

Automakers may not survive unless they bring in new development concepts that eliminate unnecessary design changes

The world is clearly heading toward stricter fuel efficiency standards. The EU has set long-term targets for 2020 and even in the US, the home of the gas guzzler, California plans to introduce standards that are tighter than those in Japan in 2015. We believe the fuel-efficient hybrids will play an important role in reaching these targets. However, Japanese automakers are developing gasoline cars that achieve fuel efficiency on a par with hybrids through the use of idle-stop systems and other innovations, and we believe this fuel efficiency revolution could spur demand for conventional cars rather than hybrids and electric vehicles.

Over the next 10 years, in addition to powertrain innovation, we expect weight reductions—of all vehicle parts—and cost reductions to be central themes of development. Reducing the weight of existing auto parts will contribute to fuel efficiency, and we believe it will be crucial for companies to use new materials, designs that reduce the weight and number of parts, and production techniques that reduce costs. What we believe is particularly urgent is that communication between design, procurement, production technology, and sales divisions improve so that vehicle development is based on a common and thorough understanding of

customer needs, thereby eliminating unnecessary engineering changes. This will be critical for cost reductions. The Japanese auto industry must realize that without dramatic innovations it could lose competitiveness and be defeated in global competition. We believe the fate of automakers will be determined by how they face up to this challenge.

As technical innovation advances, new development concepts that allow new technologies to be incorporated are needed

As the spread of hybrids and electric vehicles drastically changes the auto market, auto parts makers must develop earnings structures that are compatible with new technologies. In particular, we believe new products will be needed for eco cars, which use many electronic components that rapidly wear out. This will require technical innovation and cost efficiency improvements. The question of how to maintain the value-added of automobiles will probably become an important issue, so, assuming the performance of electric components and other vehicle parts evolve, a new development concept will have to be introduced: designs that allow auto parts to be switched out for the latest ones. If important new technologies can be incorporated into vehicles after manufacture, the decline in their residual value can be controlled. Those automakers and auto parts makers that look at development from a new perspective and change their earnings structures are likely to be winners in a competitive market.

Technologies to cope with aging societies one way to survive

Technology that caters for an ageing population could open a new market

As Japan's population is declining and becoming older, the decline in domestic auto demand is likely to continue over the long term. Dividing the population into brackets of five years, baby boomers currently account for around 7% of the total. Their children account for just under 7% of the population, but their grandchildren (aged between 0−4) only around 4%. Using a simple formula, we estimate that in 20 years, when baby boomers are no longer buying cars, the market will be 3% smaller than today even if all baby boomer grandchildren were to buy cars. Even allowing for the fact that few women baby boomers obtained driving licenses, it is clear that a decline in vehicle demand caused by the contraction in the numbers of young people will be protracted.

It is often said that the decline in auto demand is due to waning enthusiasm for cars among the younger generation. But this is not correct; the main reason is population contraction. Designing cars for the young is like fishing in a pond with no fish. Automakers are developing assistive vehicles for senior citizens, the most promising market segment in Japan because it is the fastest growing. In sedans, new contrivances include front passenger seats that automatically fold out of the car to assist vehicle entry/exit, make it easier for wheelchair users to ride in them. However, we do not believe this goes far enough. We think it would be more convenient if the rear seats were similarly electrically operated and that the healthy spouse of the healthy driver sits in the front passenger seat. Because of technical and cost issues, currently only some minivans have automatic fold-out rear seats. If automakers could resolve these issues to offer vehicle entry/exit assist at a reasonable price we believe it could make a big difference to their sales.

Technologies that cater for older drivers needed in China and other countries

In an ageing society, affordable safety devices that compensate for the deterioration in physical capacity and reaction times that come with age are also needed. The EyeSight driving assist system developed by Fuji Heavy Industries, which improves safety by monitoring objects in front of the vehicle, has attracted considerable interest and contributed to sales. The main obstacle to penetration is cost. We believe automakers would boost their sales if they include safety features for older

drivers at an affordable price and we thus hope to see rapid progress on this front. China is expected to become an even more aged society than Japan. As Japan can adapt its leading technologies for markets in China and Western Europe, we believe the commercialization benefits of technologies for the elderly would be significant.

Importance of minivehicles as a global entry-level cars rising

Minivehicle popularity increasing in Japan as a third form of eco-car

Minivehicle sales remain strong, partly because of the introduction of fuel-efficient models, but they are mainly supported by demand in regions with inadequate public transport infrastructure. In rural areas, the main users of minivehicles are people in their 50s and 60s, reflecting aging populations. Given that the vehicle ownership tax on minivehicles is about a quarter that of the tax on their nearest competitors, registered vehicles with engine capacity of around 1l, and the low running costs of minivehicles, we feel that their popularity will not decline in the regions, where demand runs to about one vehicle per adult. Recently, drastic improvements in safety and efficiency have stimulated consumer interest in minivehicles. In 2011, Daihatsu released the Mira eS, which is capable of 30km/l in JC08 mode. Suzuki followed with the release of the Alto Eco. These minivehicles have better fuel efficiency than a mild hybrid and are becoming increasingly popular as a third form of eco-car.

Minivehicles increasingly valuable as entry level cars for emerging markets in Asia and elsewhere

Leaving aside the discussion about potential major changes to the vehicle ownership tax system, we believe the trend of rising minivehicle sales and falling registered vehicle sales in Japan will continue and that the current minivehicle sales weighting of more than a third could become a permanent fixture. Japanese auto majors have responded to this structural change: Toyota has decided to start selling minivehicles (supplied by Daihatsu), Nissan has set up a minivehicle planning and development joint venture with Mitsubishi Motors, and Honda has restarted minivehicle production at its Suzuka plant. We believe these moves will trigger big changes for parts suppliers, and that minivehicles, which have been mocked as a product size that would only sell in Japan, could soon become entry-level cars in the Asian market.

Hopes for two-cylinder minivehicles

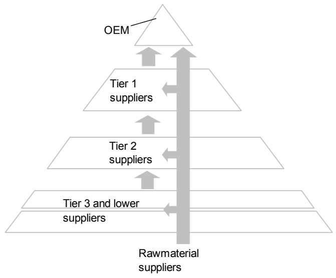
If cars with minivehicle bases are to make larger inroads into Asian markets, we believe fuel efficiency will have to be improved, costs reduced, and two-cylinder engines developed. Daihatsu has already developed a two-cylinder gasoline model and Suzuki two-cylinder gasoline and diesel models. If they are successful in Asia the volume benefits should be enormous. It is no exaggeration to say that efforts in the Japanese minivehicle market could be a gateway to success in emerging markets in Asia and elsewhere.

Auto parts makers starting to exercise some control over automakers

Automakers now using the same parts as rivals to ensure excellent performance

A vertically integrated business model, as shown in Figure 14, is typical in the auto industry. Auto parts makers comprise the lower layers of the pyramid while the automaker (assembler) rules at the apex. However, the disruption to the supply of microcontrollers and other electronics components caused by the eastern Japan earthquake and Thai floods highlighted how important certain common components and materials have become to auto production. While we do not believe control over a few electronic components will be sufficient for auto parts makers to lord it over automakers, parts that automakers must use or else lose out to competitors in terms of fuel efficiency and cost competitiveness could provide auto parts makers with the upper hand. We believe there are signs that companies that make performance-critical niche products (diesel common rail systems, starters that the use of idle-stop systems, and CVTs, etc.) and supply to multiple users could be starting to exert some control over automakers. A recent example is the Denso tandem solenoid starter, which is found in the idle-stop systems that both the Daihatsu Mira e:S and the Suzuki Alto Eco use to achieve a significant improvement in fuel efficiency. The new idle-stop system would not have been possible without this starter technology.

Figure 14. Typical auto industry business model



Source: Citi Investment Research and Analysis.

As the auto industry evolves in the 21st century, we think there could be a tidal change in the relationship between automakers and auto parts makers and between automakers/auto parts makers and makers of carbon fiber and other materials that potentially offer huge advances.

Company Focus

- Company Update
- Target Price Change
- Estimate Change

Buy	**1**
Price (20 Jun 12)	¥748
Target price	¥1,090
from ¥1,290	
Expected share price return	45.7%
Expected dividend yield	3.3%
Expected total return	**49.1%**
Market Cap	¥3,135,102M
	US$39,428M

Price Performance
(RIC: 7201.T, BB: 7201 JP)

Nissan Motor (7201)

Shares to shed undervaluation on better brand value, earnings

- **Reiterating Buy** — We recommend buying Nissan shares as 1) valuations look low and 2) the shares do not seem to have priced in expected brand value improvement in profit growth. Our target price for Nissan is ¥1,090 (previously ¥1,290). We derive our target price from our FY3/13 simplified CFPS estimate of ¥186.1 and a PCFR of 5.8x, the average of the highs and lows for the seven previous years.
- **Earnings forecasts** — Our OP forecasts assume ¥80/$ and ¥100/€, and we look for OP of ¥770bn in FY3/13, ¥890bn in FY3/14, and ¥1trn in FY3/14. That is, it looks likely that Nissan will post record OP in FY3/14 (its previous record was ¥871.8bn in FY3/06). Nissan bases its ¥700bn OP forecast for FY3/13 on ¥82/$ and ¥105/€.
- **Investment points** — The flagship model Altima is key for improving the evaluation of Nissan, as it has had to be resigned to the second tier in the US mid-size sedan market behind the Toyota Camry and the Honda Accord. However, Nissan is now looking to push the Altima into the top group. If these efforts are successful, it could significantly change the position of the Nissan brand in the US. We think the new Altima sales strategy is likely to succeed, and do not feel the shares have priced this in as yet.
- **Leader in production and development reform** — With its new Common Module Family (CMF) development system, Nissan intends to increase the number of common parts, improve asset efficiency, and significantly lower costs. CMF adoption is expected to begin at 12% in 2013 and rise to 58% in 2016, with an extremely large contribution to earnings. In our view, the speed of Nissan's new workmanship reform should be seen as the equal of VW, which is advancing the same sort of strategy.

Consol.	Sales		OP			RP		NP		EPS	PE
	¥M	YOY (%)	¥M	YOY (%)	OPM(%)	¥M	YOY (%)	¥M	YOY (%)	¥	x
3/11A	8,773,093	16.7	537,467	72.5	6.1	537,814	158.9	319,221	653.1	76	9.8
3/12A	9,409,026	7.2	545,839	1.6	5.8	535,090	-0.5	341,433	7.0	82	9.2
3/13CE	10,300,000	9.5	700,000	28.2	6.8	680,000	27.1	400,000	17.2	95	7.8
3/13E	10,470,000	11.3	920,000	68.5	8.8	928,000	73.4	547,000	60.2	131	5.7
3/13RE	10,350,000	10.0	770,000	41.1	7.4	750,000	40.2	420,000	23.0	100	7.5
3/14E	11,070,000	5.7	1,020,000	10.9	9.2	1,045,200	12.6	619,000	13.2	148	5.1
3/14RE	10,880,000	5.1	890,000	15.6	8.2	885,000	18.0	512,000	21.9	122	6.1
3/15E	11,660,000	7.2	1,000,000	12.4	8.6	998,000	12.8	580,000	13.3	138	5.4

A: Actuals, E: Citi Research Ests, CE: Co. Ests, RE: Citi Research Revised Ests, CRE: Co. Revised Ests, NA: Not Available, NM: Not Meaningful

Shares to rise as expectations for improved brand value and earnings are priced in

Undervalued shares likely to correct

We reiterate our Buy rating on Nissan shares. We recommend buying Nissan shares as 1) valuations look low and 2) the shares do not seem to have priced in expected brand value improvement in profit growth.

Among Japan's Big 3, only Nissan has been clear about its medium-term plan and the numerical targets therein. We think these targets are likely to be achieved. Earnings structure reform (CoGS cuts, etc.) is moving swiftly and global sales are rising as Nissan launches new models featuring the latest technology, and we believe that these factors will offset yen strength and high material costs, enabling Nissan to continue posting profit growth in the future. Nissan plans aggressive capex in FY3/13, and this is an important period where the firm lays the groundwork for future growth. We believe profit growth will continue moving forward thanks to the firm's brand strategy of bolstering the Nissan, Infiniti, and Datsun brands as well as efforts to expand sales of low-cost cars in developing markets via a new production system.

Figure 15. Nissan: Auto shipments, factors impacting OP

Automotive shipment

(,000)	FY3/11	FY3/12	FY3/13E	FY3/14E	FY3/15E
WW total	3,888	4,456	4,820	5,107	5,482
(yoy)	23.1%	14.6%	8.2%	6.0%	7.3%
Japan	574	639	620	588	624
(yoy)	-4.3%	11.4%	-2.9%	-5.3%	6.2%
North America	1,278	1,436	1,630	1,722	1,819
(yoy)	20.6%	12.3%	13.5%	5.7%	5.6%
Europe	672	762	753	810	872
(yoy)	30.4%	13.5%	-1.2%	7.5%	7.7%
Asia	870	1,025	1,159	1,273	1,396
(yoy)	42.2%	17.8%	13.1%	9.8%	9.6%
Others	495	594	657	714	771
(yoy)	32.6%	20.0%	10.7%	8.7%	8.0%

OP variance factors

(Ybn)	FY3/11	FY3/12	FY3/13E	FY3/14E	FY3/15E	FY3/13CE
Forex	-147.5	-170.0	9.8	0.0	0.0	40.0
Raw materials/Energy cost	-85.2	-115.6	-40.0	0.0	0.0	-
Purchasing cost	191.0	200.1	230.0	230.0	230.0	-
Volume/Mix	433.1	223.6	241.3	143.5	183.4	175.0
Selling expenditure	-191.5	-151.3	-125.0	-150.0	-180.0	-125.0
R&D	-18.5	-33.1	-57.0	-31.0	-44.0	-
Sales financing	29.5	49.8	4.9	5.0	5.0	-17.0
Others	15.0	4.8	-39.8	-77.5	-84.4	-98.8
TOTAL	225.9	8.3	224.2	120.0	110.0	-25.8

Source: Company data, Citi Investment Research and Analysis.

New ¥1,090 target price, reiterating Buy

We lower our forecasts on changes to our forex assumptions (now ¥80/$ and ¥100/€) but reiterate our Buy rating

We lower our forecasts because 1) we revise our forex assumptions to ¥80/$ and ¥100/$ from ¥84/$ and ¥108/€; 2) aggressive capex will mean higher depreciation and facility-related costs; 3) R&D costs look set to rise; and 4) we believe sales-related costs will rise more than we had previously expected as Nissan deploys its new brand strategy. However, the aggressive spending is laying the groundwork for future growth, so we do not think it should be seen in a negative light. We reiterate our Buy rating.

Nissan forecasts ¥700bn for FY3/13, while we forecast ¥770bn

Our OP forecasts assume ¥80/$ and ¥100/€, and we look for OP of ¥770bn in FY3/13 (Nissan assumes ¥700bn assuming ¥82/$ and ¥105/€), ¥89bn in FY3/14, and ¥1trn in FY3/14. That is, it looks likely that Nissan will post record OP in FY3/14 (its previous record was ¥871.8bn in FY3/06).

In Asia, which accounts for nearly 30% of OP, Nissan posted OP of ¥181.8bn in FY3/12. We model ¥215bn in FY3/13, ¥242bn in FY3/14, and ¥279bn in FY3/15. In North America, which accounts for more than 40% of OP, Nissan posted OP of ¥210.1bn in FY3/12. We model improvement to ¥365bn in FY3/13, ¥41.5bn in FY3/14, and ¥455bn in FY3/15 on expansion for the Altima and for commercial vehicles. In our view, the North American market will drive overall earnings.

Nissan forecasts FY3/13 sales of ¥10.3trn assuming ¥82/$ and ¥105/€, which would be the first time since FY3/08, a span of five years, that sales have risen above

¥10trn. The firm also forecasts OP of ¥700bn (for an operating margin of 6.8%), but we think assumptions for sales volume and mix benefits are conservative. Forex sensitivity is ¥20bn in OP for every ¥1/$ change, so at ¥80/$ Nissan's OP forecast would fall to ¥660bn.

Our new target price is ¥1,090

Our target price for Nissan is ¥1,090 (previously ¥1,290). We derive our target price from our FY3/13 simplified CFPS estimate of ¥186.1 and a PCFR of 5.8x, the average of the highs and lows over seven of the eight years between FY3/05 and FY3/12, excluding FY3/09 as an outlier.

Our previous target price of ¥1,290 was based on our previous FY3/13 simplified CFPS estimate of ¥221.6 and a PCFR of 5.8x, the average of the highs and lows over six of the seven years between FY3/05 and FY3/11, excluding FY3/09 as an outlier.

Key points are global sales expansion and spending to boost capacity

Sales volume to increase sharply thanks to new model launches

Despite the March 11 disaster in Japan and the flooding in Thailand, Nissan's global auto sales volume rose by 660,000 units in FY3/12, to 4.845mn (consolidated sales were 4.456mn units, up 14.6% YoY). This, in our view, is a sign of Nissan's underlying strength. In FY3/12 Nissan launched five new global models (the Tiida in China, the Infiniti JX in North America, the Lafesta Highway Star in Japan, and in Europe front-wheel drive and rear-wheel drive versions of the NV400). Regional launches (the Murano in China, the Vaasa, and the Altima/Sunny in other markets) also contributed.

Steady progress in offsetting yen strength via expanded overseas production and usage of parts produced overseas

Yen strength is a negative for Nissan, but it is working to offset this impact by expanding overseas production and using low-cost parts produced overseas. Nissan, we believe, has done the most among automakers to counter the negative impact of yen strength. For instance, it has already shifted production of the compact March (Micra) to Thailand from Japan, and it then re-imports the cars into Japan. Also, the firm aims to increase the proportion of parts produced overseas in its Japan production to 40% from the current level of just above 30%.

In addition, sales of new models that leverage the low-cost V platform are expanding in China and Southeast Asia, and the profit contributions of these models are growing. Nissan was an early mover in crossover SUVs like the Qashqai, and these models are selling well in Western Europe and seeing expansion in Russia. Nissan has also launched locally-produced SUVs and a new Altima in the US, and global production is likely to set a new record.

Another reason we rate Nissan a Buy is that we think Nissan profits will return to high levels faster than at other majors. However, investors have steered clear of the stock due to factors such as concerns about a Chinese economic slowdown. This has resulted in marked undervaluation, which we expect will be corrected, and we see present levels as offering a good time to buy in.

New Altima to improve Nissan brand value

There are many launches slated for FY3/13, but we also note improved specs (adoption of a new CVT, etc.)

We believe global sales will remain strong in FY3/13. Nissan plans to launch 10 new models this fiscal year: the Altima and Pathfinder in the US; the Infiniti M, Sylphy, Venucia D50, and other new Venucia models in China (Venucia is a Nissan brand in China); and the NV350 Caravan, the NV350 Caravan Wide, new

compacts, and new trucks in Japan. Nissan also plans a number of regional launches, including the Sentra, NV200, and NV sedan in North America, the Infiniti JX and new Nissan models in China, the Almera in Europe (the first of Nissan's entry-level cars produced in Russia), and the Cima, Latio, and Sylphy in Japan. These models are expected to feature 15 new technologies, including Nissan's next-generation CVT (the CVT8 developed by Jatco) and a multi-sensing system. Progress in mass production of the CVT8 has moved astonishingly fast, and it is top-class globally in cost competitiveness.

New Altima top of its class in fuel efficiency, sales volume likely to set a new record

Nissan consolidated sales came to 4.46mn units in FY3/12 (+14.6% YoY), but in FY3/13 we look for an increase to 4.84mn (+8.6%) thanks to new model launches. We forecast a rise to 1.62mn units (+13.5%) in North America thanks to expansion for the new Altima (which contributes significantly to profits) and the new Pathfinder (which will now feature a monocoque platform). The new Altima has significantly improved fuel efficiency by adopting the new CVT8 developed by Jatco, and in highway mode it gets 38mpg, well above the Toyota Camry (35mpg) and the Hyundai Sonata (35mpg). We think it likely that Altima sales in the US will hit a new record of 350,000 units in FY3/13 (versus 296,000 in FY3/12) thanks to the improved fuel efficiency and an upgraded interior, with this model driving overall US earnings. The Canton plant is already operating on a three-shift schedule, and the Smyrna plant also plans to do so and boost its output volume.

It is important to point out that Nissan finally intends to move its flagship Altima, which the company was previously resigned to being in the second tier of mid-size sedans in the US behind the Toyota Camry and Honda Accord, into the top group. If these efforts are successful, we look for a major change in the Nissan brand positioning in the US. We think it likely that the sales strategy for the new Altima will succeed, and note that the shares have yet to price this in.

Aggressive capacity increases the wellspring of future profits

In order to achieve the targets in its medium-term plan, Nissan needs to expand production capacity, ensure stable parts procurement, and maintain product quality. We think it is likely to do all of these things.

Aggressive investment to boost production capacity to 8mn units from 5.4mn ongoing, but costs are likely to be offset and profits are likely to grow

Nissan's regular production capacity is about 5.4mn units/year at present, but in its medium-term plan Power 88 the firm says it intends to boost this to 8mn units or more by end-FY3/17. It is already working to boost capacity in China, Brazil, India, Russia, Indonesia, and Mexico, and going forward we anticipate plans for further increases.

In its Power 88 medium-term plan, Nissan aims to achieve a sustainable operating margin of 8% while also maintaining a global market share of 8%. If global demand is 95mn units in FY3/17, an 8% share would be 7.6mn units, and given the possibility that global demand could be even higher we think production capacity of 8mn units or more is necessary. Therefore, Nissan says it will boost capex significantly (to ¥550bn) in FY3/13 from ¥406.4bn a year earlier, but we also think capex will need to remain high over the next several years thereafter. In addition, with aggressive new model launches and commercialization of new technologies, R&D costs look set to rise to ¥485bn from ¥428bn a year earlier, with R&D spending also likely to remain high for the next several years. However, we believe these upfront costs will be offset by profit growth stemming from increased global sales and CoGS cuts, so profits should continue to rise. In FY3/14, we think record profits are possible, which would be impressive.

Nissan plans to boost global sales not only by improving brand power but also by bolstering the Infiniti brand and reintroducing Datsun

Nissan plans not only to bolster its Nissan brand but also its luxury Infiniti brand, and it also plans to relaunch the Datsun brand in developing markets. These moves will give Nissan a full line-up of everything from entry-level cars to luxury vehicles. Nissan's weak point has been the luxury space, but it intends to leverage a tie-up with Daimler to bolster the Infiniti brand. In addition, it plans to relaunch the Datsun brand leveraging tie-ups with local firms to market low-price vehicles it could not under the Nissan brand. Datsun models will be sold in India, Indonesia, and Russia.

In its medium-term plan, Nissan targets global Infiniti sales of 500,000 units, three times the current level. To do this it will raise the number of countries in which it sells Infiniti models to 70, including launches in Brazil, Mexico, Chile, Australia, South Africa, and Hong Kong. Nissan also plans to begun production of two Infiniti models in China in 2014, with an aim of sales volume in China of 100,000 units or more (versus 19,000 in 2011). Bolstering Infiniti performance in places like China should improve earnings power, resulting in a significant contribution to bettering overall Nissan margins.

Also, as a strategic move to increase sales volume going forward, Nissan has begun an integrated global campaign in major airports the world over based on the image and value of the core Nissan brand. This is one reason why SG&A costs are expected to rise by ¥125bn in FY3/13, but moves to appeal to consumers via new technology like the Around View Monitor should boost Nissan's brand value, and we expect this to be positive for global sales.

Nissan currently boosting production capacity to 2.3mn units from 1.2mn units in China, where sales are firm

The market appears to see Nissan as a China-related stock, and the recent slowdown in economic growth and sluggishness for auto demand in China have been taken as sources of concern regarding Nissan.

China's economy continues to slow, due in part to economic deterioration in Europe, and auto demand has slowed as well. However, Nissan sales are firm thanks to strong demand for new models, suggesting market concerns may be misplaced. Regardless of present circumstances, we look for firm growth for the Chinese auto market in the medium term. Nissan's production capacity in China is 1.2mn units/year, but it plans to boost this to 2.3mn or more by 2015. The firm is also developing the Venucia brand locally in China, with an aim of getting into the entry-level segment (currently about 4mn units per year). We note that sales rose 12.2% YoY in China in January-March, with Nissan's market share up 1.0ppt to 7.5%.

Boosting sales volume in Russia, which should offset weakness in Western Europe, aims for 40% market share for group

In Russia, Nissan plans to make effective use of AvtoVaz, which it acquired jointly with Renault. The hope is to win a combined share for the Nissan, Renault, and AvtoVaz (Lada) brand of 40% or more. Nissan supplies AvtoVaz with platforms and engines, but there is no overlap with Lada in terms of products and prices. Nissan is targeting a 10% market share for the Nissan brand, and it plans to spend €167mn at a plant in Saint Petersburg that manufactures SUVs to boost capacity to 100,000 units in 2014 and increase the number of models produced there to five. Nissan also intends to spend €400mn at the AvtoVaz plant in Tolyatti to enable it to produce five models from the three brands, including the Nissan compact sedan Almera (different from that produced in Europe and the US) and Datsun models. We think operations in Russia should be able to offset weakness in Western Europe, where a downturn could well be prolonged.

Nissan plans to go on the offensive in Asia and other emerging markets, and we think these efforts will make a significant contribution on the earnings front.

The revolutionary Common Module Family strategy should bear fruit from 2013

New module strategy designed to cut parts and development costs c30%

The global auto competition cannot be won simply by increasing production capacity. Nissan plans to increase the number of common parts, improve volume efficiency, and significantly reduce costs via its new module development specifications called Common Module Family (CMF). The adoption rate for CMF parts is expected to be 12% in 2013, and Nissan intends to raise this to 58% in 2016. For models currently under development, Nissan expects to reduce parts costs by 27% and development costs by 29%, resulting in a significant contribution to earnings.

Major transformation to common module strategy from common platform strategy

Nissan has until now built cars based on four platforms: the low-cost V platform (March, Sunny), the compact B platform (Tiida, Juke), the mid-sized C platform (Sentra, Serena, X-Trail), and the full-size D platform (Altima, Teana, Murano, Elgrand). Under this development strategy, Nissan has promoted increased parts standardization, not only on a given platform but across platforms as well. However, in many cases parts used in top-end cars were simply used in low-end cars, so cost benefits did not necessarily accrue.

Under the CMF strategy, Nissan divides a vehicle into five segments (four structural and one electronic). Basically, Nissan configures a number of components for each segment and assembles them in the optimal manner for the model in question. The five segments are 1) engine and surroundings (here models need to share the same kind of engine positioning and hood height to share parts), 2) cockpit and surroundings (here seat positioning is key), 3) front underbody (here the keys are weight and safety), 4) center and rear underbody (here the keys are engine functionality and vehicle type), and 5) electronics architecture (here the keys are electronic functionality and data traffic). Parts to be shared are determined within these segments.

Huge benefits, like halving the number of air conditioning units

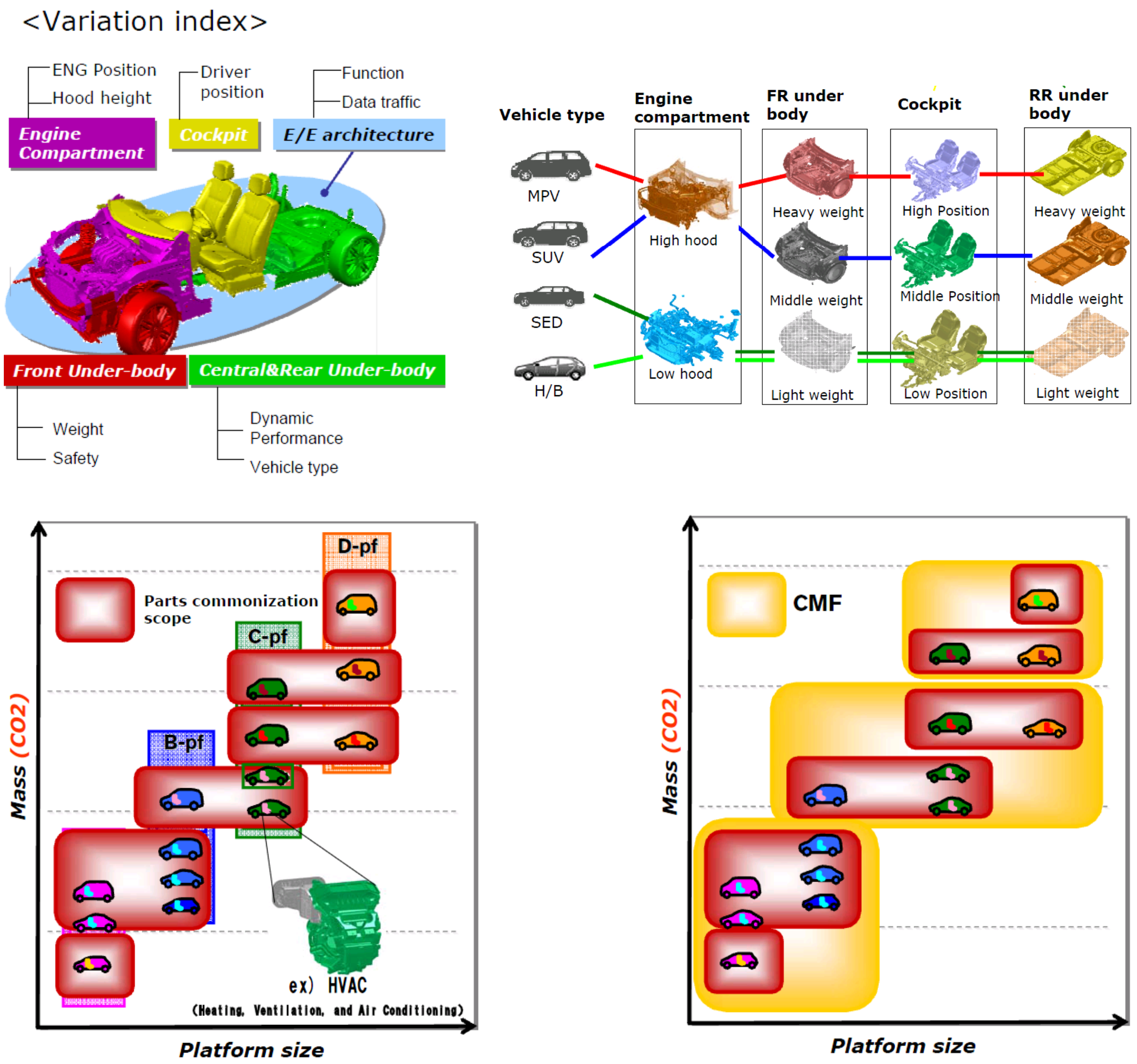
Under CMF, Nissan focuses on five segments, determining what parts to share for similar models or cars with similar parts deployment. For example, in the engine and surroundings segment mid-sized SUVs built on D platforms can share high-hood modules with SUVs built on the C platform. In the past Nissan tried to standardize parts with sedans built on the same D platform, but SUVs are designed with high hoods so standardization is easier.

Nissan refers to this as the “4 + 1 Big Module” concept, and it plans to increase the rate of common parts to 80% from the current 40%. For example, there are currently 6 air-conditioner HVACs in use, but under CMF this falls to just three.

Nissan developing its new production system at a pace that rivals VW

VW led the market with its platform standardization strategy, and it plans to roll out a new development format going forward called the Modular Transverse Matrix. The aim of this strategy is the same as Nissan’s CMF, and we see it as positive that the speed of manufacturing innovation at Nissan rivals that at VW.

Figure 16. Outline of Nissan's CMF concept



Source: Company data.

Company Focus

Isuzu Motors (7202)

Reiterate Buy: Record profits in FY3/13 on brisk Thai business

- Company Update
- Target Price Change
- Estimate Change

Buy	**1**
Price (20 Jun 12)	¥412
Target price	¥630
from ¥480	
Expected share price return	52.9%
Expected dividend yield	1.9%
Expected total return	**54.9%**
Market Cap	¥698,065M
	US$8,779M

Price Performance
(RIC: 7202.T, BB: 7202 JP)

- **Reiterating Buy rating** — We like Isuzu because we think it will post record profits in FY3/13 and out on strong truck sales in Thailand and other emerging markets. We raise our target price to ¥630 (previously ¥480), which we derive by applying a PCFR of 8.9x, the average of the highs for eight past years, to our simplified FY3/13 CFPS estimate of ¥71.4.

- **Earnings forecasts** — Assuming ¥80/$ and ¥100/€, we forecast FY3/13 OP of ¥131bn, FY12/14 OP of 148bn, FY12/15 OP of ¥162bn. Isuzu posted its record OP of ¥109.6bn in FY3/08. We forecast OP will be significantly higher in FY3/13 thanks to growth in Asia and that it will continue to expand thereafter. Isuzu forecasts FY3/13 OP of ¥123bn, assuming ¥80/$.

- **Investment points** — Barriers to entry into new markets are high for truck makers, making it difficult for latecomers. This is because transport operators usually need to keep trucks on the road as much as possible, which in turns requires a nationwide service and maintenance network to respond to accidents and other problems. Even if Chinese makers attempt to introduce low-price trucks in Southeast Asia, we do not think they will find many buyers because of inadequate service infrastructure. We believe investors need to again consider the likelihood that Isuzu's superior position in Thailand and other markets will be sustainable over the long run.

- **Thai pickup truck business extremely robust** — Isuzu's operations in Thailand were hit by floods immediately after it released a fully revamped model of its mainstay pickup truck, the D-MAX, in October 2011, but production recovered quickly and reached a record level for two consecutive months in February (20,000 units) and March (22,000 units), and it has remained at a high level since then. The new D-MAX is very popular and we believe the new Gateway plant, which is scheduled to open in autumn, will be needed to clear the order backlog.

Consol.	Sales		OP			RP		NP		EPS	PE
	¥M	YOY (%)	¥M	YOY (%)	OPM(%)	¥M	YOY (%)	¥M	YOY (%)	¥	X
3/11A	1,415,544	31.0	88,220	701.3	6.2	91,258	700.9	51,600	514.1	30	13.5
3/12A	1,400,074	-1.1	97,373	10.4	7.0	102,893	12.7	91,257	76.9	54	7.6
3/13CE	1,630,000	16.4	123,000	26.3	7.5	127,000	23.4	81,000	-11.2	48	8.6
3/13E	1,600,000	14.3	110,000	13.0	6.9	113,000	9.8	77,000	-15.6	45	9.1
3/13RE	1,680,000	20.0	131,000	34.5	7.8	135,000	31.2	86,000	-5.8	51	8.1
3/14E	1,730,000	8.1	124,000	12.7	7.2	129,000	14.2	78,000	1.3	46	9.0
3/14RE	1,810,000	7.7	148,000	13.0	8.2	153,500	13.7	92,500	7.6	55	7.5
3/15E	1,940,000	7.2	162,000	9.5	8.4	169,000	10.1	101,000	9.2	60	6.9

A: Actuals, E: Citi Research Ests, CE: Co. Ests, RE: Citi Research Revised Ests, CRE: Co. Revised Ests, NA: Not Available, NM: Not Meaningful

Share price drop caused by the strong yen creates good investment opportunity

Isuzu strong in Asia; we believe investors need to reconsider prospects for a record profit in FY3/13

The Japanese auto sector has been sold because of as the yen has strengthened. Isuzu is no exception, with its share price dropping below ¥400 at one stage. But Isuzu's business in Asia is strong and its sales weighting in Europe and Asia is relatively low, so even at ¥80/$ we believe it can reach a new record profit in FY3/13. We believe the shares look extremely attractive at the current price.

Figure 17. Isuzu: Auto shipments and factors impacting OP

Automotive shipment

(,000)	FY3/11	FY3/12	FY3/13E	FY3/14E	FY3/15E
WW total	407.3	380.7	513.0	567.5	626.1
(yoy)	41.2%	-6.5%	34.8%	10.6%	10.3%
Japan	46.8	54.1	57.0	57.9	57.9
(yoy)	10.5%	15.6%	5.4%	1.6%	0.0%
North America	8.9	11.7	13.5	13.5	13.5
(yoy)	27.2%	31.8%	15.5%	0.0%	0.0%
Asia	202.8	178.2	267.0	300.6	338.8
(yoy)	40.9%	-12.1%	49.8%	12.6%	12.7%
Others	148.9	136.7	175.5	195.5	215.9
(yoy)	56.3%	-8.2%	28.4%	11.4%	10.4%

OP variance factors

(Ybn)	FY3/11	FY3/12	FY3/13E	FY3/14E	FY3/15E	FY3/13CE
Volume/Mix	70.5	5.8	40.5	23.4	21.0	32.0
Cost reduction	17.7	11.2	8.0	10.0	12.0	8.0
Change in costs	1.2	9.2	-13.1	-16.4	-19.0	-12.4
Forex	-2.4	-4.5	-0.3	0.0	0.0	-0.5
Raw materials	-9.8	-7.4	0.0	0.0	0.0	0.0
Others	0.0	-5.1	-1.5	0.0	0.0	-1.5
Total	77.2	9.2	33.6	17.0	14.0	25.6

Source: Company data, Citi Investment Research and Analysis.

Raising target price to ¥630, reiterating Buy

Raising earnings forecasts on sales growth in Thailand and Japan

We revise our forex assumptions to reflect a stronger yen (¥80/$ [unchanged] and ¥100/€ versus ¥105/€ previously) but still raise our earnings forecast on the strength of sales volumes in Thailand and Japan and production cost reductions.

Assuming ¥80/$ and ¥100/€, we forecast FY13/13 OP of ¥13bn, FY3/14 OP of ¥148bn, and FY3/15 OP of ¥162bn. Isuzu posted its record OP of ¥109.6bn in FY3/08. We forecast OP will be significantly higher in FY3/13 thanks to growth in Asia and that it will continue to expand thereafter. Isuzu forecasts FY3/13 OP of ¥123bn, assuming ¥80/$.

We look for OP in Asia, which accounts for 30% of total OP, to expand from ¥24bn in FY3/12, to ¥37bn in FY3/13, ¥44.5bn in FY3/14, and ¥52.5bn in FY3/15, with growth driven mainly by Thailand. In Japan, we forecast OP will increase from ¥76bn in FY3/12, to ¥85bn in FY3/13, ¥93.5bn in FY3/14, and ¥98bn in FY3/15 on expanding production of parts overseas (cost savings) stable demand for trucks underpinned by substitute demand. We expect these two regions to drive overall earnings. One of Isuzu's strengths is that volume growth in Asia and other regions is increasing profits in Japan, where complete knock-down production takes place.

Isuzu forecasts FY3/13 OP of ¥123bn, assuming ¥80/$. We believe this looks somewhat conservative.

Raising target price to ¥630

We derive our ¥630 target price (previously ¥480) by applying a PCFR of 8.9x (the average of the highs for eight years between FY3/04−FY3/12, excluding FY3/09 when a loss was made), to our simplified FY13/13 CFPS estimate of ¥71.4.

Our previous ¥480 target price was based on a PCFR of 7.2x (the average of the highs and lows for seven years between FY3/04−FY3/11, excluding FY3/09), and a simplified FY12/12 CFPS estimate of ¥68.5.

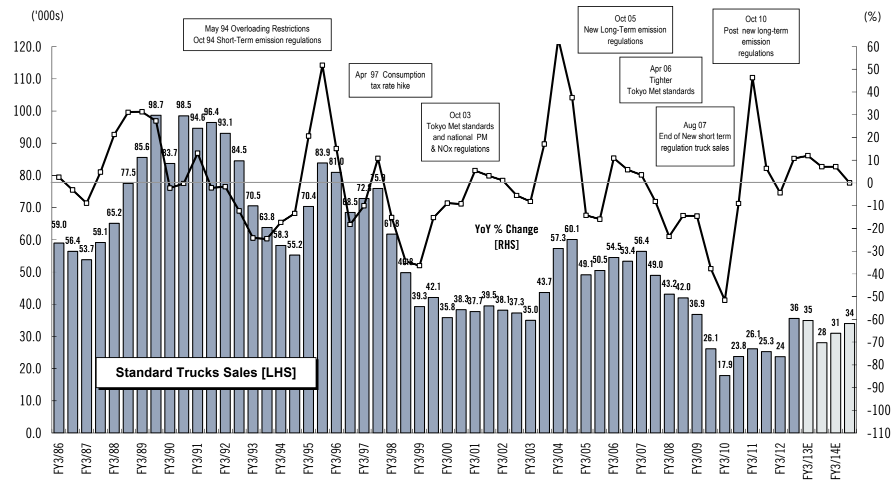
We raise our target multiple to the average of the highs as we expect FY3/13 OP to beat the previous record by a wide margin.

Share price decline caused by a strong yen creates good investment opportunity

Important to understand that truck maker Isuzu has a different earnings structure to passenger vehicle makers

One feature of Isuzu's business is that truck sales are not heavily dependent on European and US markets. In addition, it has a strong presence in Asia, mainly in Thailand, where strong demand for pickup trucks and trucks used in infrastructure construction has supported buoyant sales. Yen strengthening has hurt Isuzu's share price, but we see few concerns on the earnings front and considering the ability to cover a stronger yen through prices hikes in emerging markets, where demand is strong, we think potential share price upside is large. In Japan, we expect substitute demand created by the introduction of new emission standards by the Tokyo metropolitan government to support a large increase in truck sales, and reconstruction-related demand to contribute to truck sales from FY3/13.

Figure 18. Domestic standard truck demand



Source: JAMA, Citi Investment Research and Analysis.

Truck makers and passenger vehicle makers have different earnings structures, but this is often overlooked. Barriers to entry into new markets are high for truck makers, making it difficult for latecomers. This is because transport operators usually need to keep trucks on the road as much as possible, which in turns requires a nationwide service and maintenance network to respond to accidents and other problems. Even if Chinese makers attempt to introduce low-price trucks in Southeast Asia, we do not think they will find many buyers because of inadequate service infrastructure. We believe investors need to rerate the long-term sustainability of Isuzu's superior position in Thailand and other markets

Thai pickup truck sales robust

New plant to boost sales in Thailand

Thailand auto production increased to 1.125mn units in 2005, exceeding 1mn units for the first time, and by 2008 it had risen to 1.394mn. Output plunged to 999,000 units in 2009 amid the fallout of the global financial crisis and then recovered to 1.645mn in 2010. The March 2011 disaster and the Thai floods held output to 1.458mn in 2011, but it is on course to surge to 2.1mn units in 2012, setting a new record.

Isuzu's operations in Thailand were hit by floods immediately after it released a fully revamped model of its mainstay pickup truck, the D-MAX, in October 2011, causing production to be suspended for around six weeks. Production restarted at the end of November, but supply chains were not restored until January 2012. To clear the order backlog that built up in the interim, Isuzu extended production hours and opened plants on weekends/holidays, and output reached a record level for two consecutive months in February (20,000 units) and March (22,000 units). Production levels have remained high since April to meet robust demand.

The new D-MAX is very popular and we believe the new Gateway plant, which is scheduled to open in autumn, will be needed to clear the order backlog. In addition to volume growth, we expect profit to benefit from significantly from mix improvement. This is because auto tax breaks that are scheduled to remain in force until the end of 2012 are supporting strong sales of high-price models. The floods have increased the popularity of pickups, as they have good ground clearance, and we believe Isuzu's sales will continue to grow.

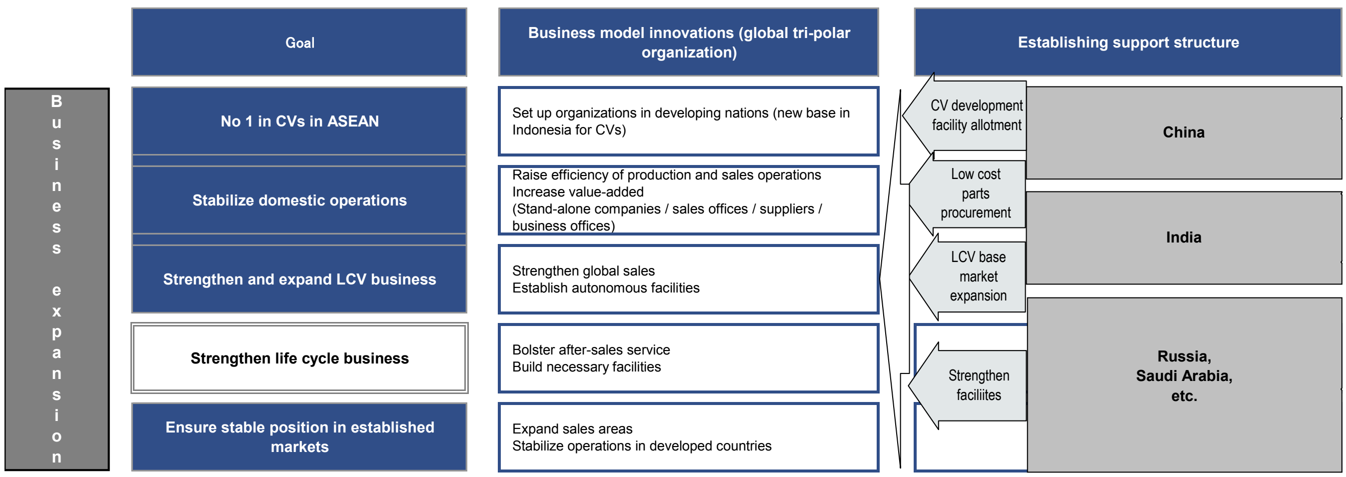
Also, flood infrastructure measures should contribute to truck demand. All these factors point to strong profit growth in Thailand in FY3/13.

Medium-term management plan aims to create a tripolar global structure

Strengthening earnings structure in emerging markets

Isuzu's medium-term management plan calls for the creation of a tripolar global structure so that the company can change its business model. Specifically, Isuzu aims to 1) become the top commercial vehicle maker in ASEAN countries; 2) stabilize domestic earnings; 3) strengthen and expand its pickup business; 4) strengthen the life cycle business; and 5) stabilize its position in established markets.

Figure 19. Isuzu: Medium-term management plan aims and hurdles



Source: Company data.

To achieve its goal of becoming the number one commercial vehicle maker in ASEAN, Isuzu plans to make Indonesia, the largest ASEAN market and one in which it lags Mitsubishi Fuso and Hino Motors, a central production base for the region and to strengthen its sales network there. Plans call for the development in

Indonesia at a low cost of light trucks and commercial vehicles for emerging markets, although Isuzu will use China as a development base for low-cost trucks and procure low-cost parts there. Low-cost trucks will also be released in Malaysia and Vietnam.

To stabilize domestic business earnings, Isuzu will launch next-generation trucks for the domestic market in synchronization with their joint development in China, thereby realizing low costs. Isuzu also aims to improve production efficiency by internalizing production of some transmission parts and strengthening production of small engines and other core modules.

Plans to strengthen and expand the pickup truck business center on increasing exports from Thailand. The new Gateway plant, scheduled for completion in autumn 2012, will boost production volume and we believe export volume is likely to increase thereafter. Isuzu also plans to develop next-generation low-emission diesel engines and release new derivative models. In India, Isuzu is developing a commercial vehicle with a pickup truck base, with a focus on cost competitiveness, and it aims to fully exploit its commercial possibilities moving forward.

In strengthening the life cycle business, Isuzu aims to expand “fixed” earnings in areas such as services and maintenance from consolidated sales companies and capture peripheral opportunities in existing businesses.

In established markets, Isuzu has set up an assembly company in Saudi Arabia, is reinvigorating its business in Russia, and has increased its stake in SML Isuzu (SMLI) in India with the aim of launching products dedicated to the Indian market equipped with Isuzu-made components. Moving forward it will strengthen the development of commercial vehicles for South American markets and develop a production business in South Africa.

Establishing a support system will be crucial for the development and production of low-cost trucks. Isuzu has already started work on a truck development center in Chongqing, China, and set up a project team in India. Plans moving forward include consolidating component manufacturing businesses in China and developing manufacturing and sales operations for small trucks in India.

Figure 20. Isuzu: ASEAN commercial vehicle business

	Existing operations	Future issues
Sales	Introduce F Series in Indonesia, enhance sales network Reorganize Malaysia DB (integrate LCV/CV) Debut QCD vehicles in Vietnam, developing nations	Debut lightweight trucks, HDs for emerging markets Consolidate Malaysia DB Fully develop QCD vehicles in emerging markets - Deal with threats from Chinese, South Korean makers
Manufacturing	Strengthen manufacturing facilities around Indonesian core - Dispatch necessary development personnel - Obtain land for new industrial production Build new CV paintshop in Thailand (Gateway)	Make local production the majority of production Build development processes in emerging markets Expand localization

Source: Company data, Citi Investment Research and Analysis.

Figure 21. Isuzu: Domestic business

	Existing operations	Future issues
Stabilize domestic operations	No 1 share (FY3/12 H2) HD: 33.0%, 2t-3t: 39.5%, Bus: 36.0% Complete consolidation of regional sales offices (Isuzu Motors Tohoku) Core modular production (some small engines) Internal production of some transmissions	Further stabilize domestic businesses Parent, sales companies, parts companies Introduce next-generation HD (synchronize with China development) Push greater efficiencies, internalized production in manufacturing ops
Strengthen and expand LCV business	Introduce new D-MAX Consolidation of export operations (establish IMIT, begin exports) Make IMIT in Europe/Central America subsidiaries Proceed with new factory (Gateway) Scheduled for completion in autumn 2012	Introduce new model derived from existing ones Fully develop exports Further promote the independence of local development facilities Develop new low emission diesel engines

Source: Company data, Citi Investment Research and Analysis.

Company Focus

- Company Update
- Target Price Change
- Estimate Change

Neutral	**2**
Price (20 Jun 12)	¥3,050
Target price	¥3,300
from ¥3,990	
Expected share price return	8.2%
Expected dividend yield	2.1%
Expected total return	**10.3%**
Market Cap	¥9,658,770M
	US$121,471M

Price Performance
(RIC: 7203.T, BB: 7203 JP)

Toyota Motor (7203)

Reiterating Neutral: Time needed to build new business model

- **Reiterating our Neutral rating** — We believe it will take time for Toyota to see benefits from earnings structure reforms and to construct a new business model. For now, we see the keys as to what level absolute profits recover and how much margins improve. We lower our target price for Toyota to ¥3,990 to ¥3,300. Our new target price is based on our FY3/13 simplified CFPS estimate of ¥490.4 and a PCFR of 6.7x, the average of the lows over seven past years.

- **Earnings forecasts** — Assuming ¥80/$ and ¥100/€, we forecast OP of ¥1.16trn for FY3/13 (Toyota forecasts ¥1trn assuming ¥80/$ and ¥105/€), ¥1.38trn for FY3/14, and ¥1.65trn for FY3/15. Although it appears the worst is over for Toyota and we forecast that it will see OP recover to 51% of its record (¥2.2704trn in FY3/08) in FY3/13, 61% in FY3/14, and 73% in FY3/15, it has a ways to go to get back to levels seen in its heyday.

- **Investment points** — We see a number of negatives for the shares: 1) issues with the luxury car strategy (Lexus, etc.), formerly a Toyota strength; 2) the risk of falling behind in fuel performance as Toyota has been slower than peers to innovate in areas such as engines; and 3) profit recovery is slower than at peers. It remains to be seen what models will be significantly impacted by new CoGS cuts and how successful the new developing markets-focused business model will be.

- **Speed with which strategic objectives achieved important** — All automakers are have adopted new development strategies and strategies to expand in developing markets, and Toyota's announcements have delivered nothing new. For us, the key point is whether the new low-cost car strategy Toyota has announced delivers greater results than at peers. It is unclear how well Toyota's strategic products aimed at developing markets will do, and we need to see what new models the company announces.

Consol.	Sales		OP			Pretax Profit		NP		EPS	PE
	¥M	YOY (%)	¥M	YOY (%)	OPM(%)	¥M	YOY (%)	¥M	YOY (%)	¥	X
3/11A	18,993,688	0.2	468,279	217.4	2.5	563,290	93.3	408,183	94.9	130	23.4
3/12A	18,583,653	-2.2	355,627	-24.1	1.9	432,873	-23.2	283,559	-30.5	90	33.8
3/13CE	22,000,000	18.4	1,000,000	181.2	4.5	1,160,000	168.0	760,000	168.0	240	12.7
3/13E	21,250,000	14.3	1,130,000	217.7	5.3	1,211,500	179.9	906,000	219.5	289	10.6
3/13RE	21,340,000	14.8	1,160,000	226.2	5.4	1,320,000	204.9	823,000	190.2	260	11.7
3/14E	22,540,000	6.1	1,430,000	26.5	6.3	1,522,000	25.6	1,113,000	22.8	355	8.6
3/14RE	22,200,000	4.0	1,380,000	19.0	6.2	1,560,000	18.2	1,093,000	32.8	345	8.8
3/15E	23,550,000	6.1	1,650,000	19.6	7.0	1,850,000	18.6	1,313,000	20.1	415	7.4

A: Actuals, E: Citi Research Ests, CE: Co. Ests, RE: Citi Research Revised Ests, CRE: Co. Revised Ests, NA: Not Available, NM: Not Meaningful

Worst over but record profit still long way off

Can Toyota speed up its earnings recovery?

A look at sales volumes clearly shows Toyota's recovery. However, earnings have not recovered as much as volumes have, and this is where Toyota runs into trouble. We believe it will take time for Toyota to see benefits from earnings structure reforms and to construct a new business model, so it seems too early to recommend buying Toyota shares. For now, we want to see to what level absolute earnings recover and how much margins improve.

Figure 22. Toyota : Auto shipments and factors impacting OP

Automotive shipment

(,000)	FY3/11	FY3/12	FY3/13E	FY3/14E	FY3/15E
WW total	7,308	7,352	8,700	9,094	9,704
(yoy)	1.0%	0.6%	18.3%	4.5%	6.7%
Japan	1,913	2,071	2,170	2,034	2,104
(yoy)	-11.5%	8.2%	4.8%	-6.3%	3.5%
North America	2,031	1,872	2,380	2,483	2,584
(yoy)	-3.2%	-7.8%	27.1%	4.3%	4.0%
Europe	796	798	820	870	925
(yoy)	-7.3%	0.3%	2.8%	6.1%	6.3%
Asia	1,255	1,327	1,810	2,023	2,254
(yoy)	28.1%	5.7%	36.4%	11.8%	11.4%
Others	1,313	1,284	1,520	1,684	1,837
(yoy)	15.3%	-2.2%	18.4%	10.8%	9.1%

OP variance factors

(Ybn)	FY3/11	FY3/12	FY3/13E	FY3/14E	FY3/15E	FY3/13CE
Volume/Mix, etc.	490.0	150.0	680.9	155.0	240.0	550.0
Cost reduction	180.0	150.0	290.0	350.0	350.0	240.0
Forex	-290.0	-250.0	-20.5	0.0	0.0	0.0
Others	-59.2	-162.7	-146.0	-285.0	-320.0	-145.6
TOTAL	320.8	-112.7	804.4	220.0	270.0	644.4

Source: Company data, Citi Investment Research and Analysis.

Maintaining Neutral, new ¥3,300 target price

Earnings are recovering, but are not yet back to heyday levels

We raise our FY3/13 OP forecast because we revise our sales volume assumption up sharply, although the change to our forex assumptions (to ¥80/$ and ¥100/€ from ¥84/$ and ¥108/€) has a negative impact. At the same time, we lower our NP forecast as we raise our tax rate assumption.

Assuming ¥80/$ and ¥100/€, we forecast OP of ¥1.16trn for FY3/13 (Toyota forecasts ¥1trn assuming ¥80/$ and ¥105/€), ¥1.38trn for FY3/14, and ¥1.65trn for FY3/15. Although it appears the worst is over for Toyota and we forecast that it will see OP recover to 51% of its record (¥2.2704trn in FY3/08) in FY3/13, 61% in FY3/14, and 73% in FY3/15, it has a ways to go to get back to levels seen in its heyday.

In Asia, which accounts for about 30% of total OP, Toyota posted OP of ¥256.8bn in FY3/12, and we model steady growth going forward, to ¥380bn in FY3/13, ¥430bn in FY3/14, and ¥490bn in FY3/15. In the US, a key source of profits, we model a recovery from ¥186.4bn in FY31/2 to ¥320bn in FY3/13, ¥350bn in FY31/4, and ¥390bn in FY3/15. However, we believe further profit growth requires a higher local production rate, significant CoGS cutting for locally-produced cars, and a recovery for Lexus.

For FY3/13, Toyota forecasts OP of ¥1trn (operating margin of 4.5%), assuming ¥80/$ and ¥105/€. However, we see upside from CoGS cutting and feel Toyota's forecasts are conservative. Forex sensitivity is ¥35bn for every ¥1/$ change ¥5bn for every ¥1/€ change.

Our new target price for Toyota is ¥3,300, down from ¥3,990 previously. This target price is based on our FY3/13 simplified CFPS estimate of ¥490.4 and a PCFR of 6.7x (the average of the lows over seven years between FY3/05 and FY3/12, excluding FY3/09, which we consider an outlier).

Issues are a renewal for Lexus and changeover to next-generation engines

Although sales volume is rising and benefits from CoGS cutting are expanding, the high-end strategy that was previously Toyota's strength has become a problem. In addition, we see a risk of deterioration in product competitiveness as Toyota has been slower than peers to innovate in areas such as engines, and the profit recovery is slower than at peers. Therefore, we use the average of the lows.

Our previous target price of ¥3,990 was based on our previous FY3/13 simplified CFPS estimate of ¥540.8 and a PCFR of 7.4x, the midpoint of the lows of 6.6x and the high-low average of 8.1x for six past years (excluding FY3/09 as an outlier).

Driver is earnings recovery in North America and developing markets like Asia

Sales volume nearing record levels, but OP still only half of its previous record

Toyota announced an OP target of ¥1trn as part of its Global Vision. Due to the major changes in the economic environment following the Lehman failure, Toyota went from its earnings peak to losses all at once, and thereafter it was beset by other issues like the recall turmoil, the March 11 disaster in Japan, and the flooding in Thailand. However, Toyota still expects to achieve OP of ¥1trn for the first time in five years in FY3/13. The main driver is expected to be increased volume, and we forecast sales volume of 8.7mn units in FY3/13 (+18.3% YoY), second only to the record in FY3/08 of 8.91mn units.

We believe the main drivers of higher sales volume will be North America, where we look for sales of 2.38mn units (+27.1%), emerging market Asia, where we look for sales of 1.81mn units (up 36.4% YoY), and other regions, where we look for sales of 1.52mn units (+18.4% YoY). However, although we look for expansion in Russia we anticipate deterioration in Western Europe, so for Europe overall we forecast sales of 820,000 units (+2.8% YoY). In Japan, we anticipate a drop-off in the second half of the year after eco-car subsidies end, so our sales forecast is only 2.17mn units (+4.8% YoY).

Toyota's forecast is 8.7mn units, breaking down to 2.35mn units in North America, 1.78mn units in Asia, 1.51mn units in other regions, 860,000 units in Europe, and 2.2mn units in Japan. However, there are concerns that the strong yen could reduce export profitability, the high-margin Lexus brand could struggle while low-margin compacts expand, and that SG&A costs are boosted in response to increasing price competition in the North American and other markets.

Sales volume looks set to near Toyota's record high. However, we expect FY3/13 OP to be only about half of the record, and therein lies Toyota's problems. The Toyota subsidiaries Hino and Daihatsu expect record profits in FY3/13. Of course, the major difference between Toyota and subsidiaries is degree of damage from a strong yen, but we believe the main factor here is that Toyota is moving more slowly in reforming its earnings structure than peers.

Still no solution for the Toyota dilemma: how to balance earnings and employment in Japan

Toyota's production capacity in Japan is 3.6mn units, but lower export profitability due to the strong yen is proving an albatross. Nissan has already shifted production of the March to Thailand and MMC has done the same for the Mirage. Honda and Mazda intend to manufacture the Fit and Demio (which are in the same class) in new plants in Mexico. Toyota, on the other hand, intends to continue producing the Vitz (Yaris) in Japan, and even with beefed-up efforts to cut CoGS we think export profitability will be extremely weak as long as the yen remains around ¥80/$. Many hybrid models, which are likely to be the focus of sales going forward, are produced in Japan, but Toyota has announced plans to produce the Prius in China and the US, so it is moving forward with local production of this model. As for the high-

margin Lexus, we have seen little to suggest production will be shifted from Japan to overseas. On the other hand, Toyota plans to bolster overseas production of things like engines, and we think the overseas production ratio will improve. Toyota is firmly wedded to keeping production capacity in Japan at 3mn units, but being overly stubborn about this would saddle Japan with production of unprofitable models. We see no solution to Toyota's "Japan problem" (should it aim for employment in Japan or profits?) and wait to see what Toyota does about this.

While peers roll out groundbreaking new development methods, Toyota lags behind, despite the TNGA announcement

Recently, Toyota announced the Toyota New Global Architecture (TNGA) concept. Under this concept, Toyota will neatly standardize parts and units via highly-efficient grouping development, while also working to reduce CoGS via cooperation with suppliers and improve product competitiveness. If Toyota had been the first to hammer out this kind of new plan, we would applaud, but many competitors have been implementing this kind of groundbreaking development concept for several years now, with some having met with significant success. In our view, Nissan and VW lead the pack in terms of next-generation development methods, and even among non-majors, auto makers have adopted a variety of approaches. Toyota says it does not calculate the cost savings gained from its TNGA concept. If Toyota were to estimate cost cuts, it could fly in the face of President Toyoda's calls for "building good cars", and this makes it difficult to forecast specific benefits or know when it will be implemented. As such, it would come as no surprise were the market to be less confident in Toyota's efforts than in those of its peers.

Also behind in developing next-generation powertrains

In addition, we believe upgrades to powertrains (core parts of any vehicle that include the engine, transmission, etc.) are necessary for there to be bold development reform. However, it is not clear when Toyota will change over to a next-generation powertrain. This is one reason for Toyota's lag in improving fuel efficiency for existing models, and we believe Toyota will be forced into an uphill battle in terms of product performance over at least the next one to two years.

For example, sales of the Camry, which underwent a full model change last year, are strong in the US. It appears one reason for strong sales is the fact that the Camry gets 35 mpg in highway mode, in line with the Hyundai Sonata's mileage. However, Nissan is expected to launch an Altima with improved fuel efficiency (38 mpg) in June. Honda also plans to launch a new Accord with better fuel efficiency than the Camry. Given Toyota's marketing muscle, we do not expect a major decline in sales even with somewhat less competitive products in areas like fuel efficiency. At the same time, Toyota has no time to waste with its rivals continuing to roll out superior new models.

President Toyoda has urged the company to "build better cars", and this forms the basis of Toyota's management strategy. The R&D department aims to develop cars that "enthrall customers", but we are concerned that right now we are seeing no strong successes in the core mass-market aside from hybrids. Some feel that the Toyota 86 epitomizes Mr. Toyoda's management philosophy, but even if that is true, we think that the main reasons for its significant appeal are that 1) it is Toyota's first sports car in a long time and 2) it boasts a horizontally-opposed engine jointly developed with Fuji Heavy, an engine Toyota could not produce on its own. We conclude that Toyota needs to produce some successes via new cars developed in-house.

Waiting for an overhaul of Toyota's outmoded business model

Toyota needs to focus more on earnings than on recovering sales volume share

In March Toyota's share price hit ¥3,600 for the first time in a year. A temporarily weakening yen, rising expectations for a US economic recovery, and a market driven by excess liquidity resulted in an inflow of risk money. We believe Toyota shares, which had been lagging, piqued market interest as they fell to a PBR below 1x (end-FY3/12 BPS was ¥3,331) from August 2011. However, we see the inability of Toyota, which generates most of its earnings in the US, to fully rectify its outmoded business model, as a cause for concern. For us to turn bullish, we would need to see acceleration in the pace of earnings recovery from FY3/14 and proof that Toyota has not fallen victim to the paradox in which bumper harvests (i.e, high sales) result in poverty (i.e, low earnings). We see scope for an increase in production and sales volume but feel it is more important to offset yen strength and boost margins. In our view, investors should not react positively to a simple recovery in Toyota's US market share, but rather check to see if sales incentives were raised in order to make this happen.

Another concern is that a new model offensive by German automakers, which are benefitting from euro weakness, has resulted in struggles for the luxury brand Lexus, which makes a major contribution to earnings in markets like North America and China. Competition has heated up for Toyota's mainstay Camry and Corolla due to the rejuvenation of US automakers and the rise of South Korean automakers, and the unquestioned strength Toyota had enjoyed in the past has ebbed. In Japan, it is becoming increasingly difficult to maintain production capacity of 3.6mn units with the yen as strong as it is, but Toyota has not hammered out a dramatic earnings structure reform strategy. We believe these things are a major weight on Toyota's share price, so even if the shares begin to rise again we doubt they will outperform market peers.

Working to bolster ops in developing markets, but peers doing so as well—we see no competitive advantage for Toyota

Leveraging Etios for new models in developing markets

Toyota began producing IMVs in Thailand and Indonesia in 2004, and sales of five models including pickup truck and SUVs have fared well. The company has now announced a new developing market strategy. By 2015, Toyota plans to produce more than 1mn compact models made exclusively for developing markets (based on the Etios currently produced in India) in the developing markets themselves. In addition, the firm also plans to raise the sales weighting of developing markets (i.e., all markets other than Japan, the US, and Europe) to 50% or more (versus 45% in 2011). This developing market strategy is based on future derivatives of the Etios, which has already been launched in developing markets, and Toyota intends to leverage the Etios platform to add six new Toyota brand models exclusively for developing markets to the two existing Etios models and sell them in 100+ nations (including China) at a price of c¥1mn.

Using Thailand, India, and Indonesia as bases for the production and export of compacts exclusively for developing markets, Toyota plans to increase production capacity in emerging markets to 3mn units, in line with capacity in Japan. As of 2013, Toyota intends to have capacity of 920,000 units in China, 760,000 units in Thailand, 310,000 units in India, 180,000 units in Indonesia (excluding Daihatsu), 140,000 units in Brazil, and 220,000 units in South Africa. The firm is also moving

forward with localizing production of things like engines, and it aims to expand cost savings via 100% local parts procurement.

No plans to develop ultra-cheap cars under the Toyota brand; the firm would likely leverage Daihatsu were it to do so

All automakers are trying to increase their presence in developing markets, and we see nothing new in Toyota's announcement. The key point now is whether Toyota can generate better results than peers with its low-price car strategy. It is unclear how well Toyota's strategic products aimed at developing markets will do, and we need to see what new models the company announces. Nissan plans to produce Datsun brand cars, which will be cheaper than its Nissan brand models, in India, Indonesia, and Russia. However, Toyota has no plans to produce ultra-cheap cars under the Toyota brand. One solution here could be collaboration with Toyota's subsidiary Daihatsu, but we would need to see the specifics of this kind of arrangement.

Company Focus

- Company Update
- Target Price Change
- Estimate Change

Buy	**1**
Price (20 Jun 12)	¥546
Target price	¥810
from ¥660	
Expected share price return	48.4%
Expected dividend yield	3.1%
Expected total return	**51.5%**
Market Cap	¥311,377M
	US$3,916M

Price Performance
(RIC: 7205.T, BB: 7205 JP)

Hino Motors (7205)

Cost savings on revamped production point to record earnings

- **Maintaining Buy** — Hino is pursuing new development and production reforms, and its profit levels are rising. We therefore maintain our Buy rating in anticipation of emerging effects of changes to the earnings structure. We raise our target price to ¥810, derived using our simplified FY3/13 CFPS forecast of ¥131.4 and the 6.2x average of the high and low PCFR multiples for eight previous years.
- **Earnings outlook** — Our OP forecasts assume exchange rates of ¥80/$ and ¥100/€ and anticipate ¥60bn in FY3/13, ¥70bn in FY3/14, and ¥82bn in FY3/15. The past OP peak was ¥45.9bn in FY3/08, but we expect earnings growth in Asia and Japan to support a substantially higher new record in FY3/13, and with further new truck development and production reforms we look for a trend of continued profit growth. Hino's estimates assume an exchange rate of ¥80/$ and call for FY3/13 OP of ¥47bn.
- **Investment points** — Hino is noteworthy for its limited exposure to Europe and the US and its strength in Asia. There is particularly strong truck demand related to infrastructure-building in Asia, and in Thailand the company is also faring well with the production of pickup truck underbodies for Toyota. Hino's share price has fallen as the yen has appreciated, but given that the threat to earnings is less than at the passenger vehicle makers and the prospects for record profit levels, we see substantial upside.
- **Significant benefits from new production reforms** — Hino is following growth strategies keyed to overseas activities, and aims to reach global annual sales of 230,000 units by the middle of the current decade. With the introduction of new production methods, the company is leveraging the creative technologies and capabilities that are its strengths in Japan and concentrating production of core parts at home, while pursuing procurement and production of peripheral parts where they are required to meet the specs of local markets overseas, to build a structure by which units are assembled near to the location of end-user demand. We expect significantly reduced costs as a result.

Consol.	Sales		OP			RP		NP		EPS	PE
	¥M	YOY (%)	¥M	YOY (%)	OPM(%)	¥M	YOY (%)	¥M	YOY (%)	¥	x
3/11A	1,242,691	21.4	28,902	nm	2.3	25,058	nm	-10,040	nm	-18	nm
3/12A	1,314,588	5.8	37,527	29.8	2.9	34,578	38.0	16,304	nm	29	19.1
3/13CE	1,480,000	12.6	47,000	25.2	3.2	45,000	30.1	28,000	71.7	49	11.1
3/13E	1,460,000	11.1	48,000	27.9	3.3	48,000	38.8	23,500	44.1	41	13.2
3/13RE	1,520,000	15.6	60,000	59.9	3.9	58,000	67.7	33,000	102.4	58	9.4
3/14E	1,560,000	6.8	60,000	25.0	3.8	60,500	26.0	31,000	31.9	54	10.0
3/14RE	1,610,000	5.9	70,000	16.7	4.3	69,000	19.0	40,000	21.2	70	7.8
3/15E	1,710,000	6.2	82,000	17.1	4.8	81,000	17.4	48,000	20.0	84	6.5

A: Actuals, E: Citi Research Ests, CE: Co. Ests, RE: Citi Research Revised Ests, CRE: Co. Revised Ests, NA: Not Available, NM: Not Meaningful

Maintaining Buy: Capture profit base shift to emerging markets, profit structure reforms

Prospects for record profits on reforms to earnings structure arising from new truck development and production methods

We think Hino's profit base is shifting to developing countries in Asia and elsewhere, and that the company is adopting new truck development and production methods to ensure that this is successful. The new development and production reforms being implemented by the company are likely to increased profit levels at the same time. We maintain our Buy rating in anticipation of emerging effects of changes to the earnings structure.

Figure 23. Hino: Consolidated sales volume and factors impacting OP

Consolidated sales volume

(,000)	FY3/11	FY3/12	FY3/13E	FY3/14E	FY3/15E
Hino brand vehicle	108.1	127.5	150.0	166.0	183.4
(yoy)	29.6%	17.9%	17.6%	10.7%	10.5%
1) Domestic	29.3	37.3	40.0	40.6	40.6
(yoy)	8.8%	27.1%	7.3%	1.6%	0.0%
2) Overseas	78.8	90.2	110.0	125.4	142.8
(yoy)	39.5%	14.5%	21.9%	14.0%	13.9%
Toyota brand vehicle	158.7	153.3	180.0	183.7	185.7
(yoy)	17.9%	-9.4%	41.0%	6.4%	8.4%
1) Domestic	142.4	137.1	160.0	161.7	161.7
(yoy)	17.4%	-3.7%	16.7%	1.1%	0.0%
2) Overseas	16.3	16.1	20.0	22.0	24.0
(yoy)	320.4%	-0.8%	23.9%	10.0%	9.1%

OP variance factors

(Ybn)	FY3/11	FY3/12	FY3/13E	FY3/14E	FY3/15E	FY3/13CE
Change in sales	33.7	36.0	34.7	20.0	20.9	29.0
Environment change	-11.1	-30.8	-10.2	0.0	0.0	-12.5
- Forex	-1.9	-15.7	-0.2	0.0	0.0	-3.0
- Raw materials	-9.2	-15.1	-10.0	0.0	0.0	-9.5
Cost reduction	18.7	18.6	18.0	19.0	20.0	18.0
Others	-13.6	-15.2	-20.0	-29.0	-29.0	-25.0
Total	27.7	8.6	22.5	10.0	11.9	9.5

Source: Company data, CIRA

Maintaining Buy, new ¥810 target price

Revising up our forecasts; we anticipate continued record profits

We raise our forecasts for Hino despite a negative impact from adjustments to our forex assumptions (to ¥80/$ and ¥100/€ from ¥80/$ and ¥105/€), as we look for contributions from volume growth in Thailand and benefits from lower costs of sales in Japan and elsewhere.

Based on our new forex assumptions, we forecast FY3/13 OP of ¥60bn, FY3/14 OP of ¥70bn, and FY3/15 OP of ¥82bn. The past OP peak was ¥45.9bn in FY3/08, but we expect earnings growth in Asia and Japan to support a substantially higher new record in FY3/13, and with further new truck development and production reforms we look for a trend of continued profit growth.

Our OP forecasts by region anticipate that more than 50% of growth will come from Asia, where we expect OP to rise from ¥15.8bn in FY3/12 to ¥32bn in FY3/13, ¥38bn in FY3/14, and ¥46bn in FY3/15. In Japan, we look for expansion in parts for overseas production activities and replacement demand to support a continued firm undertone in truck demand, thus absorbing capex and other fixed costs, with OP rising from ¥23.3bn in FY3/12 to ¥38bn in FY3/13, ¥31.5bn in FY3/14, and ¥35bn in FY3/15. Volume growth in Asia and elsewhere, resulting in profit growth for Japanese operations producing CKD kits, is a plus for Hino.

Hino itself estimates FY3/13 OP at ¥47bn while assuming an exchange rate of ¥80/$, which strikes us as somewhat conservative.

New target price: ¥810

Our revised target price for Hino is ¥810, derived using our simplified FY3/13 CFPS forecast of ¥131.4 and the 6.2x average of historical high and low PCFR multiples for the nine years from FY3/04 to FY3/12, excluding FY3/09. We switch to the average of the low and the high PCFRs from the average of the low PCFRs we used previously, reflecting the likelihood of record earnings in FY3/13 on earnings expansion in Asia and Japan and our expectations that the earnings uptrend will continue on new development and production innovations in trucks.

We raise our target price from ¥660, which was based on our previous FY3/13 simplified CFPS forecast of ¥127.2 and the 5.2x average of historical low PCFRs over the eight years from FY3/04 to FY3/11, excluding FY3/09.

Shares dip on strong yen: buying opportunity

Profit structures are different for truck makers and passenger vehicle makers

Hino is noteworthy for its limited exposure to Europe and the US and its strength in Asia. There is particularly strong truck demand related to infrastructure-building in Asia, and in Thailand the company is also faring well with the production of pickup truck underbodies for Toyota. Hino's share price has fallen off sharply as the yen has appreciated, but given that the threat to earnings is less than at the passenger vehicle makers and the prospects for record profit levels are good, we see substantial upside. Domestically, the implementation of the Tokyo Ordinance on Environmental Preservation in October 2003 and the Automotive NOx/PM Law prompted substantial growth in truck sales, and the time is approaching when we are likely to see replacement demand emerging. The expiration of eco-car subsidiaries has given rise to fears that sales volumes might decline in the near term, but we expect that replacement demand as well as reconstruction-related demand will contribute to truck sales in FY3/14 and beyond.

Construction of new Furukawa plant points to new development and production reforms

Significance of new Furukawa plant

Hino is following growth strategies keyed to overseas activities, and aims to reach global annual sales of 230,000 units by the middle of the current decade. However, commercial vehicles tend to required multi-model, small-lot production as markets are limited to specific countries and/or regions, while from the perspective of efficient investment it is hard to undertake all processes in each region, so the common approach is to export parts from Japan and other production bases for assembly overseas. With the introduction of new production methods, the company is leveraging the creative technologies and capabilities that are its strengths in Japan and concentrating production of core parts at home, while pursuing procurement and production of peripheral parts where they are required to meet the needs of local markets overseas, to build a structure by which units are assembled near to the location of end-user demand. The company believes success in these efforts will boost global production efficiency and allow flexible responses to market needs, while at the same time shortening lead times for delivery to users. The Furukawa facility is to play a crucial role as a "mother plant" for Hino, serving as the foundation of its production and supply structure by disseminating the creative technologies developed in Japan to the company's factories around the world, pursuing volume growth driven by overseas sales. While building up the production and supply structure at the new Furukawa plant, the company also plans to bolster overseas production to expand the output of vehicles tailored to local markets and optimize the production of supply of peripheral parts, and is therefore increasing capacity in Thailand and Indonesia.

First stage focuses on knock-down production; packing facilities came on-stream in May

Hino is shifting production activities from its head office facilities in Hino City, Tokyo, to the newly constructed Furukawa plant in Ibaraki Prefecture in stages, and plans to close down production operations at the Hino site by 2020. Head office functions and technology divisions will remain in Hino. The land and construction for the Furukawa plant will require a total investment of ¥50bn. In the first stage, knock-down production is to be moved, and the site's packing plant started operations in May 2012. Initially, the plant is supplying knock-down kits for the production of 50 mid-size trucks a day in Thailand, where the order backlog is substantial, but within

a year it is to be shipping knock-down kits for production of 200 vehicles a day to 50 countries around the world, including Indonesia and Colombia.

Second stage: Production of core parts from FY3/14; third stage: Assembly of vehicles from FY3/16

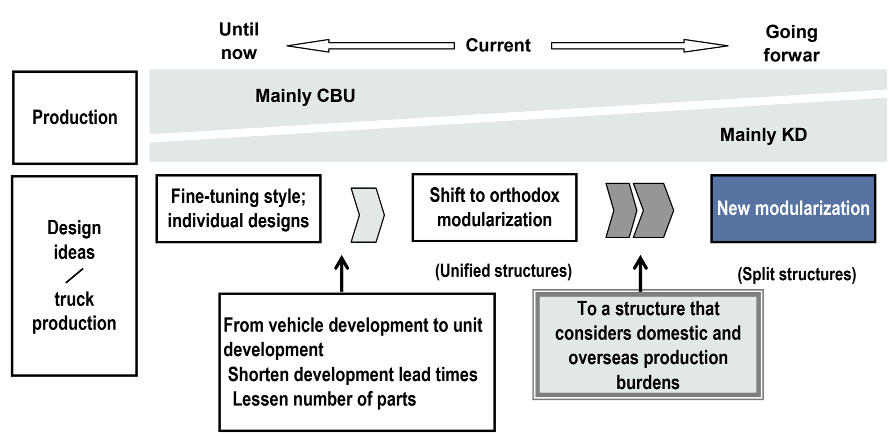
The production of axles and other core parts will start in the second stage in FY3/14–FY3/15, and vehicle assembly operations will start to be transferred in the third stage in FY3/16 and completed by FY3/21. Annual production capacity at the Hino plant is 100,000 units, but this will be roughly doubled to around 200,000 units at the Furukawa plant, and there will also be room for production of complete knock-down kits for overseas assembly.

The reason for the shift is that the lack of space at the Hino site is making it hard to increase output. New lines were needed to boost capacity, but to implement new production systems at the Hino plant would have required the temporary suspension of production activities, and it was more efficient to simply construct a new manufacturing base. Knock-down production had already overtaken production of complete vehicles at Hino in 2009, and the company plans to increase knock-down production for overseas assembly going forward to transform its Japan-based production structure into a global system, so it is also likely to benefit by having its facilities close to the point of departure for sending core parts, etc., overseas.

Expectations of substantial CoGS cutting benefits

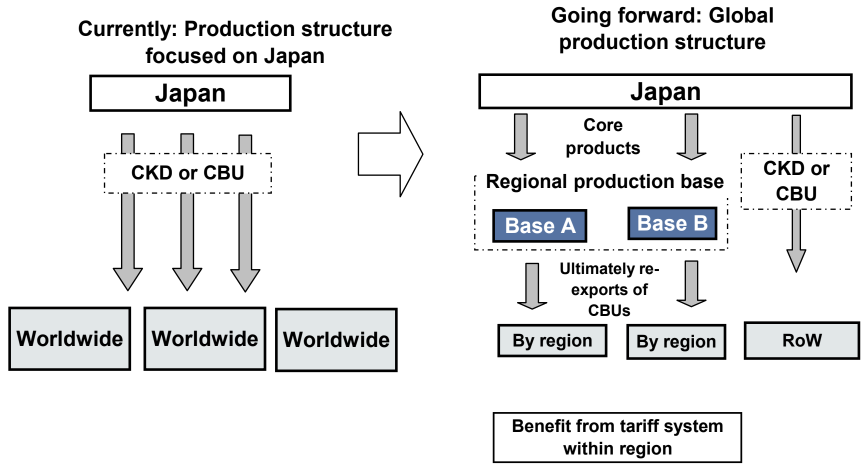
As part of its new production, Hino is sharply reducing the number of parts it uses around the world and shipping core parts from Japan to central overseas production facilities. The company will procure low-cost parts as needed locally and undertake assembly with the core parts from Japan to produce completed trucks in developing nations and elsewhere overseas. We look for substantial cost savings to emerge from the new development and production methods, and we expect this will significantly boost Hino's earnings capacity.

Figure 24. Production reform at Hino Motors



Source: Company data, Citi Investment Research and Analysis.

Figure 25. Hino's global production system reform



Source: Company data, Citi Investment Research and Analysis.

Company Focus

- Company Update
- Estimate Change

Neutral	**2**
Price (20 Jun 12)	¥78
Target price	-
Expected share price return	-
Expected dividend yield	-
Expected total return	**-**
Market Cap	¥431,953M
	US$5,432M

Price Performance
(RIC: 7211.T, BB: 7211 JP)

Mitsubishi Motors (7211)

Substantial earnings recovery, but preferred shares a bottleneck

- **Maintaining Neutral** — Our investment stance toward MMC has not changed despite the earnings recovery trend. The question of how preferred shares will be handled remains, and until this is resolved we would defer investment even given the recovery in flow earnings. We reiterate our Neutral rating.

- **Earnings outlook** — Our OP forecasts assume exchange rates of ¥80/$ and ¥100/€ and anticipate ¥76bn in FY3/13, ¥95bn in FY3/14, and ¥118bn in FY3/15. The past OP peak was ¥108.6bn in FY3/08, but we expect earnings growth in Asia to support a new record in FY3/15. MMC's estimates assume exchange rates of ¥78/$ and ¥103/€ and call for FY3/13 OP of ¥70bn. Given the differences in forex assumptions, the gap between our forecast and guidance does not seem excessive.

- **Investment points** — MMC guides for FY3/13 OP growth on contributions from Thailand and elsewhere in Asia as well as cost reductions, but we see further upside potential. Looking only at flow earnings, recovery continues at a rapid pace but we continue to feel the stock presents a risk as a long-term investment, as we still are not sure what will happen with the preferred shares.

- **Aggressively stepping up Thai operations** — MMC is pursuing an aggressive approach to Asia as a source of earnings, with strategies including expanding production capacity in Thailand. At Mitsubishi Motors Thailand, which handles production and marketing in that country, production of 1.0l–1.2l class Mirage compact cars has started at a new factory (the company's third facility). We think this may well be the most fuel-efficient car in Japan in its class and could help drive the earnings recovery at MMC.

Consol.	Sales		OP			RP		NP		EPS	PE
	¥M	YOY (%)	¥M	YOY (%)	OPM(%)	¥M	YOY (%)	¥M	YOY (%)	¥	X
3/11A	1,828,497	26.5	40,275	189.3	2.2	38,950	200.1	15,621	228.2	2	47.0
3/12A	1,807,293	-1.2	63,676	58.1	3.5	60,905	56.4	23,931	53.2	2	32.5
3/13CE	1,980,000	9.6	70,000	9.9	3.5	52,000	-14.6	25,000	4.5	5	17.3
3/13E	2,130,000	17.9	70,000	9.9	3.3	61,500	1.0	32,500	35.8	3	22.6
3/13RE	2,000,000	10.7	76,000	19.4	3.8	58,000	-4.8	30,000	25.4	3	25.9
3/14E	2,270,000	6.6	90,000	28.6	4.0	82,500	34.1	45,000	38.5	5	16.3
3/14RE	2,150,000	7.5	95,000	25.0	4.4	89,000	53.4	50,000	66.7	5	15.6
3/15E	2,350,000	9.3	118,000	24.2	5.0	113,000	27.0	66,000	32.0	7	11.8

A: Actuals, E: Citi Research Ests, CE: Co. Ests, RE: Citi Research Revised Ests, CRE: Co. Revised Ests, NA: Not Available, NM: Not Meaningful

Earnings recovering but stock best avoided until treatment of preferred is confirmed

While earnings are recovering there is no change to our investment opinion. Plans for the treatment of the preferred shares, the biggest issue for the share price, are still unclear and until they can be confirmed we believe it is best to avoid active investment, regardless of the recovery in flow earnings. We maintain our Neutral rating.

Figure 26. MMC: Auto shipments and factors impacting OP

Automotive shipment

(,000)	FY3/11	FY3/12	FY3/13E	FY3/14E	FY3/15E
WW total	1,098.0	1,072.0	1,210.0	1,312.7	1,438.3
(yoy)	36.4%	-2.4%	12.9%	8.5%	9.6%
Japan	199.0	184.0	207.6	215.8	237.5
(yoy)	17.1%	-7.5%	12.8%	4.0%	10.0%
North America	99.0	104.0	97.9	100.6	105.1
(yoy)	15.1%	5.1%	-5.9%	2.8%	4.4%
Europe	261.0	242.0	240.0	253.3	267.7
(yoy)	133.0%	-7.3%	-0.8%	5.6%	5.7%
Others	539.0	542.0	664.6	742.9	828.0
(yoy)	23.3%	0.6%	22.6%	11.8%	11.5%

OP variance factors

(Ybn)	FY3/11	FY3/12	FY3/13E	FY3/14E	FY3/15E	FY3/13CE
Volume/Mix	53.3	16.8	45.0	30.0	38.0	43.0
Change in costs	21.1	27.2	24.0	26.0	28.0	22.0
Selling expenditure	-5.1	0.5	-15.0	-13.0	-15.0	-15.0
Forex	-34.3	-10.5	-19.5	0.0	0.0	-22.0
Others	-8.5	-10.6	-22.4	-24.0	-28.0	-21.9
Total	26.5	23.4	12.1	19.0	23.0	6.1

Source: Company data, Citi Investment Research and Analysis.

Strong yen a negative, but we forecast an earnings recovery centering on Asia

Asia to drive earnings growth

We revise our forex assumptions to reflect a stronger yen (¥80/$ [unchanged] and ¥100/€ versus ¥105/€ previously) but still raise our OP forecasts to factor in a much larger contribution from Asia, a key source of earnings.

Assuming ¥80/$ and ¥100/€, we forecast FY13/13 OP of ¥76bn, FY3/14 OP of ¥95bn, and FY3/15 OP of ¥118bn. MMC posted its record OP of ¥108.6bn in FY3/08. We believe it will set a new record in FY3/15 on steady growth in Asia.

We look for OP in Asia and other regions (regions outside of Japan, Europe, and North America), which account for 60% of total OP, to expand from ¥37.7bn in FY3/12, to ¥45bn in FY3/13, ¥61bn in FY3/14, and ¥81bn in FY3/15. We think North America, where MMC's business has contracted, will make almost no contribution to profit growth.

MMC forecasts FY3/13 OP of ¥70bn, assuming ¥78/$ and ¥103/€. Considering the forex assumptions, we believe this forecast looks reasonable.

Strengthening operations in Asia

New factory strengthens operations in Thailand

MMC is expanding production capacity in Thailand as part of an aggressive business strengthening strategy in Asia. Mitsubishi Motors Thailand started full production of the Mirage, a 1.0l-1.2l-class passenger car, in April at a brand new factory, the Laem Chabang plant (the third MMC plant there). The factory has initial production capacity of 150,000 units/year, with the potential to increase to 200,000 units/year. The Mirage is a product of a completely new platform MMC is developing for compact, low-cost, and low fuel consumption cars. The model made at the new factory conforms to the Thai government's policy of reducing fossil fuel dependency and greenhouse gas emissions as well as the eco-car measures it has introduced to promote auto industry investment. The Mirage has been developed as a global

compact car, designed to meet growing demand for entry-level cars in emerging markets as well as demand for eco-friendly cars in developed nations amid rising environmental awareness and downsizing in response to energy problems. MMC plans to export it from Thailand to around the world, including to Japan. The 1.0l Mirage can achieve up to 27.2km/liter in JCO8 mode, which may be the highest efficiency of any registered vehicle running solely on a gasoline engine in Japan. We expect sales to grow globally.

Strengthening alliance with Nissan

MMC is strengthening its alliance with Nissan. The companies agreed to expand cooperation in December 2012, and as a first step they set up a minivehicle joint venture, NMKV, for the Japanese market in June 2011. Daihatsu, Suzuki, and Honda have already introduced minivehicles with next-generation engines and MMC plans to do so in FY3/14. The new minivehicle will be made at the Mizushima plant (capacity of 600,000 units/year), where one of the three lines is closed and production on the other two was reduced to one shift per day in spring. On the introduction of the new model, plans call for the minivehicle line return to two shifts a day and production of 400,000 units/year.

In July 2011, MMC and Nissan announced they had reached an agreement to manufacture Nissan one-ton pickup trucks at MMC's Laem Chabang plant in Thailand. Nissan has consigned production of the Navara pickup truck to MMC and plans call for production in Thailand to commence in FY3/13. The agreement will allow Nissan to increase Thai production of the March and other strong-selling passenger cars, while MMC will be able to increase the operating rate on production lines for its strong-selling Triton. We believe the volume benefits could be close to those achieved on previous production agreements with Toyota and Isuzu.

In addition, MMC and Nissan have entered into OEM supply arrangements in Japan and elsewhere. Nissan will supply luxury passenger cars to MMC, which has withdrawn from production in this segment. Plans call for the Fuga-based model to be sold as the Proudia and the Cima-based model as the Dignity.

We believe the alliance with Nissan will have large global production and sales volume benefits for MMC and we hope additional collaborative measures are announced moving forward.

Introducing a plug-in hybrid SUV developed using know-how acquired in the development of electric vehicles

MMC will use the technology it has acquired in developing a commercial electric vehicle to enter the plug-in hybrid market in FY3/13. Toyota, the leader in this field, has added a plug-in model to its Prius lineup, for which it is already enjoying mass production benefits. As a latecomer, MMC is targeting SUVs—a segment in which few other automakers have hybrid cars—and will release a plug-in hybrid electric (PHEV) version of the Outlander with a view to becoming the top maker in this field. The Outlander PHEV is heavier than the Prius PHV released in January 2012, but it is expected to have better fuel efficiency than the Prius PHV's 61km/l.

With a full charge the Outlander PHEV can travel for 50km on the electric powertrain before it has to be recharged. And it can reach a top speed of 100km/h without the assistance of the gasoline engine. This configuration is completely different to the Prius. The Outlander PHEV has a 2.0l four-cylinder gasoline engine, but it is only used to charge the electric-drive battery when it is running low or to power the vehicle when the electric motor is exceptionally short of torque. As the engine is only used as an auxiliary drive, only fifth and sixth gears are connected in a six-speed transmission. With a driving range estimated at 800km, we expect this model to attract interest as a new type of PHEV that is trying to leverage the advantages of an electric vehicle.

Company Focus

- Company Update
- Target Price Change
- Estimate Change

Neutral	**2**
Price (20 Jun 12)	¥105
Target price	¥110
from ¥160	
Expected share price return	4.8%
Expected dividend yield	0.0%
Expected total return	**4.8%**
Market Cap	¥313,863M
	US$3,947M

Price Performance
(RIC: 7261.T, BB: 7261 JP)

Mazda Motor (7261)

About a year needed for full Skyactiv benefits

- **Reiterating Neutral** — We think it will take a year for Skyactiv benefits to emerge. Until then the most likely factors to boost the share price would be yen weakness or other external factors. Our target price for Mazda is ¥110 (previously ¥160), which we base on our FY3/13 simplified CFPS estimate of ¥23.8 and a PCFR of 4.5x, the average of the lows over five past years.

- **Earnings forecasts** — Assuming ¥80/$ and ¥100/€, we model OP of ¥27bn in FY3/13, ¥71bn in FY3/14, and ¥105bn in FY3/15. The OP record is ¥162.1bn in FY3/08, and while we see earnings versus the peak rising from 17% in FY3/13 to 44% in FY3/14 and 65% in FY3/15, we do not expect to see record profits any time soon. Mazda is highly impacted by forex, with a ¥1/$ change resulting producing a ¥3.5bn OP swing and a ¥1/€ change producing a ¥1.2bn swing.

- **Investment points** — Mazda's share price has fallen to about ¥100 (FY3/13E PBR of 0.6x) due to yen appreciation, and right now there are few Mazda-specific factors that suggest a rebound. If more cars are fully equipped with Skyactiv, then earnings could continue to recover, but in FY3/13 the Skyactiv contribution will be small, with most coming from the CX-5. The real contribution should start in FY3/14 H2. The story of earnings improvement driven by Skyactiv is in place, but for now we think it better to sit on the sidelines for a while.

- **Skyactiv benefits** — In FY3/13 Mazda is looking for a Skyactiv ratio of about 20%. The Mazda6 with Skyactiv is scheduled for launch at end-2012, with the Skyactiv version of the Mazda3 (Mazda's best-selling car) set for launch in the spring of 2013. This should mean a huge improvement in profits in FY3/14 H2, when we expect the Skyactiv ratio to hit about 50%, even with forex rates of ¥80/$ and ¥100/€. Also, the new Mexico plant is scheduled to come on-line in 2014, and this should accelerate the pace of the earnings recovery.

Consol.	Sales		OP			RP		NP		EPS	PE
	¥M	YOY (%)	¥M	YOY (%)	OPM(%)	¥M	YOY (%)	¥M	YOY (%)	¥	X
3/11A	2,325,689	7.5	23,835	152.0	1.0	36,862	693.8	-60,042	nm	-34	nm
3/12A	2,033,058	-12.6	-38,718	nm	nm	-36,817	nm	-107,733	nm	-58	nm
3/13CE	2,200,000	8.2	30,000	nm	1.4	15,000	nm	10,000	nm	3	31.3
3/13E	2,450,000	20.5	63,000	nm	2.6	63,500	nm	31,000	nm	10	10.1
3/13RE	2,250,000	10.7	27,000	nm	1.2	12,000	nm	8,000	nm	3	39.2
3/14E	2,680,000	9.4	104,000	65.1	3.9	107,500	69.3	62,000	100.0	21	5.1
3/14RE	2,410,000	7.1	71,000	163.0	2.9	65,000	441.7	34,000	325.0	11	9.2
3/15E	2,600,000	7.9	105,000	47.9	4.0	102,000	56.9	58,000	70.6	19	5.4

A: Actuals, E: Citi Research Ests, CE: Co. Ests, RE: Citi Research Revised Ests, CRE: Co. Revised Ests, NA: Not Available, NM: Not Meaningful

About a year before Skyactiv has an impact

Skyactiv to show true colors from FY3/14 H2, so we will need to wait around a year

Selling triggered by yen strengthening has dragged the share price down to around ¥100 (FY3/13E PBR of 0.6x), and at this time we see no Mazda-specific catalysts for a rebound. If good progress is made commercializing Skyactiv technologies we believe Mazda could be profitable at ¥80/$ and ¥100/€. However, the contribution in FY3/13, centering on the CX-5, will only be small, and we do not expect to see real momentum on this front until FY3/14 H2. While a Skyactiv-led earnings recovery is a compelling investment story, we think it best that investors keep their powder dry for now.

Figure 27. Mazda : Auto shipments and factors impacting OP

Automotive shipment

(,000)	FY3/11	FY3/12	FY3/13E	FY3/14E	FY3/15E
WW total	1,100.1	1,016.4	1,129.0	1,190.5	1,260.0
(yoy)	14.2%	-7.6%	11.1%	5.4%	5.8%
Japan	206.2	226.2	233.0	230.0	242.0
(yoy)	-5.8%	9.7%	3.0%	-1.3%	5.2%
North America	367.2	361.9	413.0	442.0	468.0
(yoy)	20.9%	-1.4%	14.1%	7.0%	5.9%
Europe	207.6	170.8	188.0	200.0	212.0
(yoy)	-8.7%	-17.7%	10.1%	6.4%	6.0%
Others	319.2	257.5	295.0	318.5	338.0
(yoy)	49.6%	-19.3%	14.6%	8.0%	6.1%

OP variance factors

(Ybn)	FY3/11	FY3/12	FY3/13E	FY3/14E	FY3/15E	FY3/13CE
Volume/Mix	35.7	-36.3	55.0	28.0	33.0	42.7
Change in costs	11.2	5.6	32.0	33.0	24.0	32.1
Selling expenditure	-5.6	-2.7	-6.0	-8.0	-9.0	-5.5
Forex	-43.7	-37.6	-11.5	0.0	0.0	3.2
Others	16.7	8.4	-3.8	-9.0	-14.0	-3.8
Total	14.3	-62.6	65.7	44.0	34.0	68.7

Source: Company data, Citi Investment Research and Analysis.

Target price to ¥110, maintaining Neutral

We lower forecasts to reflect such factors as new forex assumptions (¥80/$, ¥100/€)

We lower our earnings forecast to reflect the large impact of such factors as 1) new forex assumptions (¥80/$ and ¥100/€ versus ¥84/$ and ¥108/€ previously) and 2) higher sales promotion expenses in the US and other markets amid intensifying sales competition.

Assuming ¥80/$ and ¥100/€, we forecast FY3/13 OP of ¥27bn, FY3/14 OP of ¥71bn, and FY3/15 OP of ¥105bn. Mazda posted its record OP of ¥162.1bn in FY3/08, and while we expect OP to rise versus the peak to 17% in FY3/13, 44% in FY3/14, 65% in FY3/15, we cannot foresee it reaching a new record level.

We look for OP in Asia and other regions (those outside Japan, Europe, and North America) to expand from ¥10.1bn in FY3/12 to ¥16bn in FY3/13, ¥20bn in FY3/14, and ¥25bn in FY3/15. In North America, we forecast OP will improve from a ¥40.4bn loss in FY3/12, to an ¥8bn loss in FY3/13, a ¥13bn profit in FY3/14, and a ¥26bn profit in FY3/15. In Japan, which is carrying the burden of overseas businesses single-handed, we expect Mazda to recover from the ¥18.4bn loss suffered in FY3/12 as the ratio of Skyactiv model sales increases, and we forecast OP of ¥14bn in FY3/13, ¥31bn in FY3/14, and ¥45bn in FY3/15. In the near term, however, we think profit will depend heavily on parts cost reductions.

Mazda forecasts FY3/13 OP of ¥30bn, assuming ¥80/$ and ¥105/€. If the yen strengthens any further we believe this target will be challenging. OP sensitivity to the dollar is ¥3.5bn and to the euro it is ¥1.2bn (for every ¥1 fluctuation)

Lowering target price to ¥110

We derive our ¥110 target price (previously ¥160) by applying a PCFR of 4.5x (the average of the lows for FY3/05−FY3/12, excluding those for FY3/09, FY3/11, and FY3/12, which we view as outliers), to our simplified FY13/13 CFPS estimate of ¥23.8.

Our previous ¥160 target price was based on a PCFR of 4.5x, the average of the lows for five past years (FY3/05-FY3/11, excluding FY3/09 and FY3/11), and our previous simplified FY3/13 CFPS estimate of ¥34.5.

Mazda has a high export ratio of more than 70% and its earnings are thus significantly affected by currency movements. This is also reflected in share price trends, which makes the yen a major barrier to upside at its current level. Dilution accompanying the equity issue undertaken to strengthen the balance sheet has also hurt the share price. We think the only catalysts for gains would be rapid yen depreciation and an increase in the ratio of Skyactiv model sales. If there is no change in forex rates we would not expect earnings momentum to improve until FY3/14 and we thus remain Neutral on the shares for now.

Shares languishing on earnings deterioration caused by the strong yen and dilution

Public offering, etc., diluted share value by 40%

In March 2012, Mazda raised more than ¥200bn through a public offering and subordinated loans from its major banks. The capital increase boosted the equity ratio to 24.5% at end-FY3/12, but the number of outstanding shares increased to 2.99bn from 1.78bn, resulting in dilution of 40%. Dilution and earnings deterioration caused by the strong yen have been negative for the share price. Near-term, we think the only catalyst that could trigger a turnaround would be sudden drop in the yen or reports of Mazda entering into a capital alliance. But at this time there is no sign of either happening and we think it would be best to wait for evidence of Mazda hauling itself up by its own bootstraps.

Skyactiv technology could be differentiation point, but we do not expect it to become a force until mid-FY3/14

Skyactiv model ratio to rise in earnest in FY3/13

We expect Mazda's earnings to recover as the weighting of Skyactiv model sales increases. But it will be a little while before Skyactiv technology becomes a major part of Mazda's product line-up. Mazda has put Skyactiv technology in some models (the Demio released in 2011 had a Skyactiv gasoline engine, and the CX-5 released in spring 2012 had the full complement of Skyactiv features), but they only accounted for around 20% of sales in FY3/12. Plans call for Skyactiv to be used in the Mazda6, scheduled for release at the end of 2012, and the Mazda3 (full Skyactiv model), the biggest volume model, to be released in spring 2013. This should result in the ratio of Skyactiv sales increasing to 50% in FY3/14 H2. As Mazda has made significant progress reducing costs, we estimate a Skyactiv ratio of around 50% would result in profits even at forex rates of ¥80/$ and ¥100/€. Also, a new plant in Mexico will come on-stream in 2014. The plant will make the Mazda2, and given the deterioration in margins on Mazda2 exports from Japan, we expect this development to improve earnings.

Taking conventional gasoline and diesel engine performance to the ultimate level is key

Skyactiv is a blanket term for innovative new-generation technology based on Mazda's long-term vision for technology development, known as Sustainable Zoom-Zoom. This vision is to provide customers with cars that are both fun to drive and offer superior environmental and safety performance.

There are six main Skyactiv technologies: 1) Skyactiv-G, a new generation highly-efficient direct-injection gasoline engine that achieves the world's highest gasoline engine compression ratio of 14.0:1; 2) Skyactiv-D, a clean and highly-efficient diesel

engine that has the world's lowest diesel-engine compression ratio of 14.0:1; 3) Skyactiv-Drive, a new-generation highly-efficient automatic transmission that features the best attributes of all transmission types; 4) Skyactiv MT, a new-generation manual transmission with a light shift feel, compact size and significantly reduced weight; 5) Skyactiv-Body, a new generation lightweight body with high rigidity that meets the highest-level crash safety standards; and 6) Skyactiv-Chassis, a new-generation high-performance lightweight chassis that achieves a balance between sure handling and improved comfort.

Skyactiv engines use a new combustion process developed independently by Mazda and we think it will be difficult for rivals to bridge the gap in the near term. The key is combustion performance, which has been improved to an extreme level compared with existing gasoline and diesel engines. Looking at the next 10 years, we do not expect the importance of conventional gasoline and diesel engines to be diminished. Indeed, we think conventional engine performance will become even more crucial.

Skyactiv debuted in the new Demio

The Mazda Demio was the first model to be fitted with a Skyactiv-G, a new-generation direct-injection gasoline engine that achieves a significant improvement in fuel efficiency by having the world's highest gasoline engine compression ratio of 14.0:1. The Demio, which went on sale in Japan in the first half of 2011, can achieve 30km/l (10-15 mode) without the assistance of an electric motor, giving it a significant edge over competing models.

Was the full-complement Skyactiv CX-5 a turning point for Mazda brand value?

If Mazda releases models made on a new platform and fitted with new engines and transmissions from 2012, this would significantly improve the fuel efficiency of its line-up and should strengthen its brand power, which has been one of its weaknesses. The renewal of platforms and under-bodies and release of models with completely new engines and transmissions is an event that only happens once in perhaps a dozen years and as such we believe new models should have a large impact on Mazda's earnings. The CX-5 was the first step into a new era for Mazda, and we hope to see bold designs for the new Mazda6 and the Mazda3, its biggest selling model and one on which the company's fate hinges.

Installation of regenerative breaking system the next step

The next step for Skyactiv will be to further improve fuel efficiency by installing a regenerative braking system in a model that has had technologies governing core performance thoroughly overhauled. Also, Mazda will adopt a "building block" strategy for hybrid systems and other electric devices, gradually introducing new technologies through 2015. Skyactiv will incorporate all technologies developed in line with this strategy, and we think it is one that will drastically change Mazda's earnings structure.

Company Focus

- Company Update
- Target Price Change
- Estimate Change

Buy	**1**
Price (20 Jun 12)	¥1,352
Target price	¥1,730
from ¥1,770	
Expected share price return	28.0%
Expected dividend yield	3.7%
Expected total return	**31.7%**
Market Cap	¥576,107M
	US$7,245M

Price Performance
(RIC: 7262.T, BB: 7262 JP)

Daihatsu Motor (7262)

Reiterating Buy, but keeping an eye on Indonesia sales

- **Reiterating Buy** — We forecast record profits in FY3/13, but the key question is whether demand slows in Indonesia. In our view, the situation in Indonesia should be clear by autumn or thereabouts. Our target price for Daihatsu is ¥1,730 (previously ¥1,770), which is based on our FY3/13 simplified CFPS estimate of ¥321.5 and a PCFR of 5.4x, the high-low average over the past eight years.

- **Earnings forecasts** — Assuming ¥80/$ and ¥100/€, we forecast OP of ¥128bn for FY3/13, ¥133bn for FY3/14, and ¥148bn for FY3/15. Daihatsu posted record OP of ¥115.5bn in FY3/12, and we think it will continue to post new records moving forward.

- **Investment points** — Indonesia plans to implement stricter auto loan standards from June 2012, with the down payment rising to 30% or more for bank loans and 25% or more for loans from financing companies. In the past a down payment of 15%-25% was common, so there is concern consumers could refrain from purchases after the standards are enacted. It is unclear right now how much of a negative impact this will have on Daihatsu sales, so this is something to keep an eye on.

- **e:S technology a weapon for Daihatsu** — In the future Daihatsu intends to adopt its lighter low-cost platform for use in new models as well, so we believe Daihatsu will remain at the top of the pack in fuel economy. Gas prices are rising in Asia, and we expect demand for low-priced cars with high fuel efficiency will expand significantly. Daihatsu is likely to maintain its advantage in this area in Indonesia and Malaysia. We also believe Daihatsu could have the chance to produce ultra-cheap cars in other developing markets.

Consol.	Sales		OP			RP		NP		EPS	PE
	¥M	YOY (%)	¥M	YOY (%)	OPM(%)	¥M	YOY (%)	¥M	YOY (%)	¥	X
3/11A	1,559,412	-1.0	103,443	153.9	6.6	112,215	156.0	52,556	148.3	123	11.0
3/12A	1,631,320	4.6	115,462	11.6	7.1	128,223	14.3	65,139	23.9	153	8.8
3/13CE	1,670,000	2.4	120,000	3.9	7.2	130,000	1.4	70,000	7.5	164	8.2
3/13E	1,710,000	4.8	109,000	-5.6	6.4	115,000	-10.3	60,000	-7.9	141	9.6
3/13RE	1,700,000	4.2	128,000	10.9	7.5	138,000	7.6	75,000	15.1	176	7.7
3/14E	1,820,000	6.4	122,000	11.9	6.7	129,000	12.2	68,000	13.3	160	8.5
3/14RE	1,760,000	3.5	133,000	3.9	7.6	144,000	4.3	77,000	2.7	181	7.5
3/15E	1,885,000	7.1	148,000	11.3	7.9	160,000	11.1	85,000	10.4	199	6.8

A: Actuals, E: Citi Research Ests, CE: Co. Ests, RE: Citi Research Revised Ests, CRE: Co. Revised Ests, NA: Not Available, NM: Not Meaningful

Earnings strong, but Indonesia concerns could weigh on the shares

We reiterate our Buy rating, but think it important to nail down trends in Indonesia, which should be clear this autumn

Daihatsu was the only Japanese automaker to post record profits in FY3/12, and we believe it will continue to beat this record moving forward. However, the shares have fallen since hitting a record of ¥1,622 in February 2012, on assumptions that good news had been priced in. Usually it would not be surprising to see the shares start to rise again on expectations for strong earnings in FY3/13, but there are concerns that stricter regulations set to come into effect in June on auto loan down payments in Indonesia, which accounts for 30% of Daihatsu earnings, could slow auto demand there. This has kept Daihatsu's share price soft. We believe a slowdown in auto demand in Indonesia will last for about six months, so while it could weigh on the shares near term we reiterate our Buy from a long-term view. We believe it should be clear by autumn or thereabout what is happening in Indonesia.

Figure 28. Daihatsu : Consolidated sales volume, factors impacting OP

Consolidated sales volume

(,000)	FY3/11	FY3/12	FY3/13E	FY3/14E	FY3/15E
Daihatsu brand	893.0	940.0	1,005.8	1,064.8	1,155.8
(yoy)	2.8%	5.3%	7.0%	5.9%	8.5%
1) Domestic	527.0	563.0	583.9	589.3	639.9
(yoy)	-7.1%	7.3%	3.9%	0.9%	8.6%
2) Overseas	366.0	377.0	421.8	475.5	515.9
(yoy)	21.7%	3.0%	11.9%	12.7%	8.5%
Consignments/OEMs	389.1	461.7	484.0	495.0	515.0
(yoy)	-4.1%	18.7%	4.8%	2.3%	4.0%
1) Domestic	186.3	235.2	242.0	235.0	240.0
(yoy)	-24.9%	26.2%	2.9%	-2.9%	2.1%
2) Overseas	202.8	226.5	242.0	260.0	275.0
(yoy)	28.6%	11.7%	6.8%	7.4%	5.8%

OP variance factors

(Ybn)	FY3/11	FY3/12	FY3/13E	FY3/14E	FY3/15E	FY3/13CE
Volume & Mix	22.4	23.7	20.0	16.9	29.0	18.0
Cost reduction	15.0	7.8	5.6	10.0	11.0	3.5
Change in Expenses	31.3	-15.6	-13.5	-22.0	-25.0	-16.9
Forex	-1.7	-3.9	0.5	0.0	0.0	0.0
Others	-4.3	0.0	0.0	0.0	0.0	0.0
Total	62.7	12.0	12.6	4.9	15.0	4.6

Source: Company data, Citi Investment Research and Analysis.

New ¥1,730 target price, reiterating Buy

Daihatsu likely to post record earnings in FY3/13 and beyond

Daihatsu has low export exposure and has withdrawn from Europe, so it sees less impact than other automakers from yen strength versus the dollar and euro. We revise our forex assumptions (from ¥84/$ and ¥108/€ to ¥80/$ and ¥100/€), but we raise our profit forecasts as we expect greater sales volume and further CoGS cuts.

Assuming ¥80/$ and ¥100/€, we forecast OP of ¥128bn for FY3/13, ¥133bn for FY3/14, and ¥148bn for FY3/15. Daihatsu posted record OP of ¥115.5bn in FY3/12, and we think it will continue to post new records moving forward.

For the overseas segment (which focuses on Indonesia and Malaysia), OP was ¥39.7bn in FY3/12, and we model ¥37bn in FY3/13, ¥44bn in FY3/14, and ¥51bn in FY3/15. While we anticipate a profit decline in FY3/13 we look for steady growth thereafter. In Japan, where Daihatsu has deployed its e:S technology, OP was ¥75.8bn in FY3/12, and we model ¥91bn in FY3/13, ¥89bn in FY31/4, and ¥97bn in FY3/15. Although we look for a decline in FY3/14 as the eco-car subsidy benefit drops out, we believe profits will remain high, bolstered by solid demand for minivehicles.

Daihatsu assumes ¥80/$ and ¥100/€ and forecasts FY3/13 OP of ¥120bn, but we feel this forecast is somewhat conservative.

Our new target price is ¥1,730

Our target price for Daihatsu is ¥1,730 (previously ¥1,770), which is based on our FY3/13 simplified CFPS estimate of ¥321.5 and a PCFR of 5.4x, the average of the PCFR highs and lows over the eight years between FY3/05 and FY3/12.

Our previous target price of ¥1,770 was based on our previous FY3/13 simplified CFPS estimate of ¥265.2 and a PCFR of 6.7x, the absolute high over the eight years between FY3/04 and FY3/11.

We switch to the average of the highs and the lows from the absolute high in our target valuation because despite strong earnings we believe auto demand in Indonesia will slow due to new financing rules to be enacted in Indonesia in June. This, we believe, could be negative for earnings and the share price.

Biggest weapon is fuel-efficient, low-cost e:S technology, and we expect Daihatsu to deploy this in developing markets as well

The advantage is low-cost horizontal development

Daihatsu is using its e:S technology in a number of minivehicles. The next-generation e:S technology, which has succeeded in significantly raising fuel efficiency, features a highly competitive powertrain, including a Daihatsu-developed KF engine and CVT, as well as a next-generation idle-stop device that turns off the car's engine when its speed falls below 7km/h. It is important to note that the next-generation platform adopted by the Mira e:S, the first model to use this technology, resulted in a lighter car and significant cost savings, which offset the increase in costs from adopting a new technology. Also, horizontal development of this technology into existing models is relatively easy, so it has been adopted in the mainstay Move and Tanto models as well.

The Mira e:S was launched in November 2011, and its fuel economy of 30.2km/l (in JC08 mode) beats the Honda Fit hybrid (26.0km/l) and is close to the new Toyota Prius (32.6km/l). The Move with e:S technology gets 27.0km/l and the Tanto with e:S technology gets 24.8km/l, both top of their class. Fuel efficiency in models that use this technology is more than 20% better than fuel efficiency in those that do not.

We look for deployment in Asia as well, where gas prices are rising

Daihatsu plans to adopt its lighter low-cost platform for new models as well, and so we believe it will remain in the top class globally in fuel efficiency. With gas prices rising in Asia, we believe demand for low-cost cars with impressive fuel efficiency will increase sharply, and we think Daihatsu will retain its advantages in this area in Indonesia and Malaysia. Daihatsu has not made significant moves into Asian nations other than these two. Its parent, Toyota, has begun producing low-priced cars in developing markets, but Toyota lacks the know-how to produce ultra-cheap models, and we think Daihatsu will likely get the chance to do so. We believe these models would leverage Daihatsu's low-cost production technology and its highly fuel-efficient technology.

Doing well in Japan, too

Suzuki is battling Daihatsu for the top spot in fuel economy using the same kinds of technology. However, Daihatsu benefits from scale due to its minivehicle OEM operations for Fuji Heavy, which has stopped building minivehicles. Moreover, Daihatsu is taking share from companies like MMC, which is unable to launch new minivehicle models until mid-2013. In registered vehicles, hybrid sales are strong, but owing to their low ownership taxes minivehicles are tremendously popular in regional areas where almost adults need to have a car. We look for demand to continue shifting from registered vehicles to minivehicles in these areas going forward. The eco-car subsidy is scheduled to end in August, and there is concern demand could decline thereafter, but Daihatsu plans to launch new models with full e:S technology, so we see no reason for excessive pessimism.

Need to keep an eye on trends in Indonesia

Higher downpayment requirements for auto loans in Indonesia could be a negative

The primary earnings drivers for Daihatsu are Japan and Asia. The policy rate in Indonesia is at its lowest-ever level of 5.75%, and in the medium term this is likely to be a positive for Daihatsu. However, it looks as if the auto market in Indonesia will slow in the latter half of 2012, with observers increasingly coming to the conclusion that full-year sales will be 900,000-950,000 units. The biggest factor in the expected slowdown is the stricter auto loan regulations that are expected to be implemented in June 2012. Indonesia intends to do this to lower the risk of a rise in NPLs from increased auto financing. From June, the down payment for auto loans from banks is expected to be hiked to 30% or more, with the down payment for loans from financing companies lifted to 25% or more. In the past, down payments were generally 15%-25%, so there are concerns that the implementation of these stricter regulations could cause consumers to refrain from making purchases. It is unclear what level of negative impact this could have on Daihatsu sales, so it is possible that this issue could weigh on the shares. We think demand will pick up again after about six months, but we suggest monitoring trends in Indonesia as it remains uncertain what effect the new regulations will have.

Higher gas prices could work to the advantage of Daihatsu, with its ability to produce cars with high fuel efficiency at low cost

Gas prices are on the rise in Indonesia as well. The government is no longer able to offset the rise in gas prices, resulting in supply restrictions for subsidized gasoline. Although Indonesia had been moving forward with plans to raise the price on government-subsidized gas (premium) to IDR6,000 from IDR4,500, this was postponed just prior to implementation because of massive opposition from the Indonesian public. However, there is talk that Indonesia may look to limit supply of subsidized gas, beginning in urban areas, and some kind of action is likely. In the short term this could be negative for auto demand, but if Daihatsu deploys e:S technology in Indonesia as well it could be a major step toward cementing its competitive advantage there.

Daihatsu plans to start up its No. 2 plant currently under construction in Karawang, and we think this could produce cars that sport e:S technology. This would likely be positive for Daihatsu shares, but we feel they will begin to price this in from autumn.

Company Focus

Honda Motor (7267)

Sales growth from next-generation models to pave the way to record earnings

- Company Update
- Rating Change
- Target Price Change
- Estimate Change

Buy	**1**
from Neutral	
Price (20 Jun 12)	¥2,576
Target price	¥3,350
from ¥3,530	
Expected share price return	30.0%
Expected dividend yield	3.0%
Expected total return	**33.0%**
Market Cap	¥4,642,724M
	US$58,388M

Price Performance
(RIC: 7267.T, BB: 7267 JP)

- **Upgrading to Buy** — We now see an opportunity to buy, so as to capture the earnings recovery in FY3/13 and out, with undervaluation having emerged as the shares have overshot on the downside. We trim our target price to ¥3,350 from ¥3,530. We derive our target price from our FY3/13 simplified CFPS forecast of ¥438.3 and a PCFR of 7.6x, the average of the lows and the highs over the past eight years.

- **Earnings forecasts** — We model FY3/13 OP of ¥670bn, FY3/14 OP of ¥780bn, and FY3/15 OP of ¥940bn, assuming ¥80/$ and ¥100/€. The OP record came in FY3/08 at ¥953.1bn and we see steady progress (70% in FY3/13, 82% in FY3/14, and 99% in FY3/15) in returning to the record level, with Honda nearly reaching it in FY3/15. For FY3/13, Honda assumes ¥80/$ and ¥105/€ and forecasts OP of ¥620bn.

- **Investment points** — At the Tokyo Motor Show briefing in autumn last year, President Takanobu Ito declared that Honda would win back its position at the top of the rankings for fuel efficiency in all segments over the coming three years. Honda plans to commercialize six next-generation engines (one for minivehicles, and 1.5l, 1.8l, 2.4l, 3.5l, and 1.6l diesel ones) and three types of CVTs (minivehicle, compact, and mid-size) and enhance its competitiveness in new vehicles. We expect to see new model benefits from the launch of models with new engines and think the earnings uptrend will continue.

- **A minivehicle production and development revolution** — The N BOX, a new minivehicle, production of which has begun at Honda's own Suzuka plant—the first time the Suzuka plant has been used for minivehicle production in quite a while—comes with the new S07A engine mated to a CVT, and has improved fuel economy. The body-in-white (i.e., the monocoque) is 10% lighter than it would have been with traditional processes and Honda has also introduced new production technologies that enable it to cut costs. We expect the fruits of the design and production revolution to be applied in the Mexico Fit plant and elsewhere.

Consol.	Sales		OP			Pretax Profit		NP		EPS	PE
	¥M	YOY (%)	¥M	YOY (%)	OPM(%)	¥M	YOY (%)	¥M	YOY (%)	¥	X
3/11A	8,936,867	4.2	569,775	56.6	6.4	630,548	87.6	534,088	99.0	296	8.7
3/12A	7,948,095	-11.1	231,364	-59.4	2.9	257,403	-59.2	211,482	-60.4	117	22.0
3/13CE	10,300,000	29.6	620,000	168.0	6.0	635,000	146.7	470,000	122.2	261	9.9
3/13E	10,150,000	27.7	690,000	198.2	6.8	714,000	177.4	536,000	153.4	297	8.7
3/13RE	10,020,000	26.1	670,000	189.6	6.7	692,000	168.8	505,000	138.8	280	9.2
3/14E	10,900,000	7.4	840,000	21.7	7.7	867,000	21.4	660,000	23.1	366	7.0
3/14RE	10,720,000	7.0	780,000	16.4	7.3	805,000	16.3	600,000	18.8	333	7.7
3/15E	11,710,000	9.2	940,000	20.5	8.0	968,000	20.2	723,000	20.5	401	6.4

A: Actuals, E: Citi Research Ests, CE: Co. Ests, RE: Citi Research Revised Ests, CRE: Co. Revised Ests, NA: Not Available, NM: Not Meaningful

Sales growth from next-generation models to pave the way to record earnings

Shares set to gain as Honda's earnings recover

In FY3/13, we see sales volumes surging in Asia and elsewhere, as Honda picks itself up after the Thai floods. In the US, the CR-V is doing well and Honda will debut the new Accord, which comes with a next-generation powertrain, so we see volumes there surging. If President Takanobu Ito, who has vowed to recover Honda's number one position in fuel economy, can deliver on his words, then Honda's future should be bright. We recommend buying into Honda to capture the earnings recovery, which we see being driven by global sales expansion on the launch of next-generation models.

Figure 29. Honda : Auto/motorcycle shipment volume and factors impacting OP

Automotive shipment

(,000)	FY3/11	FY3/12	FY3/13E	FY3/14E	FY3/15E
WW total	3,512	3,137	4,035	4,300	4,690
(yoy)	3.5%	-10.7%	28.6%	6.6%	9.1%
Japan	582	580	665	615	660
(yoy)	-9.9%	-0.3%	14.7%	-7.5%	7.3%
North America	1,458	1,323	1,740	1,830	1,920
(yoy)	12.4%	-9.3%	31.5%	5.2%	4.9%
Europe	198	158	150	155	160
(yoy)	-20.5%	-20.2%	-5.1%	3.3%	3.2%
Asia	1,008	874	1,200	1,400	1,630
(yoy)	6.1%	-13.3%	37.3%	16.7%	16.4%
Others	266	202	280	300	320
(yoy)	6.4%	-24.1%	38.6%	7.1%	6.7%

Motorcycle shipment

(,000)	FY3/11	FY3/12	FY3/13E	FY3/14E	FY3/15E
WW total	11,445	12,559	13,511	15,400	17,624
(yoy)	18.7%	9.7%	7.6%	14.0%	14.4%
Japan	190	220	220	220	220
(yoy)	0.0%	15.8%	0.0%	0.0%	0.0%
North America	185	200	207	215	223
(yoy)	-2.1%	8.1%	3.5%	3.9%	3.7%
Europe	202	198	184	185	191
(yoy)	1.5%	-2.0%	-7.1%	0.5%	3.2%
Asia	9,178	9,910	10,820	12,490	14,530
(yoy)	20.3%	8.0%	9.2%	15.4%	16.3%
Others	1,690	2,031	2,080	2,290	2,460
(yoy)	17.9%	20.2%	2.4%	10.1%	7.4%

OP variance factors

(Ybn)	FY3/11	FY3/12	FY3/13E	FY3/14E	FY3/15E	FY3/13CE
Volume/Mix	322.2	-155.1	446.6	160.1	220.0	476.8
Cost reduction	153.3	-92.8	197.0	55.0	60.0	152.0
Change in SG&A	-62.0	55.7	-160.0	-60.0	-80.0	-205.0
R&D	-24.2	-32.2	-35.2	-45.0	-40.0	-35.2
Forex	-137.6	-114.0	-9.8	0.0	0.0	0.0
Others	-45.7	0.0	0.0	0.0	0.0	0.0
Total	206.0	-338.4	438.6	110.1	160.0	388.6

Source: Company data, Citi Investment Research and Analysis.

New target price of ¥3,350, upgrading to Buy

We revise down our forecasts, assuming ¥80/$ and ¥100/€

We revise our forex assumptions (to ¥80/$ from ¥84/$ and to ¥100/€ from ¥108/€), which is a negative; while big hikes in our sales volume assumptions are a positive, we revise down our forecasts.

Based on our new forex assumptions of ¥80/$ and ¥100/€, we model FY3/13 OP of ¥670bn, FY3/14 OP of ¥780bn, and FY3/15 OP of ¥940bn, assuming ¥80/$ and ¥100/€. The OP record came in FY3/08 at ¥953.1bn and we see steady progress (70% in FY3/13, 82% in FY3/14, and 99% in FY3/15) in returning to the record level, with Honda nearly reaching it in FY3/15.

By region, we model OP in Asia of ¥160bn in FY3/13, rising to ¥205bn in FY3/14 and ¥260bn in FY3/15, versus ¥76.9bn in FY3/12, as Honda recovers from the Thai floods in FY3/13 and earnings then steadily expand to come to account for c30% of the total. For North America, the key earnings fount, we model FY3/13 OP of ¥380bn, FY3/14 OP of ¥425bn, and FY3/15 OP of ¥480bn, up from ¥223.3bn in FY3/12, as we expect Honda to revive thanks to increased competitiveness stemming from next-generation models, starting with the new Accord.

By business segment, we forecast a revival in autos starting in FY3/13, with OP of ¥356bn, followed by ¥456bn in FY3/14 and ¥603bn in FY3/15, versus an operating loss of ¥77.2bn in FY3/12. In motorcycles, we forecast OP of ¥137bn in FY3/13, ¥144bn in FY3/14, and ¥152bn in FY3/15, versus ¥142.6bn in FY3/12. We see Honda offsetting the negative of Indonesia with India in FY3/13 and we anticipate steady growth in FY3/14 and out. For financial services, we forecast FY3/13 OP of ¥182bn, FY3/14 OP of ¥185bn, and FY3/15 OP of ¥195bn, versus FY3/12 OP of ¥170.0bn, with the segment producing steady earnings despite the decline in margins we anticipate.

Honda assumes ¥80/$ and ¥105/€ and puts FY3/13 OP at ¥620bn (operating margin of 6.0%), but we feel it is being slightly conservative. OP sensitivity is ¥17bn for the dollar and ¥1bn for the euro and GBP combined.

New target price of ¥3,350

We derive our ¥3,350 target price (previously ¥3,530) from our FY3/13 simplified CFPS forecast of ¥438.3 and a PCFR of 7.6x, the average of the lows and the highs for FY3/05-FY3/12.

We previously set our ¥3,530 target price using our FY3/13 simplified CFPS forecast of ¥480.5 and a PCFR of 7.4x, the average of the highs and the lows for the seven years, FY3/05-FY3/11.

Earnings recovery expectations emerged in February, as hopes of a US economic recovery gained ground, risk money returned to the equity market thanks to the "excess liquidity market", and the yen weakened, so Honda shares reached ¥3,300 for the first time in a year in March. However, they fell back to the ¥2,300-¥2,400 range in early June on subsequent yen strength and fears of demand deterioration in Indonesia because of the automotive finance down payment issue. We now see an opportunity to buy, so as to capture the earnings recovery in FY3/13 and out, with undervaluation having emerged as the shares have overshot on the downside.

Sales volume growth to drive earnings up

Sales volumes to surge, in part on reaction to 2011

The key point is the surge in sales volume, in reaction to 2011 and the launch of new vehicles. Our retail sales assumptions for FY3/13 are 690,000 in Japan (14.9% up YoY), 1.733mn in North America (up 30.5%), 238,000 in Europe (up 9.2%), and 1.064mn in the major Asian markets (up 32.9%). Honda targets 730,000 in Japan, 1.7mn in North America, and 290,000 in Europe, but we are more bearish than Honda on Japan and Europe. There are no company forecast numbers for Asia but sales in flood-hit Thailand were very low in 2011, so we believe Honda is budgeting for substantial growth.

The impact of yen strength is lingering but we anticipate earnings growth from higher sales volumes and a big contribution from cost-cutting benefits. In emerging markets, for the near term we see capex growth on beefed up production capacity and more new vehicle launches continuing, and R&D costs rising on the commercialization of new technologies, but we expect the earnings uptrend to continue on launches of new models fitted with new engines.

Can Honda win back the fuel efficiency crown? New Accord to be the first litmus test

New vehicles with next-generation engines to set the course of Honda's future

The proclamation by President Takanobu Ito at the Tokyo Motor Show briefing in autumn last year that Honda would win back its position at the top of the rankings for fuel efficiency in all segments over the coming three years is probably seared into investors' memories. To regain the fuel economy crown, Honda plans to commercialize six next-generation engines (one for minivehicles, and 1.5l, 1.8l, 2.4l, 3.5l, and 1.6l diesel ones) and three types of CVTs (minivehicle, compact, and mid-size) and enhance its competitiveness in new vehicles.

The new Nissan Altima is best-in-class with 38mpg—what about the new Accord?

The new Accord, which is due to be launched in the second half of this year, is slated to come with a next-generation engine and a next-generation CVT. The biggest focal point is how good will its fuel economy be, as the Accord is a banner vehicle that supports the House of Honda. In highway mode, the Toyota Camry, which underwent a complete overhaul last year, gets 35mpg, as does the Hyundai Sonata, while the Nissan Altima, launched in June, gets a much better 38mpg. We think it will be hard for the Accord to beat the Altima in highway mode but we think it will beat the Camry and the Sonata. We see the results of the battle in this class as

being a litmus test that will help determine the next-generation technical abilities of Honda.

The N BOX minivehicle, which gets 22.2km/l in JC08 mode, is behind the Daihatsu Tanto, which comes with e:S technologies and which gets 24.8km/l, in fuel miserliness, and was not able to seize the economy crown. However, sales have been good, as people like the roominess of the cabin and other aspects of its performance. To rack up good sales it is not necessarily essential to be number one in fuel efficiency but we think many investors hope to see Honda with vehicles that sell explosively around the world, appealing to consumers with their overwhelming technical superiority, just as Honda did in the past. While naturally Honda's new models offer improved fuel efficiency over the models they replace, Honda's fuel efficiency performance is no longer mold-breaking, as other firms have been improving fuel efficiency by much more than Honda had been expecting. This makes Honda look like just another automaker and we believe the shares are likely to react negatively, so we caution Honda not to rest on its laurels and hope to see it show its true colors.

Manufacturing revolution starts with N BOX

Honda has made the N BOX lighter thanks to a new production format

Production of the N BOX, a new minivehicle, has begun at Honda's own Suzuka plant—the first time the Suzuka plant has been used for minivehicle production in quite a while. Fuel economy has been improved with the new S07A engine and a CVT and also through lightweighting the body. The body in white (i.e., the monocoque) is 10% lighter than it would have been with traditional processes and Honda has also introduced new production technologies that enable it to cut costs.

To lighten the body, Honda has used steel sheet formed at different pressures, which has different thicknesses and tensile strengths, for the exterior side panels, which are large press components. The upper half is 0.65mm thick and has a tensile strength of c270MPa, while the lower half is 1.6mm thick and has a tensile strength of 590MPa.

Honda has also changed the welding order for the body panels, with the monocoque formed by initially welding only the inner panels with a multiple welding machine and then attaching the outer panels to the inner ones with a spot welding machine. Through this the vehicle can be made lighter by getting rid of reinforcement materials and bolts, and by switching to spot welding from metal inert gas (MIG) welding Honda has cut costs. Previously there were subassembly processes for the roof and side panels, but now the inner and outer are combined and the monocoque formed from one panel, so there is no need to bolt on reinforcement materials or to fix in place with MIG welding.

New production technologies established at Suzuka to be taken to Mexico and elsewhere

Honda is working to effect new development and production revolutions in minivehicles. It has put together development and procurement teams at the Suzuka plant and is amassing expertise in next-generation, low-cost vehicle production. It intends to apply the results to production not just in developed markets but also in emerging markets. We expect to see minivehicles serve not just in Japan but also in emerging markets as entry-level cars and see the fruits of the development and production revolution being applied at the Mexico Fit plant, which is under construction. Having further improved cost-competitiveness in compacts, Honda's fight-back is poised to begin.

In motorcycles, India sales are strong and we see Honda offsetting stagnant demand in Indonesia due to the down payment issue

Expanding India production capacity to 4mn units

Having parted ways with Hero Moto, Honda is rapidly expanding its Indian capacity. It had capacity for 1mn units at the No. 1 plant, in Gurgaon, Haryana, and is adding 1.2mn units to its current 600,000 units of capacity at the No. 2 plant, in Alwar, Rajasthan. The No. 3 plant, in Bangalore, Karnataka, will commence operations with 1.2mn units of capacity in 2013. With this, production capacity will rise to 4mn units in 2013 from 1.6mn. The Indian motorcycle market has already broken the 10mn barrier and is heading for 20mn. We think that by launching models with enhanced fuel economy and aggressively expanding production capacity, India will make an earnings contribution soon.

Indonesian motorcycle demand set to recover in 2013 and Honda can cover the FY3/13 hiccup with profit growth in other markets

To obtain a loan for a motorcycle in Indonesia, customers will need to put down 20% or 25% of the cost as a down payment from June. We note the possibility that, as a result, motorcycle demand may slow and even contract for a while, but we forecast a recovery in demand in 2013 as the economy remains strong. The equity market sees the slowdown in motorcycles in Indonesia as a negative but we think Honda can offset this with recoveries in autos in the US and elsewhere. We thus see no need to get overly concerned about the impact on Honda of the Indonesia problem.

Company Focus

- Company Update
- Target Price Change
- Estimate Change

Buy	**1**
Price (20 Jun 12)	¥1,625
Target price	¥2,010
from ¥2,370	
Expected share price return	23.7%
Expected dividend yield	1.0%
Expected total return	**24.7%**
Market Cap	¥911,567M
	US$11,464M

Price Performance
(RIC: 7269.T, BB: 7269 JP)

Suzuki Motor (7269)

We like the sustained earnings growth despite aggressive capex

- **Maintaining Buy** — The shares have been stuck at a low level on concerns of demand declines in Europe and Indonesia but we see a buying opportunity in light of FY3/13 earnings, which should close in on the all-time high. We set our target price at ¥2,010, versus ¥2,370 before. We calculate our target price using our FY3/13 simplified CFPS forecast of ¥314.6 and the average of the high and the low PCFRs for the last nine years, 6.4x.

- **Earnings forecasts** — We model FY3/13 OP of ¥138bn, FY3/14 OP of ¥160bn, and FY3/15 OP of ¥185bn, on forex assumptions of ¥80/$ and ¥100/€. The previous earnings record was ¥149.4bn in FY3/08; we see Suzuki beating that in FY3/14, with earnings at 92% of the all-time high in FY3/13, 107% in FY3/14, and 124% in FY3/15. The company assumes ¥75/$ and ¥105/€ and targets FY3/12 OP of ¥120bn.

- **Investment points** — We expect yen strength to be a negative again in FY3/13 but foresee contributions from higher sales volume in India, where Suzuki has bolstered diesel engine production, and in Japan, where the company has cut sales promotion expenses on the launch of competitive new vehicles and improved its earnings power. Suzuki is engaged in large-scale capex in India and other emerging markets in preparation for demand growth, which is creating a capex burden and increasing R&D expenses, but we think it has the power to absorb this upfront investment burden and continue to grow earnings.

- **Two-cylinder diesel** — Suzuki is developing a two-cylinder diesel and it plans to use this to bolster its compact commercial vehicle lineup in India. Compact trucks in India are notorious for their vibration and noise so in this market the compact commercial vehicle with a two-cylinder diesel that Suzuki is developing could well be a huge hit, not least because it should be very fuel efficient. When opening up emerging markets, the early bird gets the worm, and the spotlight is on Suzuki's next step forward in India.

Consol.	Sales		OP			RP		NP		EPS	PE
	¥M	YOY (%)	¥M	YOY (%)	OPM(%)	¥M	YOY (%)	¥M	YOY (%)	¥	x
3/11A	2,608,217	5.6	106,934	34.7	4.1	122,502	30.5	45,176	56.2	74	21.9
3/12A	2,512,186	-3.7	119,305	11.6	4.7	130,554	6.6	53,888	19.3	88	18.4
3/13CE	2,600,000	3.5	120,000	0.6	4.6	135,000	3.4	70,000	29.9	125	13.0
3/13E	2,860,000	13.8	137,000	14.8	4.8	153,000	17.2	82,000	52.2	134	12.1
3/13RE	2,680,000	6.7	138,000	15.7	5.1	153,000	17.2	75,000	39.2	123	13.2
3/14E	3,070,000	7.3	150,000	9.5	4.9	168,000	9.8	90,000	9.8	147	11.0
3/14RE	2,910,000	8.6	160,000	15.9	5.5	176,000	15.0	85,000	13.3	139	11.7
3/15E	3,200,000	10.0	185,000	15.6	5.8	202,000	14.8	99,000	16.5	162	10.0

A: Actuals, E: Citi Research Ests, CE: Co. Ests, RE: Citi Research Revised Ests, CRE: Co. Revised Ests, NA: Not Available, NM: Not Meaningful

Investments to bolster profit structure in India point to record earnings potential

Lagging among Asia-related stocks

We consider Suzuki an Asia play, yet its share price performance compares poorly to truck makers Isuzu, Hino, and Daihatsu. We think this is because Suzuki's earnings guidance is normally conservative and the significant changes to the company's profit structure have not been sufficiently recognized by the market. India is Suzuki's lifeline, and the company is implementing committed strategies, including aggressively increasing local production, introducing cars created specifically for the market like the Ertiga, and stepping up marketing of small trucks with newly developed two-cylinder diesel engines. Suzuki's share price has languished due to concerns including the risk of declining demand in Europe and Indonesia, but given prospects for profit recovery to around record levels in FY3/13 on earnings growth in India and Japan, we see a buying opportunity.

Figure 30. Suzuki : Auto/motorcycle shipment volume, factors impacting OP

Automotive shipment

(,000)	FY3/11	FY3/12	FY3/13E	FY3/14E	FY3/15E
WW total	2,577	2,485	2,755	3,023	3,355
(yoy)	14.5%	-3.6%	10.8%	9.7%	11.0%
Japan	720	759	819	839	880
(yoy)	1.1%	5.4%	7.9%	2.4%	4.9%
Europe	265	242	230	243	257
(yoy)	-6.7%	-8.7%	-5.0%	5.7%	5.8%
North America	31	30	31	32	33
(yoy)	-20.5%	-3.2%	3.3%	3.2%	3.1%
Asia	1,433	1,339	1,546	1,764	2,025
(yoy)	28.5%	-6.6%	15.5%	14.1%	14.8%
Others	128	115	129	145	160
(yoy)	26.7%	-10.2%	11.7%	12.8%	10.3%

Motorcycle shipment

(,000)	FY3/11	FY3/12	FY3/13E	FY3/14E	FY3/15E
WW total	1,332	1,404	1,483	1,679	1,926
(yoy)	5.7%	5.4%	5.6%	13.2%	14.7%
Japan	75	72	75	75	75
(yoy)	-7.4%	-4.0%	4.2%	0.0%	0.0%
Europe	78	58	55	55	61
(yoy)	-17.0%	-25.6%	-5.2%	0.0%	10.9%
North America	28	54	61	65	70
(yoy)	-46.2%	92.9%	13.0%	6.6%	7.7%
Asia	1,065	1,126	1,187	1,368	1,592
(yoy)	15.9%	5.7%	5.4%	15.2%	16.4%
Others	86	94	105	116	128
(yoy)	-24.6%	9.3%	11.7%	10.5%	10.3%

OP variance factors

(Ybn)	FY3/11	FY3/12	FY3/13E	FY3/14E	FY3/15E	FY3/13CE
Volume/Mix	25.3	-54.2	52.7	53.0	63.0	32.7
Cost reduction	35.5	22.6	27.0	30.0	34.0	27.0
Change in costs	-13.0	43.2	-20.0	-35.0	-45.0	-15.0
R&D	4.7	-5.7	-5.2	-11.0	-12.0	-5.0
Depreciation	3.4	35.3	-13.9	-15.0	-15.0	-14.0
Forex	-28.3	-28.9	-21.8	0.0	0.0	-25.0
Total	27.6	12.3	18.8	22.0	25.0	0.7

Source: Company data, Citi Investment Research and Analysis.

Maintaining Buy, new target price of ¥2,010

Despite adjusting forex assumptions to ¥80/$ and ¥100/€, we raise our forecasts on expectations of higher sales volume in India and elsewhere

We adjust the forex assumptions underlying our earnings forecasts for Suzuki to ¥80/$ and ¥100/€ (from ¥80/$ and ¥105/€), which has a negative impact, but we also take into account higher expectations of sales volume growth in India and elsewhere as well as product mix improvements, and therefore raise our overall forecasts.

We now forecast OP of ¥138bn in FY3/13, ¥160bn in FY3/14, and ¥185bn in FY3/15. The record is ¥149.4bn (FY3/08), but with growth in earnings from Asia and Japan, we look for OP to reach 92% of the past peak and to set new records in FY3/14 (+7% over the previous high) and FY3/15 (+24%).

By region, we expect OP from Asia to rise from ¥31.6bn in FY3/12 to ¥51.1bn in FY3/13, ¥72.5bn in FY3/14, and ¥92.9bn in FY3/15, and to expand to reach 50% of overall OP. We expect OP from Japan to increase from ¥79.6bn in FY3/12 to ¥85.5bn in FY3/13, ¥86bn in FY3/14, and ¥89.6bn in FY3/15, with strong earnings supported by a firm undertone to demand for minivehicles.

Company guidance assumes exchange rates of ¥75/$ and ¥105/€ and call for FY3/13 OP of ¥120bn, but this strikes us as a conservative target given that it is roughly in line with the ¥119.3bn posted in FY3/12, when earnings were hit by the effects of the March 2011 earthquake in eastern Japan and a labor strike in India. Forex OP sensitivity is about ¥800mn for each ¥1 change in the yen/dollar rate and the same for each ¥1 change in the yen/euro rate.

New target price: ¥2,010

Our new target price for Suzuki is ¥2,010 (reduced from ¥2,370), which we derive using our FY3/13 simplified CFPS forecast of ¥314.6 and the 6.4x historical average of the high and low PCFR multiples over the last nine years (FY3/04–FY3/12).

We derived our previous target price by using our FY3/12 simplified CFPS forecast of ¥308.0 and the 7.7x historical average of the high PCFR multiples over eight years (FY3/04–FY3/11).

While revising our earnings forecasts, we also adjust our valuation multiple (from average high PCFR to the average of highs and lows) to take into account negatives including fears of progressive yen appreciation, potentially diminished expectations of growth in India, and reduced automobile and motorcycle demand in Indonesia due to increased down payments required for auto loans.

Big investment in the future in India and Japan

Growth in India and Japan probably sufficient to cover negative factors in Indonesia

Suzuki's FY3/12 earnings were negatively impacted by progressive yen appreciation, the reduced production in Japan and elsewhere due to the effects of the March 2011 earthquake, and lower sales in India resulting from labor action, but OP was still up 11.6% YoY. Yen strength will continue to have a negative effect in FY3/13, but we expect positive contributions from sales volume growth in India, where the company has beefed up diesel engine production, and increased sales in Japan, where the introduction of competitive new models and lower promotional spending is set to boost profitability. Substantial investments to pave the way for sales growth in India and other developing nations will increase the depreciation burden, and R&D spending on new models is set to rise, but we continue to think the company has sufficient capacity to absorb these negatives and achieve higher profits.

However, there is a good chance that increased down payment requirements for auto loans will have an impact on automobile and motorcycle demand in Indonesia, and this has negative implications for Suzuki. Still, we think this will be more than offset by brisk earnings in India and Japan.

India strategy advancing on production capacity growth and bolstered diesel offerings

Increases in India production contributing

In 2011, rising interest rates were a negative for the Indian auto market but in April the policy rate was lowered to 7.75%. The impact of rising gasoline prices has been substantial and there has been a shift to diesel vehicles from gasoline ones. Suzuki has been responding with expanded production capacity for diesel engines with technology licensed in from Fiat and with fully built diesel engines bought in from Fiat, thereby raising its diesel ratio. Also in 2011, Maruti Suzuki auto production and sales volumes fell due to labor conflicts at the Manesar plant but we anticipate a reactionary increase in FY3/13. We expect to see a big increase in volumes in FY3/13 on increased production of strong selling diesel vehicles, a full contribution from the Manesar No. 2 plant and the start of operations at the Manesar No. 3 plant.

Production capacity will hit 1.7mn units after the completion of the Manesar No. 3 plant; Suzuki building new plant in Gujarat with an eye to exports

Maruti Suzuki had aggregate annual capacity of 1.2mn units at the Gurgaon plant in Haryana, where production started in 1983, and at the Manesar plant, where production started in 2006. It added the Manesar No. 2 plant (annual production capacity of 250,000) in autumn 2011 and is pressing ahead with the construction of the No. 3 plant (250,000), where production is slated to begin in autumn 2012. When it is completed, Maruti Suzuki will have annual production capacity of 1.7mn units. However, it is nearly 30 years since the Gurgaon plant was built, and the buildings and the production facilities need to be revamped. Suzuki had been looking to build a new plant to beef up its Indian operations as well as revamping

the obsolete facilities. It decided to build a new auto plant in the western state of Gujarat in a bid to cut distribution costs when exporting overseas.

Hopes pinned on new seven-seat Ertiga

Suzuki started selling the Ertiga, which can seat seven in three rows, in April. In India, most vehicles with three rows of seats have engines of 2l or larger. However, the Ertiga comes with a 1.4l gasoline or 1.3l diesel engine, so fuel economy is good. It also features a roomy and comfortable interior. Suzuki's strategy is to capture demand in India, where families tend to be relatively large, by launching a model in a category that has not hitherto existed, namely a three seat-row compact of an affordable size with good fuel economy. The 1.4l gasoline model is the most affordable, at INR589,000, while the most expensive 1.3l diesel model comes in at INR845,000. Maruti Suzuki March sales amounted to 112,724 units (up 2.1% YoY), a record for a single month. In April the Ertiga sold 5,593 units, and overall sales were up 3.6% YoY for the fourth straight month of growth. May sales dipped 4% YoY, as gasoline prices surged and sales of the Alto and the Wagon R, which do not have diesel versions, shrank. However, with an increase in Ertiga sales the model mix improved and we see no need for great concern.

To commercialize two-cylinder diesel in compact truck in India

Suzuki is developing a two-cylinder diesel and plans to use it to beef up its compact commercial vehicles. The two-cylinder diesel engine will significantly improve fuel economy but vibration will intensify and it will in our view take time for the engine to be used in a passenger vehicle. However, compact trucks in India suffer from intense vibration and noise, so in this kind of market a compact commercial vehicle fitted with the two-cylinder engine Suzuki is developing could well be a big hit thanks to its fuel performance. The cast-iron rule in emerging markets is that the early bird catches the worm and we will be watching Suzuki's fresh move to open up a new market with interest.

Coming up with measures to bolster motorcycles in India

Suzuki has announced the construction of a new motorcycle plant, which will have annual capacity of 500,000 units when production starts in 2014. It already has motorcycle plants in two places in India, but with the market expected to grow, it plans to increase annual production capacity to 950,000 units from 450,000. The new plant will be built on land owned by Maruti Suzuki in the northern state of Haryana, with the intention probably to use the production and marketing strengths of Maruti Suzuki, with its expertise in autos.

Company Focus

- Company Update
- Rating Change
- Target Price Change
- Estimate Change

Buy	**1**
from Neutral	
Price (20 Jun 12)	¥624
Target price	¥800
from ¥750	
Expected share price return	28.2%
Expected dividend yield	1.4%
Expected total return	**29.6%**
Market Cap	¥487,007M
	US$6,125M

Price Performance
(RIC: 7270.T, BB: 7270 JP)

Fuji Heavy Industries (7270)

Buy on change in earnings structure driven by increase in Subaru brand value

- **Upgrading to Buy** — The established image of Fuji Heavy is now outdated. We recommend buying into the great improvement in the earnings structure that has resulted from increase in the value of the Subaru brand. We lift our target price to ¥800 from ¥750. Our target price is based on the average of the high and the low PCFR multiples for seven past years of 5.4x and our simplified FY3/13 CFPS forecast of ¥148.6.

- **Earnings forecasts** — We model OP of ¥78bn in FY3/13, ¥88bn in FY3/14 and ¥110bn in FY3/15, assuming ¥80/$ and ¥100/€. Record OP was ¥91.4bn in FY3/00, so our forecasts represent 85% of the peak in FY3/13, 96% in FY3/14, and a new all-time high of 120% versus FY3/00 in FY3/15, by which time production capacity will have been expanded. Guidance is for FY3/13 OP of ¥67bn, assuming ¥80/$ and ¥105/€.

- **Key investment drivers** — Fuji Heavy's horizontally opposed boxer engines make for a low center of gravity and superior stability, so high ratings for handling and safety for the Legacy and other vehicles have boosted the value of the Subaru brand. Added to this are strong sales and the benefits of production volume growth, along with increases in shipment prices for popular models and reductions in sales promotion spending. The resulting change in the earnings structure, under which margins remain healthy even at ¥80/$, represents a major change for the company.

- **Expanding production capacity** — As the Chinese government has not given approval for Fuji Heavy to build a plant in China, the company is considering a second US plant in Indiana. We see this as positive, as capacity expansion in the US will begin to contribute to earnings sooner. The company also plans to expand capacity in Japan, mainly for engines and other parts of the powertrain, so we project all-time high profits for FY3/15, when the new capacity will begin to contribute fully.

Consol.	Sales		OP			RP		NP		EPS	PE
	¥M	YOY (%)	¥M	YOY (%)	OPM(%)	¥M	YOY (%)	¥M	YOY (%)	¥	X
3/11A	1,580,563	10.6	84,135	207.6	5.3	82,225	267.7	50,326	nm	65	9.7
3/12A	1,517,105	-4.0	43,959	-47.8	2.9	37,277	-54.7	38,453	-23.6	49	12.7
3/13CE	1,860,000	22.6	67,000	52.4	3.6	63,000	69.0	48,000	24.8	62	10.1
3/13E	1,780,000	17.3	90,000	104.7	5.1	90,000	141.4	58,000	50.8	74	8.4
3/13RE	1,870,000	23.3	78,000	77.4	4.2	74,000	98.5	56,000	45.6	72	8.7
3/14E	1,860,000	4.5	100,000	11.1	5.4	101,000	12.2	62,000	6.9	80	7.8
3/14RE	1,940,000	3.7	88,000	12.8	4.5	85,000	14.9	56,000	0.0	72	8.7
3/15E	2,070,000	6.7	110,000	25.0	5.3	108,000	27.1	67,000	19.6	86	7.3

A: Actuals, E: Citi Research Ests, CE: Co. Ests, RE: Citi Research Revised Ests, CRE: Co. Revised Ests, NA: Not Available, NM: Not Meaningful

Increase in Subaru brand value the biggest driver of recovery

We recommend buying into the big change in the earning structure resulting from the increase in brand value

In the past, Fuji Heavy had a fragile earnings structure under which profits sagged badly when the yen appreciated. In recent years, however, improvement in the performance and cost competitiveness of the Legacy has made it a big hit in the US, and the resulting increase in Subaru brand recognition has made Fuji Heavy a profitable carmaker. The brand is now benefitting further from both improved performance and reduced costs resulting from the introduction of a new horizontally opposed engine and a new CVT. The established image of Fuji Heavy is now therefore outdated, and we recommend buying into the big improvement in earnings structure at today's Fuji Heavy.

Figure 31. Fuji Heavy : Earnings by segment, auto shipment volume, factors impacting OP

Earnings by segment

(Ybn)	FY3/11	FY3/12	FY3/13E	FY3/14E	FY3/15E
Sales	1,580.6	1,517.1	1,870.0	1,940.0	2,070.0
Automobiles	1,452.2	1,389.1	1,736.7	1,803.6	1,931.7
Aerospace	82.8	80.3	85.3	88.4	90.3
Industrial products	30.1	33.6	33.0	33.0	33.0
Others	15.5	14.2	15.0	15.0	15.0
OP	84.1	44.0	78.0	88.0	110.0
Automobiles	80.4	39.4	73.0	83.0	105.0
Aerospace	2.3	2.9	3.0	3.0	3.0
Industrial products	-0.1	0.5	0.5	0.5	0.5
Others	1.5	1.0	1.5	1.5	1.5
Eliminations	0.1	0.2	0.0	0.0	0.0

Automotive shipment

(,000)	FY3/11	FY3/12	FY3/13E	FY3/14E	FY3/15E
WW total	656.9	639.7	723.1	754.7	815.6
(yoy)	16.8%	-2.6%	13.0%	4.4%	8.1%
Japan	158.2	172.2	139.6	131.5	138.2
(yoy)	-7.6%	8.8%	-19.0%	-5.8%	5.1%
North America	307.0	308.6	360.5	383.0	418.0
(yoy)	22.9%	0.5%	16.8%	6.2%	9.1%
Europe	59.5	55.0	83.0	86.7	90.4
(yoy)	53.4%	-7.6%	50.9%	4.5%	4.3%
Asia	62.4	48.3	65.0	73.5	83.0
(yoy)	27.6%	-22.6%	34.6%	13.0%	13.0%
Others	69.8	55.6	75.0	80.0	86.0
(yoy)	30.0%	-20.3%	34.9%	6.7%	7.5%

OP variance factors

(Ybn)	FY3/11	FY3/12	FY3/13E	FY3/14E	FY3/15E	FY3/12CE
Volume/Mix, etc.	83.1	1.2	56.2	14.0	34.0	51.4
Cost reduction	8.9	-2.2	22.5	20.0	23.0	21.1
Change in costs	6.1	8.0	-42.0	-20.0	-30.0	-47.7
R&D	-5.7	-5.2	-4.9	-4.0	-5.0	-4.9
Forex	-35.6	-42.0	2.2	0.0	0.0	3.1
TOTAL	56.8	-40.2	34.0	10.0	22.0	23.0

Source: Company data, Citi Investment Research and Analysis.

Upgrading to Buy, new target price of ¥800

We anticipate sales volume growth, even assuming ¥80/$ and ¥100/€

The revision in our yen assumptions from ¥84/$ to ¥80/$ and ¥108/€ to ¥100/€ is negative, our change in forex sensitivity assumptions (to –¥8bn from –¥5.5bn of a ¥1 strengthening versus the dollar), and higher SG&A expenses on sales volume growth are the main negatives versus our previous forecasts. However, we do not anticipate tax payments emerging to the extent we did previously, which is a positive. Netted out, we revise down our forecasts but we are impressed that even as forex sensitivity rises, Fuji Heavy can generate high earnings levels even at ¥80/$.

We now model OP of ¥78bn in FY3/13, ¥88bn in FY3/14 and ¥110bn in FY3/15, assuming ¥80/$ and ¥100/€. All time high OP was ¥91.4bn in FY3/00, so our forecasts represent 85% of the peak in FY3/13, 96% in FY3/14, and a new all-time high of 120% in FY3/15, by which time production capacity will have been expanded.

We forecast growth in OP by region from ¥23.1bn in FY3/12 to ¥34bn in FY3/13, ¥40bn in FY3/14 and ¥56bn in FY3/15 in North America, and from ¥18.9bn in FY3/12 to ¥43bn in FY3/13, ¥47bn in FY3/14 and ¥53bn in FY3/15 in Japan, despite the high yen.

We see FY3/13 OP guidance of ¥67bn, which assumes ¥80/$ and ¥105/€, as conservative. Our estimates put forex sensitivity at ¥7.8bn for each ¥1 change against the dollar, and ¥300mn against the euro.

New target price of ¥800

We raise our target price from ¥750 to ¥800. Our new target price is based on our simplified FY3/13 CFPS forecast of ¥148.6 and the 5.4x, the average of the high and the low PCFR multiples between FY3/05 and FY3/12 (excluding FY3/09 because of losses). We are impressed that even as forex sensitivity rises, Fuji Heavy can generate high earnings levels even at ¥80/$, and we raise our target multiple to the average of the high and the low.

Our previous target price of ¥750 was based on an FY3/13 CFPS forecast of ¥149.9 and the 5.0x midpoint between the 5.5x average high and 4.4x average low PCFR multiples in six past years.

In FY3/13, the company plans to expand production capacity at its Indiana plant to build more of the Legacy, US sales of which are strong. Expansion in profitable exports of CBU vehicles to China should also contribute. The company has withdrawn from the assembly of minivehicles in Japan, and has instead begun production of the sports car jointly developed with Toyota. This is driving improvement in the production mix, while increase in production volume thanks to the launch of the new Impreza, which has both a new engine and new CVT, should also boost earnings from higher volumes. In the past, a high export ratio and vulnerability to yen appreciation was a weakness of Fuji Heavy, so an earnings structure that is now profitable even at ¥80/$ represents a major transformation.

Rivals cannot emulate Subaru vehicles

Superior handling a feature of Subaru vehicles thanks to horizontally opposed engines, AWD

While competing vehicles have flat four or V6 engines, Fuji Heavy uses its proprietary horizontally opposed boxer engines. This enables a low center of gravity, which makes for better handling and stability, while Fuji Heavy also adds AWD technology to further improve handling and safety. The high value that consumers ascribe to the handling and safety of the Legacy and other Subaru vehicles, which derives from the low center of gravity due to the boxer engines and AWD, is driving enhanced brand value. And in addition to production volume growth resulting from strong sales, marketing strategy is also contributing to earnings through price hikes for popular models and reductions in promotional spending. The company now plans to begin using parts manufactured overseas to further reduce costs.

Boost to Subaru brand value thanks to proprietary technologies

Strong sales push US profits to all-time highs in three years through 2011

Fuji Heavy's US sales of the Legacy, Outback, Impreza, Forester, and Tribeca were an all-time high of 266,989 in 2011. This is a considerable achievement, given that inventories were too low for an extended period as output fell after the eastern Japan earthquake. Volumes have now reached new all-time highs in the US in three consecutive years, after growing YoY for four years.

Improved economy thanks to new horizontally opposed engines and CVT

The company's packaging of the Legacy and other core vehicles as global models and the stable handling of AWD are highly regarded. Now, however, improvement in brand value is being driven by twin efforts to further improve both handling and the brand's environmental credentials with the Lineartronic CVT, new horizontally opposed engines, lighter bodies and better fuel economy. Despite being AWD, the new Impreza has top-ranked fuel economy for its class of 36mpg (highway driving, company data).

Entire lineup achieved top-class safety rating in US for three years running

The company's vehicles achieve high safety ratings throughout the world, and the entire range of Fuji Heavy vehicles was awarded the "Top Safety Pick" rating when the US Insurance Institute for Highway Safety announced its 2012 ratings in December 2011. This makes Fuji Heavy the only carmaker to achieve the Top Safety Pick ratings for its entire lineup in three consecutive years, and the top-class safety of Subaru vehicles is another factor driving sales growth.

Legacy achieves top safety rating in Japan also

Fuji Heavy gets the top safety rating in Japan also. Under the FY3/12 Japan New Car Assessment Program (JNCAP), a testing and evaluation scheme run by the Ministry of Land, Infrastructure, Transport and Tourism and the National Agency for Automotive Safety and Victims' Aid, the Legacy was awarded the five-star JNCAP rating. In FY3/12, a pedestrian leg protection rating was added to the previous collision safety and pedestrian protection ratings in the JNCAP five-star rating. This rating is given to only the safest cars, and is the highest available in Japan.

Superior performance means high residual value

The company's efforts in the area of product lineup, environmental considerations and safety improvement mean its vehicles retain their value well. In the Residual Value Awards released by the Automotive Lease Guide in November 2011, Subaru won the award for best mainstream brand for the third consecutive year. This, along with expansion of the dealer network, has contributed to a positive cycle of sales growth, and we expect further increase in the Subaru brand value as the company adds other competitive vehicles to its lineup.

EyeSight further enhancing brand value

US to be second overseas market to get EyeSight

Fuji Heavy plans to introduce the leading-edge driver-assist system EyeSight, which uses stereo cameras, in the North American market this summer. EyeSight is the world's first driver-assist system that uses stereo cameras alone for adaptive cruise control and a features a pre-crash safety system aimed at protecting pedestrians and cyclists, and it is already in use. Some 90% of the Legacy and Outback vehicles sold in Japan between December 2011 and February 2012 have EyeSight, and it has been highly evaluated by drivers. Overseas, EyeSight was first introduced in Australia in late 2011, and it will be standard equipment in some Legacy and Outback models in the US from the 2013 model year. The US version of EyeSight will have the same specifications as in Japan, with pre-crash braking, pre-crash brake assist, adaptive cruise control, pre-collision throttle management, and lane-departure warnings. Fuji Heavy sees EyeSight as an important part of its overall safety technologies, and as it plans to introduce it worldwide, we expect it to drive sales volume growth.

Toyota to help boost Subaru brand value

RWD sports car to help expand sales in new regions

The new Subaru BRZ was released on March 28. Based on the concept of "Pure handling delight – a new dimension in driving pleasure", the BRZ has a front-engine, rear-wheel drive layout, and the low positioning of the horizontally opposed engine in the ultra-low center of gravity means that handling is exceptional.

The BRZ name uses the B of the boxer engine and the R of rear-wheel drive, while the Z stands for "ultimate". The car was jointly developed with Toyota Motor, which sells it under the 86 name. The external designs of the two vehicles differ somewhat, but they are identical underneath the skin, and Fuji Heavy manufactures both. We expect Toyota to sell larger volumes, because of its greater marketing muscle, but the more that Toyota is able to sell of the 86 throughout the world, the greater the increase in the Subaru brand value, as Fuji Heavy effectively developed and manufactures the 86. We expect this to also drive growth in Fuji Heavy's sales in regions where it has previously not been able to fully develop a dealer network.

We expect Fuji Heavy to achieve targets in medium-term business plan

Good progress in implementation of Motion-V medium term plan

Fuji Heavy is currently in the middle of its five-year Motion-V ("motion five"), five-year medium-term business plan that runs FY3/12 to FY3/16.

It has five themes: 1) the "Confidence in Motion" policy of carrying through in all activities, 2) the "seeking new Subaru DNA", based on the customer's perspective, 3) "accelerated expansion in scale" through improvement in marketing and supply capacity, 4) "reinforcing business foundations" by cutting costs and leveraging tie-ups, and 5) "improving management quality" to support specific business initiatives. Fuji Heavy is making good progress in implementing the plan, and the company said when reporting results in May that it has not changed the overall plan and maintains the targets it contains.

Difficulties building local plant in China, so boosting capacity in US

The company has incorporated additional initiatives into the plan in light of changes in the operating environment, which include stronger than expected sales growth, particularly in North America, delays to the start-up of local production in China, and unfavorable exchange rates. FY3/12 sales of 640,000 vehicles and OP of ¥44bn topped initial guidance of 632,000 and ¥30bn. In response to change in the industry environment, the company has reviewed its sales strategy, by 1) raising its US sales target to 380,000 vehicles in FY3/16 because of strong local sales, and 2) shifting to a sales plan based on the export of CBU vehicles for the Chinese market. It is also reorganizing production sites, as it now appears unlikely that it will be able to begin local production in China before the plan ends, so it is boosting capacity at existing plants in Japan and the US, as well as considering further future capacity increases in North America. It has responded to yen appreciation by further cutting CoGS.

No change to target of ¥120bn OP, 6% operating margin

The company has revised its FY3/16 consolidated sales target to 850,000 vehicles from 900,000, to factor in both stronger than expected US sales and revisions to assumptions regarding local production in China. It has also revised its forex assumptions from ¥90/$ and ¥120/€ to ¥80/$ and ¥105/€, without changing the operating margin target of 6%.

Continuing growth in production capacity

The company needs to expand production facilities, because it is currently operating at full capacity. It has been forced to abandon plans for a local Chinese production facility that were to be a pillar of the medium-term business plan because the Chinese government will not give its approval. The company has said it is considering a second plant in Indiana, and we see this as positive as expanded production capacity in the US should begin to contribute to earnings sooner. The company also plans to expand capacity in Japan, mainly for engines and other parts of the powertrain, so we project all-time high profits for FY3/15, when the new capacity will begin to contribute fully.

Company Focus

- Company Update
- Target Price Change
- Estimate Change

Neutral	**2**
Price (20 Jun 12)	¥783
Target price	¥850
from ¥1,250	
Expected share price return	8.6%
Expected dividend yield	0.8%
Expected total return	**9.3%**
Market Cap	¥273,341M US$3,438M

Price Performance
(RIC: 7272.T, BB: 7272 JP)

Yamaha Motor (7272)

Earnings deterioration caused by a strong yen and worsening conditions in Indonesia a weight on the shares

- **Maintaining Neutral** — Yen strengthening and deteriorating market conditions in Europe, Indonesia, and elsewhere are making life tougher for Yamaha. We maintain our Neutral rating, as we believe negatives have already been priced in, but lower our target price to ¥850 from ¥1,250. We derive our target price by applying a PCFR of 6.2x, the midpoint between the average of the lows (5.3x) and the highs and lows (7.2x) for six past years to our simplified FY12/12 CFPS estimate of ¥137.5.
- **Earnings forecasts** — Assuming ¥80/$ and ¥100/€, we forecast FY12/12 OP of ¥30bn, FY12/13 OP of ¥53bn, FY12/14 OP of ¥75bn. Yamaha posted its record OP of ¥127bn in FY12/07, and we think it will take time for profit to return to this level because of the significant handicap posed by such factors as a stronger yen. Yamaha forecasts FY12/12 OP of ¥45bn, assuming ¥77/$ and ¥100/€.
- **Investment points** — Asia, and in particular Indonesia, has become the driver of Yamaha's profit. However, Indonesia will tighten auto loan regulations in June 2012, raising the minimum down payment for motorcycles to 25% for purchases financed by banks and 20% for purchases financed by finance companies. Concern that this will cause a significant reduction in motorcycle demand is negative for the shares. We assume Yamaha's motorcycle sales volume in Indonesia declines 17% YoY in FY12/12.
- **Cost increases accompanying shift to fuel injection a negative** — The shift to fuel injection engines in Indonesia will hurt Yamaha's profitability because it will not be able to pass on the associated costs. Assuming fuel injection increases the cost of a motorcycle by around ¥8,000, we estimate volume would have to expand by around 1mn units to generate sufficient economies of scale to cover most of the increased cost. We think the double blow of lower demand and higher costs in Indonesia will have a big impact on Yamaha's profit in FY12/12.

Consol.	Sales		OP			RP		NP		EPS	PE
	¥M	YOY (%)	¥M	YOY (%)	OPM(%)	¥M	YOY (%)	¥M	YOY (%)	¥	X
12/10A	1,294,131	12.2	51,308	nm	4.0	66,141	nm	18,303	nm	56	14.1
12/11A	1,276,159	-1.4	53,405	4.1	4.2	63,494	-4.0	26,963	47.3	77	10.1
12/12CE	1,400,000	9.7	45,000	-15.7	3.2	47,000	-26.0	17,000	-37.0	49	16.1
12/12E	1,405,000	10.1	53,000	-0.8	3.8	55,000	-13.4	22,000	-18.4	63	12.4
12/12RE	1,296,000	1.6	30,000	-43.8	2.3	32,000	-49.6	9,000	-66.6	26	30.4
12/13E	1,530,000	8.9	72,000	35.8	4.7	79,000	43.6	40,000	81.8	115	6.8
12/13RE	1,445,000	11.5	53,000	76.7	3.7	59,000	84.4	25,000	177.8	72	10.9
12/14E	1,655,000	8.2	90,000	25.0	5.4	99,000	25.3	52,000	30.0	149	5.3
12/14RE	1,573,000	8.9	75,000	41.5	4.8	82,000	39.0	41,000	64.0	117	6.7

A: Actuals, E: Citi Research Ests, CE: Co. Ests, RE: Citi Research Revised Ests, CRE: Co. Revised Ests, NA: Not Available, NM: Not Meaningful

Many negatives, few positives for the shares

Earnings deterioration a serious concern and no positives on the horizon

Yamaha's earnings environment is becoming harsher due to yen strengthening and deteriorating market conditions in Europe, Indonesia, and elsewhere. We believe the negatives have already been priced in but see little in the way of upside catalysts near term and maintain our Neutral rating.

Figure 32. Yamaha Motor : Earnings by segment, motorcycle shipments and OP variance factors

Earnings by segment

(Ybn)	FY12/10	FY12/11	FY12/12E	FY12/13E	FY12/14E	FY12/12CE
Sales	**1,294.1**	**1,276.2**	**1,296.0**	**1,445.0**	**1,573.0**	**1,400.0**
Motorcycle	906.0	887.6	896.5	1,028.5	1,142.5	995.0
(Indonesia)	352.0	328.0	264.2	308.9	355.6	360.8
Marine products	167.1	178.9	191.0	199.0	207.0	195.0
Power products	103.0	100.3	97.5	103.0	106.5	100.0
Other products	118.0	75.1	72.1	73.5	73.8	110.0
Operating profit	**51.3**	**53.4**	**30.0**	**53.0**	**75.0**	**45.0**
Motorcycle	42.7	27.6	19.2	38.8	57.6	40.0
(Indonesia)	43.0	34.2	14.0	21.0	27.0	n.a.
Marine products	0.7	7.1	10.0	11.5	12.5	5.0
Power products	-11.3	7.5	-10.0	-9.2	-8.1	-10.0
Other products	19.1	5.0	4.3	4.9	5.5	10.0

Motorcycle shipment

(,000)	FY12/10	FY12/11	FY12/12E	FY12/13E	FY12/14E	FY12/12CE
Japan	99	101	95	94	92	95
North America	53	64	75	80	85	72
Europe	227	185	180	182	185	191
Asia	6,084	6,059	6,066	6,911	7,801	7,197
(Indonesia)	3,326	3,136	2,600	3,040	3,500	3,700
Others	497	573	595	800	900	721
Total	6,960	6,982	7,011	8,067	9,063	8,276

OP variance factors

(Ybn)	FY12/10	FY12/11	FY12/12E	FY12/13E	FY12/14E	FY12/12CE
Volume/Mix	61.2	23.3	12.5	34.5	32.0	46.1
Change in SG&A	20.6	22.0	-13.0	-17.5	-19.0	-16.0
Cost reduction	11.0	19.9	13.0	15.0	16.0	14.0
Raw mateials	-7.1	-7.6	4.0	0.0	0.0	-4.6
Depreciation	15.2	0.0	-5.4	-5.0	-4.0	-5.4
R&D	4.3	-9.8	-6.0	-4.0	-3.0	-6.0
Forex	-18.4	-32.2	-20.0	0.0	0.0	-27.9
Others	27.0	-13.5	-8.5	0.0	0.0	-8.5
Total	113.8	2.1	-23.4	23.0	22.0	-8.4

Source: Company data, Citi Investment Research and Analysis.

Target price to ¥850, maintaining Neutral

Revising down forecasts because of yen strengthening and worsening conditions in Indonesia

We lower our forecasts to reflect new forex assumptions (¥80/$ and ¥100/€ versus ¥84/$ and ¥108/€ previously) as well as weaker motorcycle demand in Europe and Indonesia and cost increases accompanying the conversion to fuel injection engines in Indonesia.

Assuming ¥80/$ and ¥100/€, we forecast FY12/12 OP of ¥30bn, FY12/13 OP of ¥53bn, and FY12/14 OP of ¥75bn. Yamaha Motor posted its record OP of ¥127bn in FY12/07, and we think it will take time for profit to return to this level because of the significant handicap posed by such factors as a stronger yen.

We look for OP in Asia to decline from ¥48.6bn in FY12/12 to ¥34bn in FY12/13 because of weakness in Indonesia but then expand to ¥46bn in FY12/14 and ¥57bn in FY12/15.

By segment, we forecast motorcycle OP will decline from ¥27.6bn in FY12/12 to ¥19.2bn in FY12/13 but then expand to ¥38.8bn in FY12/14 and ¥57.6bn in FY12/15. We forecast marine products OP will expand from ¥7.1bn in FY12/12 to ¥10bn in FY12/13, ¥11.5bn in FY12/14, and ¥12.5bn in FY12/15, with outboard motor sales growth covering the impact of a strong yen and keeping profits rising. We forecast power products OP will decline from ¥7.5bn in FY12/12 to a ¥10bn loss in FY12/13 but then improve slowly to a ¥9.2bn loss in FY12/14 and an ¥8.1bn loss in FY12/15. We expect this segment to make a profit in FY12/12 on the reversal of litigation cost reserves but then remain in the red because of slack demand for ATVs in the US and elsewhere. We forecast industrial equipment/robot OP (chip mounters, etc.,) will increase from ¥6.3bn in FY12/12 to ¥6.5bn in FY12/13, ¥7bn in FY12/14, and ¥7.5bn in FY12/15.

Yamaha forecasts FY12/12 OP of ¥45bn, assuming ¥77/$ and ¥100/€. We believe this looks somewhat optimistic.

Lowering target price to ¥850

We derive our ¥850 target price (previously ¥1,250) by applying a PCFR of 6.2x, the midpoint between the average of the lows (5.3x) and the highs and lows (7.2x) for seven years, FY12/05−FY12/11, excluding FY12/09, which we consider to be an outlier, to our simplified FY12/12 CFPS estimate of ¥137.5.

Our previous ¥1,250 target price was based on a PCFR of 7.2x, the average of the highs and lows for seven past years (excluding FY12/09), and a simplified FY12/12 CFPS estimate of ¥174.7.

We lower our target multiple because of such factors as yen strengthening, a further decline in demand in Europe, and earnings deterioration in Indonesia due to a decline in demand caused by tighter auto loan regulations and cost increases on the shift to fuel injection engines. We maintain our Neutral rating.

Double blow of declining demand and rising costs in Indonesia

Tighter loan standards and fuel injection costs in Indonesia major negatives for earnings

Asia, and in particular Indonesia, has become the driver of Yamaha's profit. Indonesia's policy rate is 5.75%, a record low, and we believe this will be a positive for business over the medium-term. However, we believe motorcycle demand in Indonesia will continue to decline in 2012, mainly because of the introduction of tighter auto loans regulations in June. To reduce the risk of NPL expansion accompanying auto financing, Indonesia will raise the minimum deposit ratio for motorcycles to 25% for purchases financed by banks and 20% for purchases financed by finance companies. Concern that this will cause a significant reduction in motorcycle demand is negative for the shares. We assume motorcycle sales volume in Indonesia declines 17% YoY in FY12/12.

Also, the shift to fuel injection engines in Indonesia will hurt Yamaha's profitability as it will not be able to pass on the associated costs. Assuming fuel injection increases the cost of a motorcycle by around ¥8,000, we estimate volume would have to expand by around 1mn units to generate sufficient scale merits to cover most of it. The double blow of lower demand and higher costs in Indonesia will have a big impact on Yamaha's profit in FY12/12, and we think concern about this as well as yen strengthening has contributed to share price weakness. We estimate it will take around six months for motorcycle demand to recover but as the impact new loan regulations will have remains unclear and trends need to be monitored closely.

Our Indonesia motorcycle assumptions are as follows:

2012: Overall demand 7.45mn units (−7% YoY), Yamaha sales 2.6mn units (−17%)

2013: Overall demand 8.6mn units (+15% YoY), Yamaha sales 3.04mn units (+17%)

2014: Overall demand 9.82mn units (+14% YoY), Yamaha sales 3.5mn units (+15%)

Marine products beats strong yen to recover

Reliability and extensive sales network underpin Yamaha's outboard motor brand value

Outboard motors and other marine products are also a profit driver for Yamaha. Yamaha makes around 130 different 2-stoke and 4-stoke outboard motors (2hp-350hp) and has an extremely strong market presence, with the top market share in Europe, Asia, South America, and Africa, and the second largest market share in North America. In addition to a reputation for unrivalled reliability, Yamaha's strengths include concurrent development through strategic alliances with major boat builders and a global service network that spans more than 160 countries.

Yamaha overcomes strong yen to stage marine products profit recovery

The marine products business had sales of ¥289.9bn and OP of ¥28.2bn in FY12/07 (forex: ¥118/$ and ¥161/€). In FY12/09, the impact of the global financial crisis caused sales to drop to ¥150.1bn, resulting in an operating loss of ¥24.3bn (¥84/$ and ¥130/€). But in FY12/11, sales recovered to ¥178.9bn and OP to ¥7.1bn,

despite a stronger yen (¥80/$ and ¥111/€). Yamaha has overcome the impact of a yen strengthening by significantly reducing break-even sales through fixed cost cuts: the outboard motor business is now profitable at sales of 230,000 units a year.

Targeting outboard motor business expansion in developed nations and emerging markets

Outboard motor sales volume has trended as follows: 334,000 units in 2008, 240,000 units in 2009, 272,000 units in 2010, 303,000 units in 2011, and 321,000 units in 2012 (company target). The weighting of emerging market sales increased from 50% in 2010 to 53% in 2011 and is expected to rise to 55% in 2012. Demand in emerging markets centers on motors for fishing and transport vessels, although recently sales for private boats have increased in Brazil and Russia as the middle-class has expanded. Conditions are tough in Europe but demand is recovering in the US. Yamaha estimates the market for marine products is worth ¥3trn and it expects the marine products segment, mainly outboard motors, to be a pillar of future earnings. The marine products segment had sales of ¥178.9bn in FY12/11 (developed markets ¥137.4bn, emerging markets ¥41.5bn), and Yamaha has set a challenging target of raising sales to ¥300bn by the mid-2010s (developed markets ¥200bn, emerging markets ¥100bn). If the power of the outboard motor brand is properly leveraged, we believe this could be achievable.

Nissan Motor

Investment strategy

We rate the shares of Nissan Buy (1), with a ¥1,090 target price.

We recommend buying Nissan shares as 1) valuations look low and 2) the shares do not seem to have priced in expected brand value improvement in profit growth. The flagship model Altima is key for improving the evaluation of Nissan, as it has had to be resigned to the second tier in the US mid-size sedan market behind the Toyota Camry and the Honda Accord. However, Nissan is now looking to push the Altima into the top group. If these efforts are successful, it could significantly change the position of the Nissan brand in the US. We think the new Altima sales strategy is likely to succeed, and do not feel the shares have priced this in as yet.

Valuation

We use PCFR to value companies in the auto sector. We employ a five-tier PCFR model, based on data for eight years from FY3/05-FY3/12 (we exclude FY3/09 because of its exceptional circumstances). We use industry trends, earnings trends, and intrasector comparisons in calculating our target prices. The five tiers are 1) the absolute high PCFR, 2) the average of PCFR highs, 3) the average of low and high PCFRs, 4) the average of PCFR lows, and 5) the absolute PCFR low. We derive our ¥1,090 target price for Nissan by applying a PCFR of 5.8x, the average of the highs and lows, to our FY3/13E simplified CFPS estimate of ¥186.1.

Risks

We believe risks facing the auto sector include forex, domestic sales trends, global sales trends, technology investment, rising material prices, and sizable changes in financial earnings. We believe risks to our target price for Nissan include possible large changes in the company's earnings resulting from 1) sharp fluctuations in forex rates; 2) greater-than-expected changes in domestic or overseas demand; 3) unexpected negatives, such as product recalls; 4) fluctuations in finance earnings in North America; 5) a change in the cost-cutting schedule owing to changes in the company's sales plan; and 6) earnings fluctuations at Renault in Europe leading to volatility in Nissan's numbers. If these factors manifest themselves differently than we have anticipated, earnings may differ from our forecasts, and the share price may vary from our target price.

Isuzu Motors

Investment strategy

We rate the shares of Isuzu Motor Buy (1), with a ¥630 target price.

We like Isuzu because we think it will post record profits in FY3/13 and out on strong truck sales in Thailand and other emerging markets. Barriers to entry into new markets are high for truck makers, making it difficult for latecomers. This is because transport operators usually need to keep trucks on the road as much as possible, which in turns requires a nationwide service and maintenance network to respond to accidents and other problems. Even if Chinese makers attempt to introduce low-price trucks in Southeast Asia, we do not think they will find many buyers because of inadequate service infrastructure. We believe investors need to

again consider the long-term sustainability of Isuzu's superior position in Thailand and other markets.

Valuation

We use PCFR as the basis for our valuation of companies in the auto sector. For Isuzu, we employ a five-tier PCFR model, based on data for the nine years from FY3/04-FY3/12 (excluding FY3/09, which was an outlier), and use industry trends, earnings trends, and intrasector comparisons in calculating our target prices. The five tiers are 1) the absolute high PCFR, 2) the average high PCFR, 3) the average of the low and the high PCFRs, 4) the average low PCFR, and 5) the absolute low PCFR. We derive our ¥630 target price by applying a PCFR of 8.9x, the average of the highs, to our FY3/13 CFPS forecast of ¥71.4.

Risks

We believe the major risks facing the auto sector include forex, sales trends in Japan, North America, Asia, and developing markets, and higher prices of and possible supply shortages in steel and other inputs. We see five main factors that could cause Isuzu's share price to diverge from our target price. First, domestic truck sales could expand or contract substantially beyond our expectations. Second, North American sales could rise or fall outside our anticipated range. Third, sales in Asia and developing markets could rise or fall outside our expected ranges. Fourth, progress in the small diesel engine development project with Toyota could differ from our expectations. Fifth, business could be impacted by management developments at GM. If these factors manifest themselves differently than we have anticipated, the share price may vary from our target price.

Toyota Motor

Investment strategy

We rate the shares of Toyota Motor Neutral (2), with a ¥3,300 target price.

We believe it will take time for Toyota to see benefits from earnings structure reforms and to construct a new business model. For now, we see the keys as to what level absolute profits recover and how much margins improve. We see a number of negatives for the shares: 1) issues with the luxury car strategy (Lexus, etc.), formerly a Toyota strength; 2) the risk of falling behind in fuel performance as Toyota has been slower than peers to innovate in areas such as engines; and 3) profit recovery is slower than at peers. It remains to be seen what models will be significantly impacted by new CoGS cuts and how successful the new developing markets-focused business model will be.

Valuation

We use PCFR as the basis for our valuation of companies in the auto sector. We employ a five-tier PCFR model, based on data for the eight years from FY3/05-FY3/12 (excluding FY3/09, which we consider an outlier), and use industry trends, earnings trends, and intra-sector comparisons in calculating our target prices. The five tiers are 1) the absolute high PCFR, 2) the average high PCFR, 3) the average of the low and the high PCFR, 4) the average low PCFR, and 5) the absolute low PCFR. For Toyota, we derive our ¥3,300 target price using our simplified FY3/13 CFPS estimate of ¥490.4 and a PCFR of 6.7x, the average of the lows.

Risks

We believe the major risks facing the auto sector are 1) forex, 2) sales, 3) CoGS cutting benefits, 4) input prices, and 5) quality issues, as these factors are major causes of earnings volatility. We believe risks to our target price for Toyota include 1) significant yen volatility; 2) demand and competition in North America and Europe in response to economic trends; 3) input price trends; 4) protracted sluggishness in domestic demand; 5) trends in growth in sales of new vehicles such as the IMV and low-cost cars in Asia, where we expect earnings to grow; 6) the emergence of trade friction on earnings deterioration at US automakers; 7) earnings deterioration in financial operations; and 8) quality issues. If the impact of any of these factors varies from our expectations, earnings and the share price may diverge from our target price.

Hino Motors

Investment strategy

We rate the shares of Hino Motors Buy (1), with an ¥810 target price.

Hino is pursuing new development and production reforms, and its profit levels are rising. We rate the shares Buy to capture the fruits of changes to the earnings structure. Hino is noteworthy for its limited exposure to Europe and the US and its strength in Asia. There is particularly strong truck demand related to infrastructure-building in Asia, and in Thailand the company is also faring well with the production of pickup truck underbodies for Toyota. Hino's share price has fallen off sharply in tandem with progressive yen appreciation, but given that the threat to earnings is less than at the passenger car makers and the prospects for record profit levels, we see substantial upside.

Valuation

We use PCFR as the basis for our valuation of companies in the auto sector. Ordinarily, we employ a five-tier PCFR model, based on data for the nine years between FY3/04-FY3/12 (excluding FY3/09, which we consider an outlier), and use industry and earnings trends, and intra-sector comparisons in calculating our target prices. The five tiers are: 1) the absolute high PCFR; 2) the average of the PCFR highs; 3) the average of the high and low PCFRs; 4) the average of the PCFR lows; and 5) the absolute PCFR low. Our ¥810 target price is based on our FY3/13 simplified CFPS forecast of ¥131.4 and a PCFR of 6.2x, the average of the PCFR highs and lows.

Risks

We believe risks facing the auto sector include forex and domestic and North American sales trends. With regard to Hino specifically, however, we believe main risks to our target price include: 1) demand trends and competitive conditions in the domestic truck market, including small trucks; 2) changes in the scale of cost-cutting benefits on fluctuations in output; 3) trends in the development of overseas business; and 4) the trends and future structural changes in the Toyota business. If these factors manifest themselves differently than we have anticipated, earnings may differ from our forecasts, and the share price may vary from our target price.

Mitsubishi Motors

Investment strategy

We rate the shares of MMC Neutral (2). Earnings are recovering but the question of how preferred shares will be handled remains, and until this is resolved we would defer investment even given the recovery in flow earnings.

Valuation

This company has a Neutral rating. We have not assigned a target price and therefore no valuation methodology is applicable.

Risks

We believe risks facing the auto sector include 1) forex trends, 2) domestic sales trends, and 3) North American sales trends. Risks for MMC include: 1) progress toward the achievement of the new medium-term plan; 2) sales volumes and sales incentives in North America and Europe; 3) sales trends in Asia and other regions and in Russia, which are the regions driving earnings; 4) sharp forex movements; and 5) the impact of soaring raw material prices. The success or failure of the PSA capital deal is also likely to have a big impact on the shares. If these factors manifest themselves differently than we have anticipated, earnings may differ from our forecasts.

Mazda Motor

Investment strategy

We rate the shares of Mazda Neutral (2), with a ¥110 target price.

We think it will take a year for Skyactiv benefits to emerge. Until then the most likely factors to boost the share price would be yen weakness. Mazda's share price has fallen to about ¥100 (FY3/13E PBR of 0.6x) due to yen appreciation, and right now there are few Mazda-specific factors that suggest a rebound. If more cars are fully equipped with Skyactiv, then earnings could continue to recover, but in FY3/13 the Skyactiv contribution will be small, with most coming from the CX-5. The real contribution should start in FY3/14 H2. The story of earnings improvement driven by Skyactiv is in place, but for now we think it better to sit on the sidelines for a while.

Valuation

We use PCFR as the basis for our valuation of companies in the auto sector. We employ a five-tier PCFR model, based on data for the past eight years (FY3/05-FY3/12, excluding the outliers of FY3/09, FY3/11, and FY3/12), and use industry trends, earnings trends, and intrasector comparisons in calculating our target prices. The five tiers are 1) the absolute high PCFR, 2) the average high PCFR, 3) the average of the low and the high PCFR, 4) the average low PCFR, and 5) the absolute low PCFR.

For Mazda, we apply a PCFR of 4.5x, the average of the lows, to our simplified FY3/13 CFPS forecast of ¥23.8 to derive our ¥110 target price.

Risks

We believe risks facing the auto sector include forex, and sales trends in Japan, North America, and Asia. We believe risks to our target price for Mazda include 1) significant deviation from our forex assumptions (yen appreciation against the dollar and the euro has a negative profit impact); 2) large increases or declines in domestic sales; 3) fluctuating sales and changing competitive conditions in North America; 4) a significant change in sales volumes in Europe, a major source of earnings; 5) falling sales in Asia, including China, and other areas, and 6) cost increases from unwinding the joint venture with Ford. Forex has the largest impact on earnings, followed by sales volume. Sales incentives also have a major earnings impact in each region, so we advise paying close attention to incentive spending trends. If these factors manifest themselves differently than we have anticipated, earnings may differ from our forecasts, and the share price may vary from our target price.

Daihatsu Motor

Investment strategy

We rate the shares of Daihatsu Motor Buy (1), with a ¥1,730 target price.

We forecast record profits in FY3/13, but the key question is whether demand slows in Indonesia. In our view, the situation in Indonesia should be clear by autumn. Indonesia plans to implement stricter auto loan standards from June 2012, with the down payment rising to 30% or more for bank loans and 25% or more for loans from financing companies. In the past a down payment of 15%-25% was common, so there is concern consumers could refrain from purchases after the standards are enacted. It is unclear right now how much of a negative impact this will have on Daihatsu sales, so this is something to keep an eye on.

Valuation

We use PCFR as the basis for our valuation of companies in the auto sector. We employ a five-tier PCFR model, based on data for the past eight years (FY3/05-FY3/12), and use industry trends, earnings trends, and intrasector comparisons in calculating our target prices. The five tiers are as follows: 1) the absolute high PCFR, 2) the average high PCFR, 3) the average of the low and high PCFRs, 4) the average low PCFR, and 5) the absolute low PCFR. We derive our ¥1,730 Daihatsu target price using our simplified FY3/13 CFPS forecast of ¥321.5 and a PCFR of 5.4x, the average of the highs.

Risks

We believe the main risks facing the auto sector in general include 1) forex trends, 2) domestic sales trends, 3) US sales trends, and 4) sales trends in other overseas regions (in Daihatsu's case, Malaysia and Indonesia). Daihatsu's parent forex exposure is low relative to peers, partly due to a significant decline in foreign-currency-denominated exports since 2000, although the importance of subsidiaries in Indonesia and Malaysia is rising and with it the forex impact of these Asian currencies is rising.

We believe company-specific risks to our target price include 1) a change in its share of the domestic minivehicle market and changes in prices on changes in the competitive landscape; 2) a higher or lower upfront investment burden versus our expectations and a possible impact from Toyota's strategies; 3) an expedited

development of Daihatsu's overseas strategy or delays to it; and 4) forex fluctuations.

We think Daihatsu's shares are sensitive to monthly minivehicle unit sales data, but we are positive on the way its regular introductions of new models contribute to earnings. If Asia earnings trends were to exceed our expectations, we would anticipate an even larger positive impact. Naturally, things could also head the other way. We believe Daihatsu's strategic importance within the Toyota group will be vital to medium-term growth potential. We believe joint strategies with Toyota in Asia, where low-priced models are needed, are of great importance, and we believe earnings contributions from Asia hold the key to transforming the company's currently low-margin earnings structure. If these factors manifest themselves differently than we have anticipated, earnings may differ from our forecasts and the share price may vary from our target price.

Honda Motor

Investment strategy

We rate the shares of Honda Motor Buy (1), with a ¥3,350 target price.

We now see an opportunity to buy, so as to capture the earnings recovery in FY3/13 and out, with undervaluation having emerged as the shares have overshot on the downside. At the Tokyo Motor Show briefing in autumn last year, President Takanobu Ito declared that Honda would win back its position at the top of the rankings for fuel efficiency in all segments over the coming three years. Honda plans to commercialize six next-generation engines (one for minivehicles, and 1.5l, 1.8l, 2.4l, 3.5l, and 1.6l diesel ones) and three types of CVTs (minivehicle, compact, and mid-size) and enhance its competitiveness in new vehicles. We expect to see new model benefits from the launch of models with new engines and think the earnings uptrend will continue.

Valuation

We use PCFR as our basis for valuing auto sector companies. We employ a five-tier PCFR model, based on results (US GAAP) for the past eight years (FY3/05-FY3/12), and use industry trends, earnings trends, and intrasector comparisons in calculating our target prices. The five tiers are 1) the absolute high PCFR, 2) the average high PCFR, 3) the average of the low and the high PCFR, 4) the average low PCFR, and 5) the absolute low PCFR. Our Honda target price of ¥3,350 is the product of our simplified FY3/13 CFPS estimate of ¥438.3 and a PCFR of 7.6x, the average of the highs and the lows.

Risks

We believe major risks facing the auto sector include 1) forex movements; 2) global sales trends; 3) materials price trends; and 4) finance business earnings. We think risks to our target price for Honda include substantial earnings fluctuations from any of the following: 1) forex movements; 2) sales volumes in the US and Europe; 3) US demand and incentive payment trends; 4) earnings trends in Asia; and 5) materials prices. If these factors manifest themselves differently than we have anticipated, earnings may differ from our forecasts, and the share price may vary from our target price.

Suzuki Motor

Investment strategy

We rate the shares of Suzuki Motor Buy (1), with a ¥2,010 target price.

The shares have been stuck at a low level on concerns of demand declines in Europe and Indonesia but we see a buying opportunity in light of FY3/13 earnings, which should close in on the all-time high.

We expect yen strength to be a negative again in FY3/13 but foresee contributions from higher sales volume in India, where Suzuki has bolstered diesel engine production, and in Japan, where the company has cut sales promotion expenses on the launch of competitive new vehicles and improved its earnings power. Suzuki is engaged in large-scale capex in India and other emerging markets in preparation for demand growth, which is creating a capex burden and increasing R&D expenses, but we think it has the power to absorb this upfront investment burden and continue to grow earnings.

Valuation

We use PCFR as the basis for our auto sector valuations. In calculating our target price we employ a five-tier PCFR model, based on data for the past nine years (FY3/04-FY3/12), and use industry trends, earnings trends, and intrasector comparisons in calculating our target prices. The five tiers are 1) the absolute high PCFR, 2) the average high PCFR, 3) the average of the low and the high PCFRs, 4) the average low PCFR, and 5) the absolute low PCFR. We derive our ¥2,010 target price by applying a PCFR of 6.4x, the average of the highs and the lows over the past eight years, to our FY3/12 simplified CFPS forecast of ¥314.6.

Risks

We believe risks facing the auto sector include forex trends, domestic and North American sales trends, and raw material prices. Risks for Suzuki include: 1) yen appreciation; 2) a decline in demand and intensified competition in the domestic minivehicle market; 3) weaker demand for motorcycles; 4) what happens in the arbitration related to the dissolution of the relationship with VW; 5) Asian demand trends; and 6) prices of raw materials. Additionally, we believe the impact of a major decline in auto demand in India owing to changes in the economy merits close observation. If these factors manifest themselves differently than we have anticipated, earnings may differ from our forecasts and the share price may vary from our target price.

Fuji Heavy Industries

Investment strategy

We rate the shares of Fuji Heavy Buy (1), with an ¥800 target price.

The established image of Fuji Heavy is now outdated. We recommend buying into the great improvement in the company's earnings structure that has resulted from increase in the value of the Subaru brand. Fuji Heavy's horizontally opposed boxer engines make for a low center of gravity and superior stability, so high ratings for handling and safety for the Legacy and other vehicles have recently boosted the value of the Subaru brand. Added to this are strong sales and the benefits of production volume growth, along with increases in shipment prices for popular

models and reductions in sales promotion spending. The resulting change in the earnings structure, under which margins remain healthy even at ¥80/$, represents a major change for the company.

Valuation

For our auto sector valuations, we employ a five-tier PCFR model, based on data for the past eight years (FY3/05-FY3/12, excluding FY3/09, which we consider an outlier), and use industry trends, earnings trends, and intrasector comparisons in calculating our target prices. The five tiers are 1) the absolute high PCFR, 2) the average high PCFR, 3) the average of the low and the high PCFRs, 4) the average low PCFR, and 5) the absolute low PCFR. For Fuji Heavy, we derive our ¥800 target price by applying a target PCFR of 5.4x, the average of the highs and the lows, to our FY3/13 simplified CFPS forecast of ¥148.6.

Risks

We believe the main risks facing the auto sector include forex, domestic sales, and North American sales. We believe risks to our target price for Fuji Heavy include the earnings impact of any of the following factors varying significantly from our assumptions: 1) forex trends (yen appreciation against the dollar is earnings negative); 2) domestic automobile sales volume; 3) overseas sales volumes, particularly for the new Legacy; and 4) increases or decreases in marketing expenses resulting from trends in overseas demand and increased competition. We believe sales of the new Legacy in the crucial North American market will be important. Given Fuji Heavy's heavy dependence on North American earnings, sales incentives merit close observation.

If these factors manifest themselves differently than we have anticipated, earnings may differ from our forecasts, and the share price may vary from our target price.

Fuji Heavy supplies helicopters to Japan's Ministry of Defense, but an issue regarding the compensation for associated royalties has arisen. In August 2001, under its medium-term (FY01-05) plan for building up defense capabilities, the ministry decided to adopt Boeing's AH-64D Apache Longbow as the successor to its superannuated AH-1S Cobras, agreeing to buy 62 of the new helicopters. However, with cuts to the defense budget, the ministry canceled the plan after placing 10 orders between FY02 and FY07. Fuji Heavy paid licensing fees to Boeing for 62 aircraft, and there are concerns it will be unable to recover these fees or the costs of parts already purchased in anticipation of three more orders between FY08 and FY09. Fuji Heavy filed the lawsuit out of concern that a total of ¥30bn in costs might be unrecoverable. The trial could be lengthy, and we accordingly see no cause for near-term concern.

Yamaha Motor

Investment strategy

We rate the shares of Yamaha Motor Neutral (2), with an ¥850 target price.

Yen strengthening and deteriorating market conditions in Europe, Indonesia, and elsewhere are making life tougher for Yamaha. We maintain our Neutral rating as we believe the negatives have already been priced in and that there is a dearth of factors that would drive the shares higher. Asia, and in particular Indonesia, has become the driver of Yamaha's profit. However, Indonesia will tighten auto loan regulations in June 2012, raising the minimum deposit ratio for motorcycles to 25%

for purchases financed by banks and 20% for purchases financed by finance companies. Concern that this will cause a significant reduction in motorcycle demand is negative for the shares.

Valuation

We use PCFR as the basis for auto sector company valuations. We employ a five-tier PCFR model, based on data for the seven years from FY12/05-FY12/11(excluding FY12/09, which we consider an outlier), and use industry trends, earnings trends, and intrasector comparisons in calculating our target prices. The five tiers are 1) the absolute high PCFR, 2) the average high PCFR, 3) the average of the low and the high PCFR, 4) the average low PCFR, and 5) the absolute low PCFR. Our ¥850 target price for Yamaha Motor is based on our FY12/12 simplified CFPS forecast of ¥137.5 and a PCFR of 6.2x, the midpoint between the average of the lows, 5.3x, and the average of the highs and the lows, 7.2x.

Risks

We believe risks facing the auto sector include forex and domestic and US sales trends. We believe risks to our target price for Yamaha include: 1) appreciation of the yen against the euro, dollar, Asian currencies, etc. (yen weakness boosts profits); 2) unit sales fluctuations on changing US demand trends, given the company's extremely high earnings dependence on the North American market in its three key businesses of motorcycles, ATVs, and outboard motors; 3) margin deterioration owing to declining demand in Europe; and 4) changes in the sales environment in Asia or South and Central America, where an earnings expansion phase is unfolding. Any change in US demand has a considerable impact on Yamaha, given its high earnings dependency on its North American operations. Accordingly, demand conditions in the US and forex trends merit close observation. If these factors manifest themselves differently than we have anticipated, earnings may differ from our forecasts and the shares may deviate from our target price.

Appendix A-1

Analyst Certification

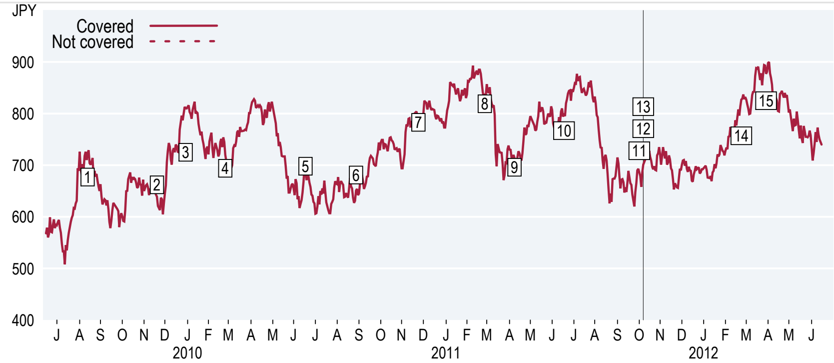
The research analyst(s) primarily responsible for the preparation and content of this research report are named in bold text in the author block at the front of the product except for those sections where an analyst's name appears in bold alongside content which is attributable to that analyst. Each of these analyst(s) certify, with respect to the section(s) of the report for which they are responsible, that the views expressed therein accurately reflect their personal views about each issuer and security referenced and were prepared in an independent manner, including with respect to Citigroup Global Markets Inc and its affiliates. No part of the research analyst's compensation was, is, or will be, directly or indirectly, related to the specific recommendation(s) or view(s) expressed by that research analyst in this report.

IMPORTANT DISCLOSURES

Nissan Motor (7201)

Ratings and Target Price History
Fundamental Research

Analyst: Noriyuki Matsushima



	Date	Rating	Target Price	Closing Price
1	13-Aug-09	1M	*860	723
2	19-Nov-09	1M	*780	639
3	30-Dec-09	1M	*1,020	810
4	24-Feb-10	1M	*970	720
5	17-Jun-10	1M	*920	688
6	27-Aug-10	1M	*880	651
7	24-Nov-10	1M	*1,050	787
8	25-Feb-11	1M	*1,270	838
9	8-Apr-11	*3M	*650	714
10	17-Jun-11	*1M	*960	800
11	3-Oct-11	1M	*980	686
12	7-Oct-11	Stock rating system changed		
13	7-Oct-11	*1	980	701
14	23-Feb-12	1	*1,120	827
15	29-Mar-12	1	*1,290	877

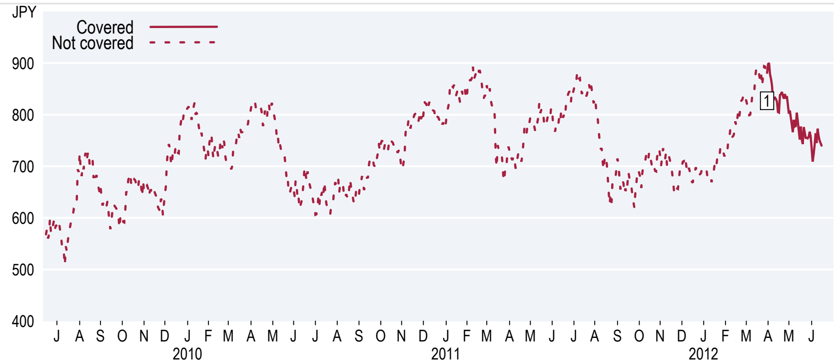
* Indicates change

Rating/target price changes above reflect Eastern Standard Time

Nissan Motor (7201)

Ratings and Target Price History
Best Ideas Research
Relative Call (3 Month)

Analyst: Noriyuki Matsushima



	Date	Rating	Target Price	Closing Price
1	30-Mar-12	*ADD MP	-	881

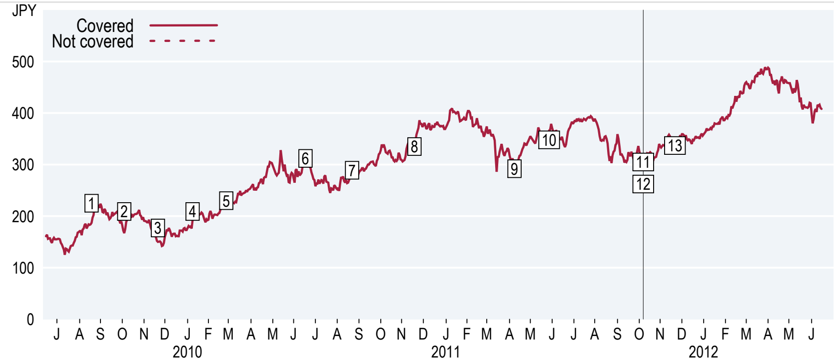
* Indicates change

Rating/target price changes above reflect Eastern Standard Time

Isuzu Motors (7202)

Ratings and Target Price History
Fundamental Research

Analyst: Noriyuki Matsushima



	Date	Rating	Target Price	Closing Price
1	19-Aug-09	*2H	*215	187
2	5-Oct-09	*1H	215	167
3	20-Nov-09	*2H	*165	150
4	8-Jan-10	2H	*200	192
5	25-Feb-10	*1H	*310	218
6	17-Jun-10	1H	*370	300
7	23-Aug-10	1H	*450	280
8	18-Nov-10	1H	*510	345
9	8-Apr-11	*2H	*340	306
10	27-May-11	*1H	*470	366
11	7-Oct-11	Stock rating system changed		
12	7-Oct-11	*1	470	314
13	22-Nov-11	1	*480	339

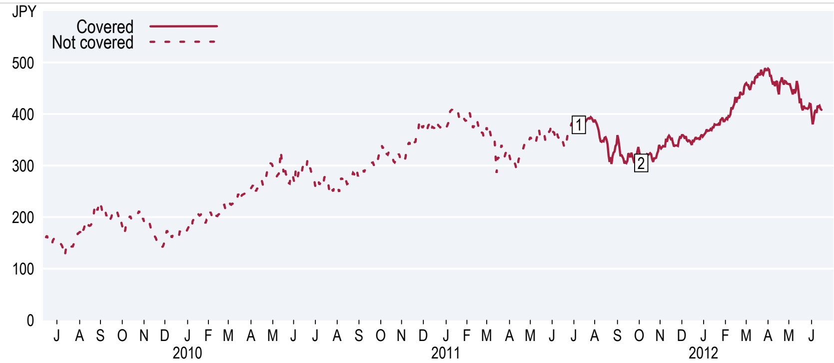
* Indicates change

Rating/target price changes above reflect Eastern Standard Time

Isuzu Motors (7202)

Ratings and Target Price History
Best Ideas Research
Relative Call (3 Month)

Analyst: Noriyuki Matsushima



	Date	Rating	Target Price	Closing Price
1	8-Jul-11	*ADD MP	-	388
2	5-Oct-11	*REM MP	-	312

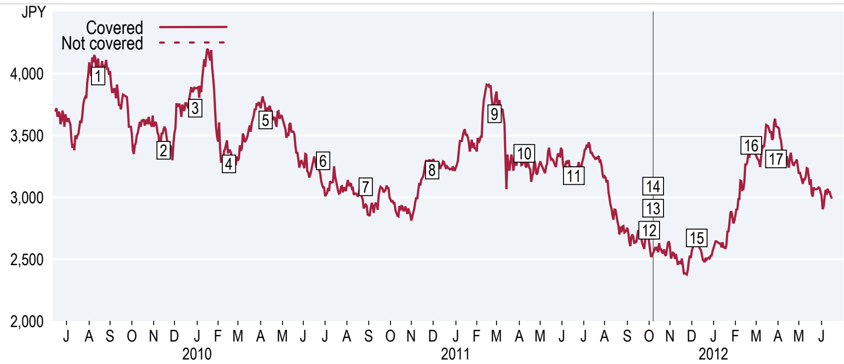
* Indicates change

Rating/target price changes above reflect Eastern Standard Time

Toyota Motor (7203)

Ratings and Target Price History
Fundamental Research

Analyst: Noriyuki Matsushima



	Date	Rating	Target Price	Closing Price
1	14-Aug-09	1M	*5,350	4,120
2	16-Nov-09	1M	*4,260	3,550
3	30-Dec-09	1M	*4,590	3,880
4	16-Feb-10	1M	*4,000	3,380
5	8-Apr-10	1M	*4,750	3,690
6	29-Jun-10	1M	*3,790	3,080
7	27-Aug-10	*2M	*3,300	2,941
8	30-Nov-10	2M	*3,500	3,220
9	25-Feb-11	2M	*4,140	3,755
10	8-Apr-11	*3M	*2,440	3,340
11	17-Jun-11	*2M	*3,580	3,175
12	3-Oct-11	2M	*2,930	2,635
13	7-Oct-11	Stock rating system changed		
14	7-Oct-11	*2	*2,800	2,549
15	8-Dec-11	2	*2,970	2,647
16	23-Feb-12	2	*3,600	3,370
17	29-Mar-12	2	*3,990	3,575

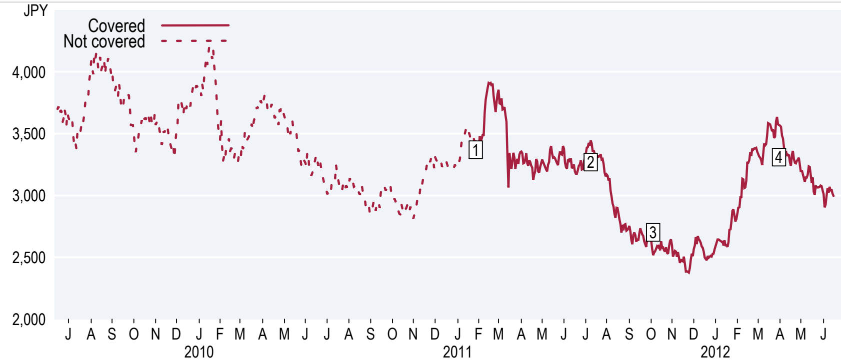
* Indicates change

Rating/target price changes above reflect Eastern Standard Time

Toyota Motor (7203)

Ratings and Target Price History
Best Ideas Research
Relative Call (3 Month)

Analyst: Noriyuki Matsushima



	Date	Rating	Target Price	Closing Price
1	27-Jan-11	*ADD LP	-	3,440
2	8-Jul-11	*REM LP	-	3,445
3	5-Oct-11	*ADD LP	-	2,517
4	30-Mar-12	*REM LP	-	3,570

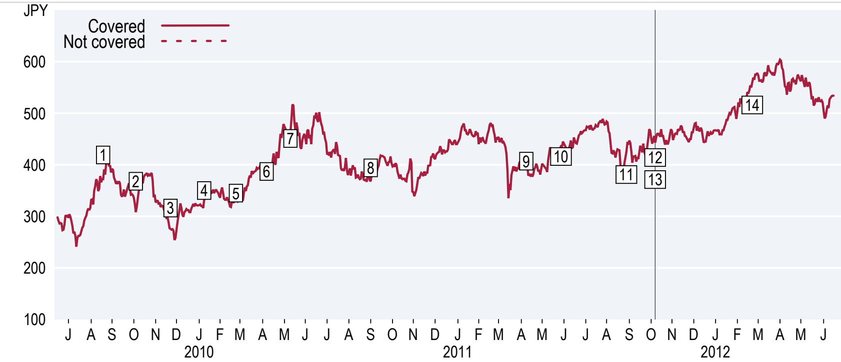
* Indicates change

Rating/target price changes above reflect Eastern Standard Time

Hino Motors (7205)

Ratings and Target Price History
Fundamental Research

Analyst: Noriyuki Matsushima



	Date	Rating	Target Price	Closing Price
1	19-Aug-09	*2M	*410	372
2	5-Oct-09	*1M	410	308
3	23-Nov-09	*2M	*295	277
4	8-Jan-10	2M	*350	333
5	23-Feb-10	2M	*380	341
6	7-Apr-10	*1M	*470	397
7	11-May-10	1M	*630	462
8	1-Sep-10	1M	*530	368
9	8-Apr-11	*2M	*420	400
10	27-May-11	*1M	*510	436
11	29-Aug-11	1M	*550	425
12	7-Oct-11	Stock rating system changed		
13	7-Oct-11	*1	550	443
14	22-Feb-12	1	*660	560

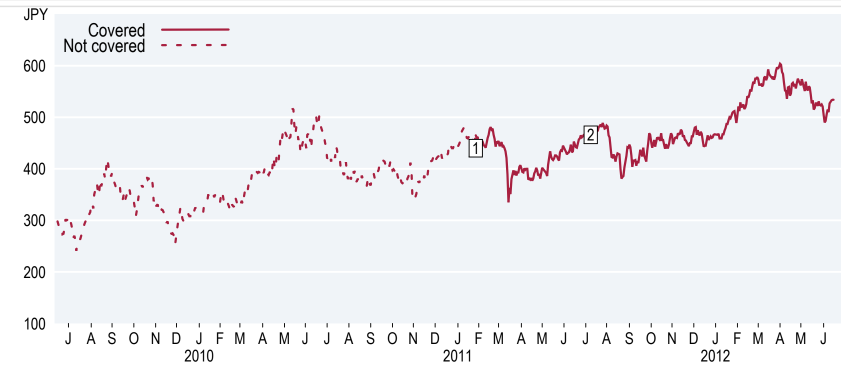
* Indicates change

Rating/target price changes above reflect Eastern Standard Time

Hino Motors (7205)

Ratings and Target Price History
Best Ideas Research
Relative Call (3 Month)

Analyst: Noriyuki Matsushima



	Date	Rating	Target Price	Closing Price
1	27-Jan-11	*ADD MP	-	465
2	8-Jul-11	*REM MP	-	477

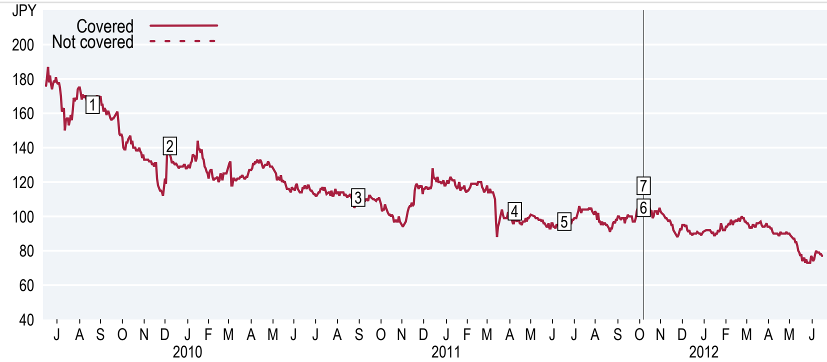
* Indicates change

Rating/target price changes above reflect Eastern Standard Time

Mitsubishi Motors (7211)

Ratings and Target Price History
Fundamental Research

Analyst: Noriyuki Matsushima



	Date	Rating	Target Price	Closing Price
1	20-Aug-09	3S	*150	169
2	8-Dec-09	*2S	150	136
3	31-Aug-10	2S	*110	107
4	8-Apr-11	*3S	*80	99
5	17-Jun-11	*2M	*100	93
6	7-Oct-11	Stock rating system changed		
7	7-Oct-11	*2	-	102

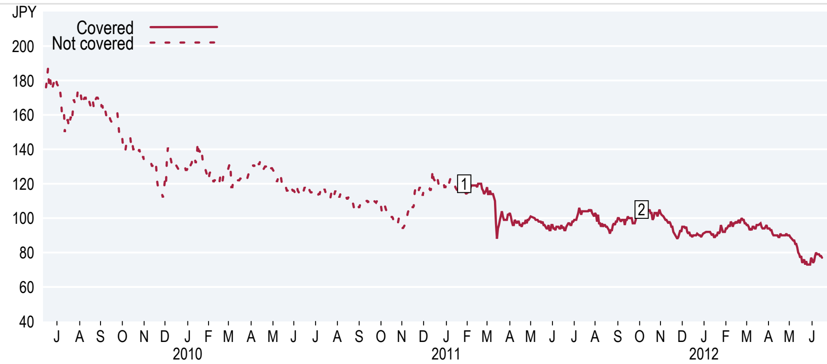
* Indicates change

Rating/target price changes above reflect Eastern Standard Time

Mitsubishi Motors (7211)

Ratings and Target Price History
Best Ideas Research
Relative Call (3 Month)

Analyst: Noriyuki Matsushima



	Date	Rating	Target Price	Closing Price
1	27-Jan-11	*ADD LP	-	118
2	5-Oct-11	*REM LP	-	101

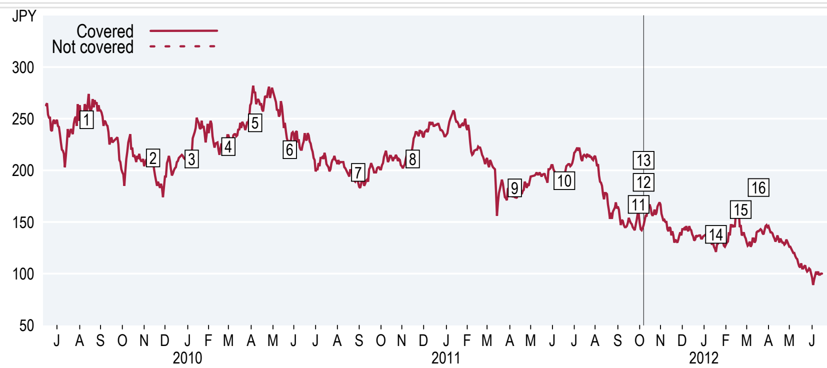
* Indicates change

Rating/target price changes above reflect Eastern Standard Time

Mazda Motor (7261)

Ratings and Target Price History
Fundamental Research

Analyst: Noriyuki Matsushima



	Date	Rating	Target Price	Closing Price
1	12-Aug-09	1M	*360	256
2	13-Nov-09	1M	*240	210
3	7-Jan-10	1M	*265	215
4	1-Mar-10	*2M	*260	234
5	7-Apr-10	*3M	260	276
6	26-May-10	*1M	*285	229
7	31-Aug-10	*2M	*210	188
8	16-Nov-10	*1M	*280	224
9	8-Apr-11	*3M	*120	174
10	17-Jun-11	*2H	*210	195
11	30-Sep-11	2H	*170	158
12	7-Oct-11	Stock rating system changed		
13	7-Oct-11	*2	*160	147
14	18-Jan-12	2	*140	121
15	22-Feb-12	*3	*120	147
16	19-Mar-12	*2	*160	141

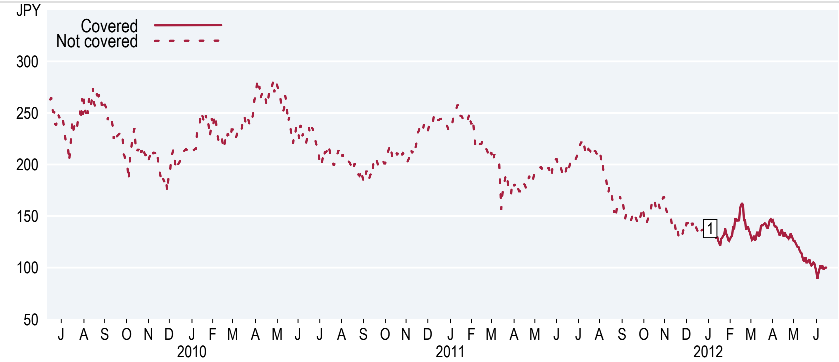
* Indicates change

Rating/target price changes above reflect Eastern Standard Time

Mazda Motor (7261)

Ratings and Target Price History
Best Ideas Research
Relative Call (3 Month)

Analyst: Noriyuki Matsushima



	Date	Rating	Target Price	Closing Price
1	4-Jan-12	*ADD LP	-	138

* Indicates change

Rating/target price changes above reflect Eastern Standard Time

Daihatsu Motor (7262)

Ratings and Target Price History
Fundamental Research

Analyst: Noriyuki Matsushima

	Date	Rating	Target Price	Closing Price
1	17-Aug-09	2M	*1,110	993
2	6-Oct-09	*1M	1,110	870
3	24-Nov-09	1M	*950	802
4	29-Dec-09	1M	*1,200	928
5	24-Feb-10	1M	*1,250	835
6	17-Jun-10	1M	*1,230	841
7	23-Aug-10	1M	*1,500	997
8	8-Apr-11	*3M	*830	1,143
9	3-Jun-11	*2M	*1,360	1,298
10	29-Aug-11	*1M	*1,500	1,245
11	7-Oct-11	Stock rating system changed		
12	7-Oct-11	*1	1,500	1,323
13	22-Nov-11	1	*1,770	1,314

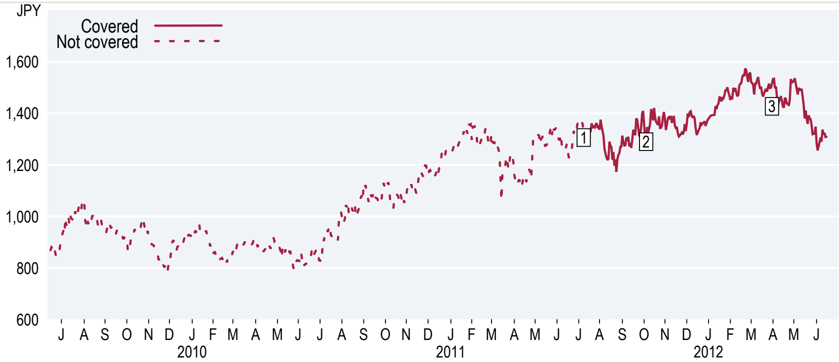
* Indicates change

Rating/target price changes above reflect Eastern Standard Time

Daihatsu Motor (7262)

Ratings and Target Price History
Best Ideas Research
Relative Call (3 Month)

Analyst: Noriyuki Matsushima



	Date	Rating	Target Price	Closing Price
1	8-Jul-11	*ADD LP	-	1,314
2	5-Oct-11	*ADD MP	-	1,290
3	30-Mar-12	*REM MP	-	1,516

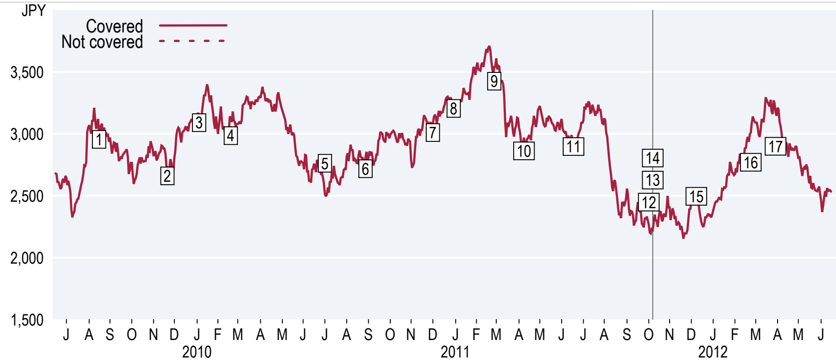
* Indicates change

Rating/target price changes above reflect Eastern Standard Time

Honda Motor (7267)

Ratings and Target Price History
Fundamental Research

Analyst: Noriyuki Matsushima



#	Date	Rating	Target Price	Closing Price
1	17-Aug-09	*1M	*4,000	3,000
2	20-Nov-09	1M	*3,510	2,725
3	5-Jan-10	1M	*4,110	3,145
4	18-Feb-10	1M	*4,170	3,130
5	1-Jul-10	*2M	*2,720	2,512
6	27-Aug-10	2M	*2,800	2,811
7	1-Dec-10	2M	*3,510	3,080
8	30-Dec-10	2M	*3,580	3,215
9	25-Feb-11	*1M	*4,480	3,540
10	8-Apr-11	*3M	*2,470	2,969
11	17-Jun-11	*2M	*3,100	2,927
12	3-Oct-11	2M	*2,460	2,265
13	7-Oct-11	Stock rating system changed		
14	7-Oct-11	*2	*2,400	2,224
15	8-Dec-11	2	*2,800	2,450
16	23-Feb-12	2	*3,180	3,010
17	29-Mar-12	2	*3,530	3,175

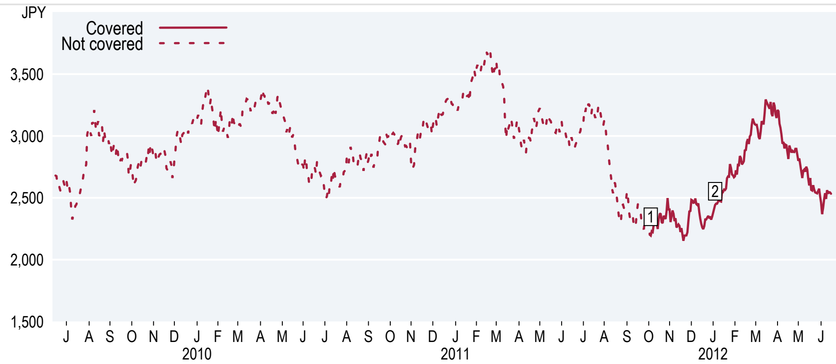
* Indicates change

Rating/target price changes above reflect Eastern Standard Time

Honda Motor (7267)

Ratings and Target Price History
Best Ideas Research
Relative Call (3 Month)

Analyst: Noriyuki Matsushima



#	Date	Rating	Target Price	Closing Price
1	5-Oct-11	*ADD LP	-	2,195
2	4-Jan-12	*REM LP	-	2,443

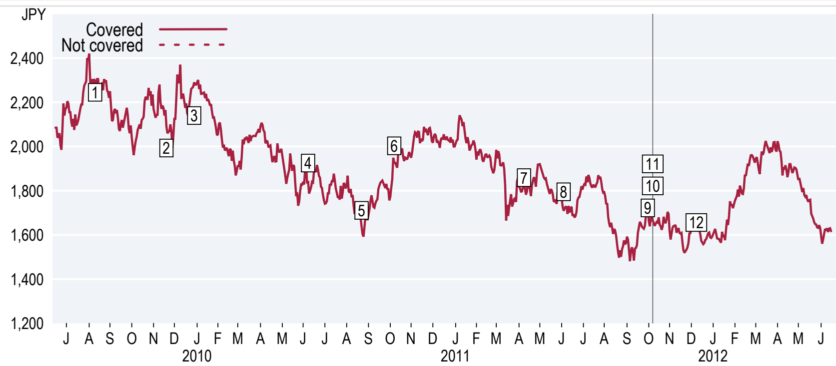
* Indicates change

Rating/target price changes above reflect Eastern Standard Time

Suzuki Motor (7269)

Ratings and Target Price History
Fundamental Research

Analyst: Noriyuki Matsushima



#	Date	Rating	Target Price	Closing Price
1	11-Aug-09	1M	*2,720	2,295
2	19-Nov-09	1M	*2,550	2,090
3	29-Dec-09	1M	*2,700	2,290
4	8-Jun-10	1M	*2,310	1,844
5	23-Aug-10	1M	*2,370	1,639
6	7-Oct-10	1M	*2,530	1,928
7	8-Apr-11	*2M	*1,950	1,843
8	3-Jun-11	*1M	*2,430	1,709
9	30-Sep-11	1M	*2,250	1,722
10	7-Oct-11	Stock rating system changed		
11	7-Oct-11	*1	2,250	1,665
12	8-Dec-11	1	*2,370	1,642

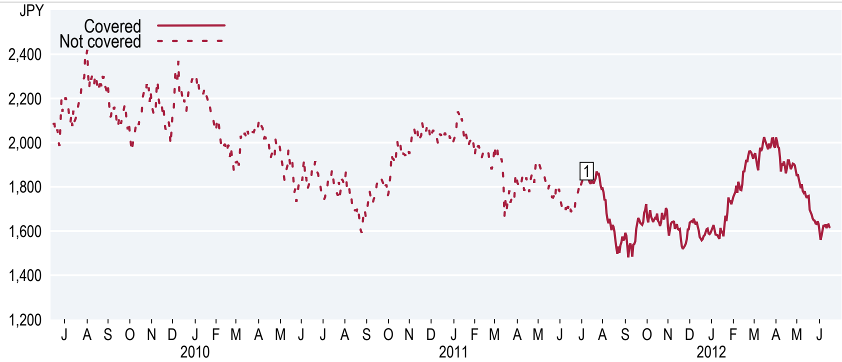
* Indicates change

Rating/target price changes above reflect Eastern Standard Time

Suzuki Motor (7269)

Ratings and Target Price History
Best Ideas Research
Relative Call (3 Month)

Analyst: Noriyuki Matsushima



	Date	Rating	Target Price	Closing Price
1	8-Jul-11	*ADD MP	-	1,871

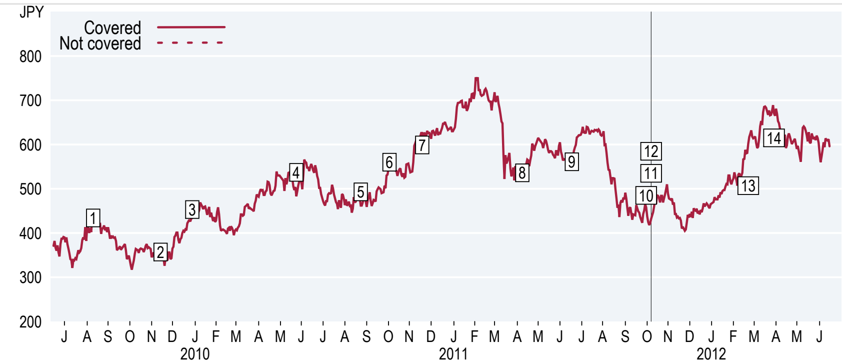
* Indicates change

Rating/target price changes above reflect Eastern Standard Time

Fuji Heavy Industries (7270)

Ratings and Target Price History
Fundamental Research

Analyst: Noriyuki Matsushima



	Date	Rating	Target Price	Closing Price
1	11-Aug-09	1M	*640	426
2	13-Nov-09	1M	*535	353
3	29-Dec-09	1M	*650	434
4	25-May-10	1M	*700	483
5	24-Aug-10	1M	*570	462
6	4-Oct-10	1M	*770	559
7	18-Nov-10	1M	*880	626
8	8-Apr-11	*3M	*420	547
9	17-Jun-11	*2M	*590	567
10	30-Sep-11	2M	*490	458
11	7-Oct-11	Stock rating system changed		
12	7-Oct-11	*2	*460	432
13	22-Feb-12	2	*650	602
14	29-Mar-12	2	*750	670

* Indicates change

Rating/target price changes above reflect Eastern Standard Time

Fuji Heavy Industries (7270)

Ratings and Target Price History
Best Ideas Research
Relative Call (3 Month)

Analyst: Noriyuki Matsushima

	Date	Rating	Target Price	Closing Price
1	27-Jan-11	*ADD MP	-	714
2	8-Jul-11	*REM MP	-	640

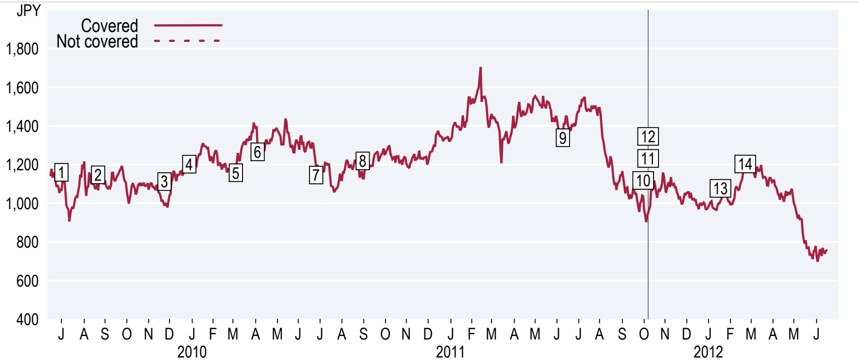
* Indicates change

Rating/target price changes above reflect Eastern Standard Time

Yamaha Motor (7272)

Ratings and Target Price History
Fundamental Research

Analyst: Noriyuki Matsushima



#	Date	Rating	Target Price	Closing Price
1	1-Jul-09	*3M	*740	1,064
2	21-Aug-09	*2M	*1,100	1,067
3	24-Nov-09	2M	*1,040	987
4	29-Dec-09	*3M	1,040	1,202
5	4-Mar-10	*2M	*1,250	1,179

#	Date	Rating	Target Price	Closing Price
6	4-Apr-10	*3M	*1,025	1,398
7	25-Jun-10	*2M	*1,360	1,187
8	31-Aug-10	2M	*1,240	1,129
9	9-Jun-11	*1M	*1,730	1,365
10	30-Sep-11	1M	*1,320	1,036

#	Date	Rating	Target Price	Closing Price
11	7-Oct-11	Stock rating system changed		
12	7-Oct-11	*1	1,320	951
13	18-Jan-12	*2	*1,060	1,013
14	22-Feb-12	2	*1,250	1,183

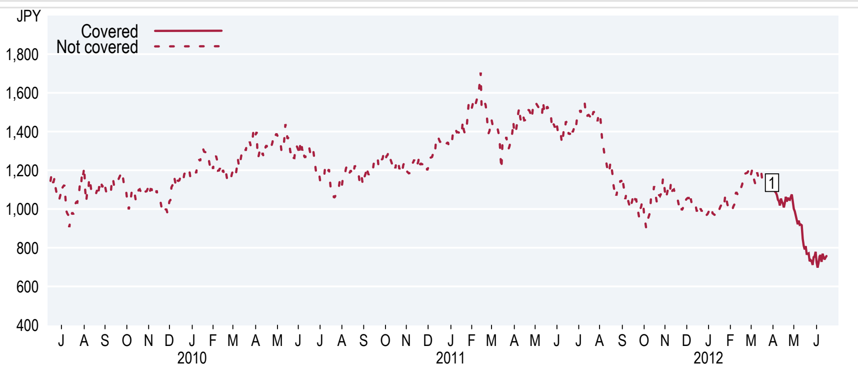
* Indicates change

Rating/target price changes above reflect Eastern Standard Time

Yamaha Motor (7272)

Ratings and Target Price History
Best Ideas Research
Relative Call (3 Month)

Analyst: Noriyuki Matsushima



#	Date	Rating	Target Price	Closing Price
1	30-Mar-12	*ADD LP	-	1,109

* Indicates change

Rating/target price changes above reflect Eastern Standard Time

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	12 Month Rating			Relative Rating		
Data current as of 31 Mar 2012	**Buy**	**Hold**	**Sell**	**Buy**	**Hold**	**Sell**
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