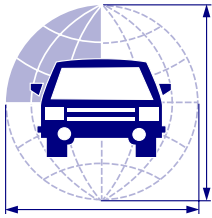


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Energy Security & Climate Change

Investing in the Clean Car Revolution

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Executive Summary

This report, a collaborative effort with the World Resources Institute, presents a framework for understanding the regulatory and market dynamics driving the demand for more fuel efficient and less polluting automobiles, and highlights seven investment ideas that are levered to this long-term theme.

The global need to address energy security concerns and the impact of climate change on the earth's environment is intensifying pressure on the auto industry to create vehicles with higher fuel economy and lower emissions. The objectives of this report are to present a clear, concise overview of the global market and regulatory environment driving this trend toward cleaner cars and to highlight companies from the Merrill Lynch global auto universe that are leveraged to it.

This is not tomorrow's story – it is playing out right now in the changing competitive strategies of major automakers. For example, Toyota's and Honda's relentless improvement in powertrain technology is enabling them to offer truly new alternatives (the 2006 Lexus RX 400h luxury hybrid) and upsize their products while improving fuel economy (2005 Honda Odyssey).

These innovations, and many more by other automakers, are leading consumers to demand everything they have always demanded in cars – styling, space, speed, etc. – plus better fuel efficiency and lower emissions. This is what we mean by the Clean Car Revolution: in a world of finite resources, rising consumer expectations are stimulating a technology race to meet them.

Automakers and their suppliers have many ways to meet the growing demand for more economical and cleaner cars, including:

- Creating **new vehicle types** designed-from-scratch (hybrids like Prius),
- Modifying traditional vehicles with **alternative powertrains** (hybrid, diesel, hydrogen ICE, etc.),
- Developing **new powertrain technologies** to enhance existing engines and transmissions (turbochargers, cylinder deactivation, variable valve and cam timing, electronic control strategies, etc.),
- Improving **exhaust treatment** (particulate filters for diesels, enhanced catalytic converters, etc.),
- Redesigning **lighter vehicle structures** (CUVs replacing SUVs, hydroformed structures, material substitution including high-strength steel, aluminum, magnesium and even carbon fiber),
- Shifting production toward **smaller vehicles**.

In light of these trends, the collective thinking of our global auto team has led us to highlight seven companies that we believe are positioned to capitalize on the revolution:

1. **BorgWarner Automotive (U.S.) – (BWA, B-2-7, \$54.93)**

Almost all of BorgWarner's key products offer the benefits of higher fuel efficiency and/or lower emissions. We estimate that these products account for at least 70% of the company's 2004 revenues.

2. **Denway Motors (China) – (DENMF, B-1-7, HK\$2.93)**

Denway is an indirect play on stricter regulation in China through its 50% stake in Guangzhou Honda. Guangzhou Honda's current vehicles are more efficient than most manufacturers in China, which implies that the additional costs to meet new standards will be minimal relative to its competitors.

3. **Faurecia (France) – (ZFRXF, B-1-7, €62.50)**

Faurecia is a direct play on tightening emissions standards in Europe. It is the European leader for diesel particulate filters, with about 60% market share.

4. **Hyundai Motor (Korea) – HYMLF, C-2-7, W\$7,500)**

As a major exporter of vehicles Hyundai must focus on R&D efforts to at least keep up with its global peers in complying with Kyoto Protocol and other climate policies. Its aggressive R&D efforts are focused on hybrid electric vehicles, fuel cell vehicles, diesel engines, and other fuel efficiency enhancements.

5. **Keihin (Japan) - (7251, B-1-7, ¥1739)**

As a major supplier of injection systems and related components, particularly Honda, Keihin is capitalizing on the shift from carburetion to fuel injection on two-wheel vehicles.

6. **Magna International (Canada) -(MGA, B-1-7, \$69.60)**

Magna's market-leading high-pressure hydroforming business is a critical technology for creating lighter (as much as 20%), stronger vehicles and thus we believe it will play a key role in the intensifying drive for higher fuel economy.

7. **Toyota Motor (Japan) – (TM, B-1-7, \$71.37)**

Toyota Motor is the global leader in hybrid technology. The company has about 65% of the small, but rapidly growing hybrid vehicle market in the U.S., which is supported by largely proprietary technology.

This report is the result of a collaborative effort, prepared with the generous contribution and expertise of Fred Wellington and Amanda Sauer of the Capital Markets Research team at the World Resources Institute. Based in Washington, DC, WRI is an independent nonprofit environmental think tank that seeks to find practical solutions to environmental problems. WRI has a deep understanding of the complex and changing regulations that dictate the development of cleaner, more economical automobiles. We have relied on this expertise in drafting this report.

CONTENTS

■ Section	Page
Executive Summary	2
Climate Change & Energy Security	
1. <i>The Evolving Regulatory Framework</i>	4
Ways to Play Cleaner Cars	
2. <i>Investment Ideas from our Global Auto Universe</i>	14
BorgWarner Automotive (U.S.)	<i>Levered to Fuel Economy & Emissions</i> 14
Denway Motor (China)	<i>A Pure Play on Honda in China</i> 15
Faurecia (France)	<i>Leader in a Critical Technology: Diesel Particulate Filters</i> 17
Hyundai Motor (Korea)	<i>Export Markets will Force Korea to keep up</i> 18
Keihin (Japan)	<i>Two Wheelers: Toxic Emissions in Emerging Markets</i> 19
Magna International (Canada)	<i>Hydroforming: Key Technology for Lighter Vehicles</i> 21
Toyota Motor (Japan)	<i>Leading in Hybrids</i> 22
IQ Profiles	
3. <i>Financial Summaries</i>	26
Stock Universe/Global Comparatives	
4. <i>Key Statistics</i>	33
Merrill Lynch Research Team	
5. <i>Global Automotive Research Team</i>	34

1. Climate Change & Energy Security: The Evolving Regulatory Framework

Energy Security and Climate Change are driving demand for cleaner, more efficient vehicles. Although these issues have largely been regulated separately, there is a trend towards convergence. As these regulations converge, the world’s largest consumer of oil, personal transportation, will be impacted over both the near and long terms. The Kyoto Protocol is forcing governments to make good on commitments to reduce emissions at their source. The global auto industry accounts for about 30% of greenhouse gas emissions (GHG) in developed countries. In this section, we discuss in detail how regulations around the world are driving the clean car revolution.

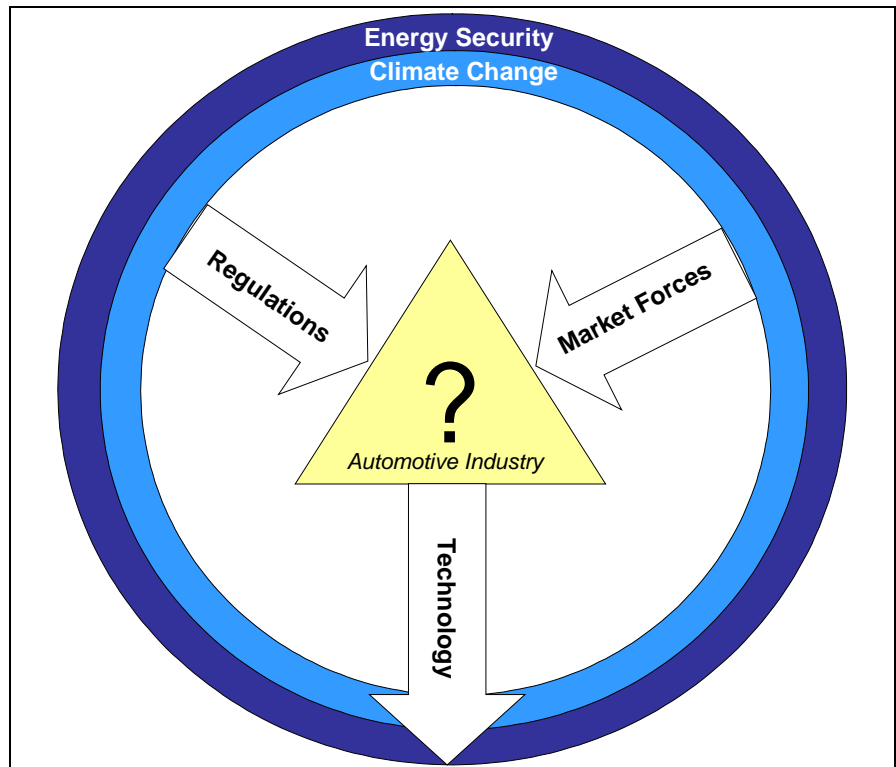
The automotive industry is increasingly influenced by constraints on oil consumption and climate change. The confluence of energy security concerns and growing awareness of climate change are fueling more stringent and widespread regulations on carbon dioxide (CO₂) emissions and fuel economy.

Energy security and climate change issues will not be resolved in the foreseeable future; instead these issues will only intensify going forward. How these macro issues drive market forces, regulations and technological evolution will have a profound impact on the competitive dynamics in the industry. Investors should consider how these new parameters shape industry dynamics and explore investment opportunities to capitalize on a clear trend towards fuel efficiency, cleaner technology and less carbon intensive fuels.

These changing dynamics present investment opportunities in companies that are better positioned around the regulations or offer competitive technology solutions (see Chart 1). For investors, solutions to these challenges present a compelling investment opportunity.

The confluence of energy security concerns and growing awareness of climate change are fueling more stringent and widespread regulations on carbon dioxide (CO₂) emissions and fuel economy, which will lead to new and improved technology.

Chart 1: New Competitive Dynamics in the Automobile Industry



Source: WRI Capital Markets Research

Consumer preferences have shifted towards smaller, more efficient vehicles. The SUV boom is long over.

Market Demand for Cleaner, Fuel Efficient Vehicles

The current upward trend in oil prices should continue. At \$55+ per barrel, consumers are taking notice. The current political instability in the Middle East, the reconstruction in Iraq, and the ongoing war on terrorism have brought attention back to our dependence on foreign oil. Currently, the United States imports slightly less than 2/3rds of its oil. In twenty years, this will increase to over 3/4ths. The U.S.'s appetite for oil is expected to grow by 40% over the next twenty years. China and India, however, are expected to increase their oil consumption by 130% and 140% over the same timeframe.

Moreover, consumer preferences have shifted towards smaller, more efficient vehicles. The SUV boom is long over. While a debate is raging among automakers about the health of the light truck market, and in particular, the SUV market, the data are clear that the SUV business peaked in 2000, coincident with the explosion in car-based crossover utility (CUV) sales. It's not so much that consumers are trading in traditional SUVs, but rather that they are trading in midsize cars and opting increasingly for CUVs rather than SUVs.

Regardless of the motivation, regulations place pressure on the industry to produce vehicles with higher fuel economy and lower emissions.

Regulations Motivated by Climate Change and Oil Concerns are Converging

Because personal transportation is the world's largest consumer of oil, the auto industry will find itself impacted by regulatory changes to energy security and supply issues over both the near and long terms.

Furthermore, momentum has been gathering around the world on policies to regulate greenhouse gasses (GHGs¹), including carbon dioxide (CO₂). Companies in GHG-intensive sectors, such as the auto sector, will be subject to regulations and standards in the European Union (EU), Canada, Japan, Australia, and some U.S. regional markets. Also, regulations on fuel economy in China have recently been enacted (Table 1).

Because CO₂ emissions are directly proportional to fossil fuel consumption, it is difficult to separate policies motivated by climate change concerns from those motivated by energy security benefits. Regardless of the motivation, these regulations place pressure on the industry to produce vehicles with higher fuel economy and lower emissions. This will stimulate demand for cleaner technologies and fuels as companies begin to compete around these new parameters.

Table 1: Fuel economy and GHG standards for vehicles around the world

Country/region	Type	Measure	Structure	Test method ^a	Implementation
United States	Fuel	mpg	Cars and light trucks	U.S. CAFE	Mandatory
European Union	CO ₂	g/km	Overall light -duty fleet	EU NEDC	Voluntary
Japan	Fuel	km/L	Weight-based	Japan 10-15	Mandatory
China	Fuel	L/100-km	Weight-based	EU NEDC	Mandatory
California	GHG	g/mile	Car/LDT1 and LDT2 ^b	U.S. CAFE	Mandatory
Canada	Fuel	L/100-km	Cars and light trucks	U.S. CAFE	Voluntary
Australia	Fuel	L/100-km	Overall light-duty fleet	EU NEDC	Voluntary
Taiwan, South Korea	Fuel	km/L	Engine size	U.S. CAFE	Mandatory

a. Test methods include U.S. Corporate Average Fuel Economy (CAFE), New European Drive Cycle (NEDC), and Japan 10-15 Cycle. b. Car/LDT1 applies to all cars and trucks weighing under 3,750 lbs. LDT2 applies to trucks weighing 3,751 lbs and above.

Source: Feng An and World Resources Institute, Pew Center on Global Climate Change

¹ The greenhouse gases are carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs); perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆).

In the nine major markets we have identified the common trend is towards tightening regulations. The U.S. currently has the least stringent standards while Japan and the EU with the most stringent standards of the major auto markets.

Major Global Auto Markets Restrict Oil Consumption by Vehicles

Nine markets around the world that have implemented or have proposed standards on fuel economy and/or tailpipe GHG emissions including all of the world's major auto markets. (The only OECD countries that do not have standards are Mexico and Iceland). The trend is towards tightening regulations, with the U.S. having the least stringent standards of the major auto markets. These standards are structured quite differently, thus making cross-border comparisons difficult. Yet, according to a study prepared in part by WRI for the Pew Center on Global Climate Change, some basic generalizations can be made:

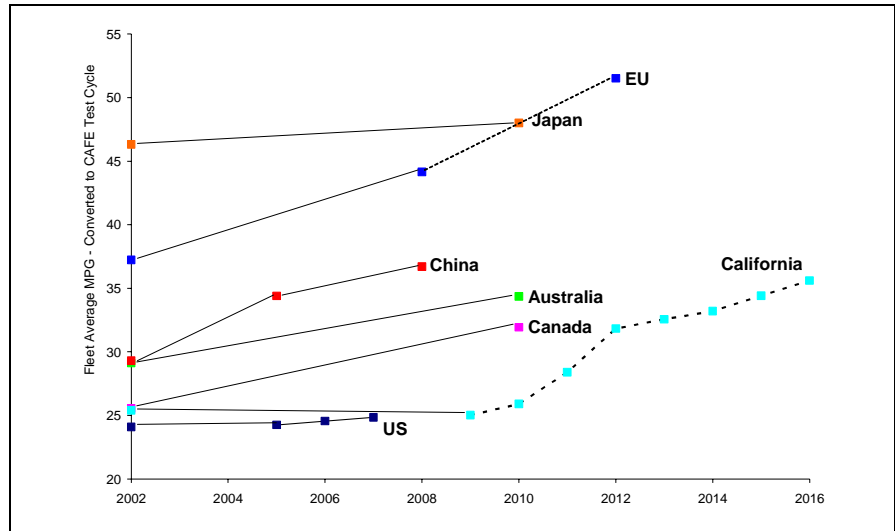
- The EU and Japan have the most stringent standards in the world.
- The fuel economy and GHG emission performance of U.S. cars and trucks is lower than most other countries.
- The new Chinese standards are more stringent than those in Australia, Canada, California, and the United States. They are less stringent than those in the EU and Japan.
- If California GHG standards go into effect, they would increase the stringency of the U.S. standards, but would still be less stringent than those in the EU, Japan and China.

While this section focuses on fuel economy and CO₂ emission limits, there are hosts of other public sector initiatives that are influencing the auto industry. These would include but are not limited to: fuel taxes, technology incentive programs, and research and development (R&D) programs (Table 2). While each of these policy measures deserves consideration, the focus is on fuel economy and carbon emissions standards because they are the most salient issues for investors in auto companies.

Table 2: Measures to Promote Fuel-efficient Vehicles around the World

Fuel efficiency approach	Measures/forms	Country/region
Fuel economy standards	Numeric standard in mpg, km/L, or L/100-km	United States, Japan, Canada, Australia, China, Taiwan, South Korea
GHG emission standards	Grams/km or grams/mile	European Union, California
High fuel taxes	Fuel taxes at least 50% greater than crude oil base price	European Union, Japan
Fiscal incentives	Tax relief based on engine size, efficiency, and carbon dioxide emissions	European Union, Japan
R&D programs	Incentives for particular technologies and alternative fuels	United States, Japan, European Union
Economic penalties	Gas guzzler tax	United States
Technology mandates and targets	Sales requirement for ZEVs	California
Traffic control measures	HOV lanes for hybrids; ban on SUVs	California, Virginia and others (hybrid HOV lanes); Paris (SUV ban)

Source: Feng An and World Resources Institute, Pew Center for Global Climate Change Note: This list is not exhaustive.

Chart 2: Comparison of Fuel Economy and GHG Emissions Standards


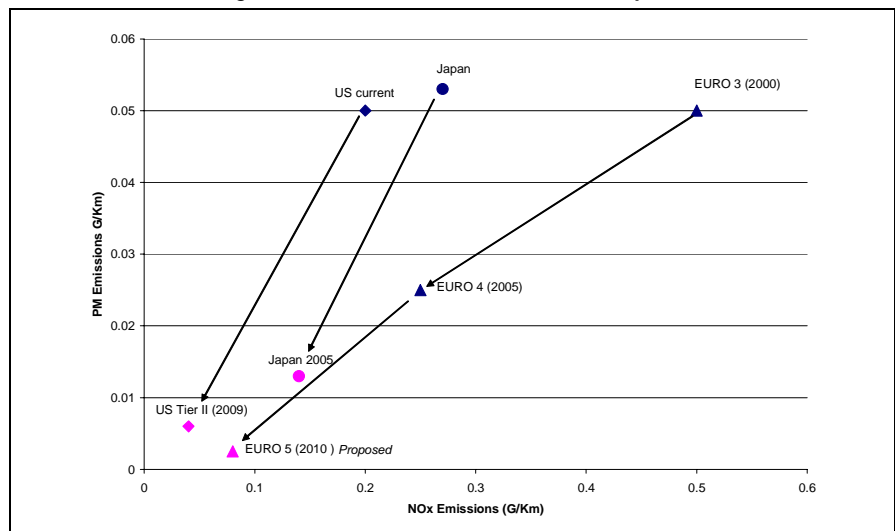
Note: Dotted lines denote proposed standards Source: Feng An and World Resources Institute, Pew Center for Global Climate Change

In addition to fuel economy and GHG standards, air pollution regulations are increasing in scope and stringency, particularly in the major auto markets. These regulations set emissions standards that are particularly relevant for diesel engines, which emit higher levels of particulate matter (causing respiratory illnesses and haze) and nitrogen oxides (precursors to smog) than petrol engines. Historically Europe had lower air quality standards, which along with preferential tax treatment, allowed for the growth of diesel engines in the market.

In Europe, OEMs were able to meet the latest round of air quality regulations (EURO 4) through efficiency improvements to diesel engines (including direct injection) despite their claims that this would not be possible. The real question that remains is if efficiency improvements alone will be enough to meet the next phase of air emissions standards (EURO 5), or if filters and after-treatments will be necessary. The answer to this question will also inform diesel growth in the U.S., where standards are currently being phased-in to approximately the same level as EURO 5 by 2009.

Air pollution regulations are increasing in scope and stringency, particularly in the major auto markets, which are particularly relevant for diesel engines that emit higher levels of particulate matter and nitrogen oxides.

Faurecia is a direct play on these tightening standards as the European leader for diesel particulate filters, with about 60% market share. Faurecia's current diesel particulate filter removes over 99% of the particulate matter in diesel exhaust (page 16).

Chart 3: Diesel Passenger Car Standards in the U.S., EU and Japan


Source: WRI Capital Markets Research

The Kyoto Protocol is an international treaty, which is the most comprehensive set of regulations designed to reduce greenhouse gas (GHG) emissions. Although not aimed directly at the autos, the industry is a major focus as it accounts for about 30% of GHG emissions.

In 1998, automakers and the European Commission agreed to voluntarily reduce the carbon dioxide (CO₂) emissions of vehicles sold in the EU with milestones in 2008, 2010, and 2012. There are ongoing talks to extend ultimate compliance to 2012.

BorgWarner's recent acquisition of 62% of Beru AG, materially increases its diesel engine content per vehicle market by combining Beru's diesel ignition products with its own diesel timing chains and turbochargers (page 14).

The Kyoto Protocol

The most comprehensive set of regulations on greenhouse gas (GHG) emissions is The Kyoto Protocol, which went into effect in February 2005. The purpose of this international treaty is to reduce GHGs that contribute to climate change (also known as “global warming”). Currently 149 nations have ratified the treaty, including developed countries responsible for over 60 percent of global CO₂ emissions.

The Protocol will not only affect direct GHG emissions from manufacturers and utilities, it is important to note that the binding commitments by national governments under the Protocol do not specify the *source* of emissions. The global auto industry is a major source of GHG emissions, accounting for 30% of OECD GHG emissions and 20% of developing country emissions, and is the fastest growing source of CO₂ emissions globally. Therefore, governments around the world are implementing policies to reduce emissions from this sector in order to meet their commitments under the Protocol.

The Kyoto Protocol establishes reduction targets for signatory countries that comprise over 60% of the world's auto sales. Canada, Japan, the European Union have established CO₂ reduction plans from passenger vehicles due in large part to their commitments under the Kyoto Protocol.

European Union

In March 1998, ACEA and the Commission agreed to the “ACEA Agreement,” a collective undertaking by the European automobile manufacturers association and its members to voluntarily reduce the carbon dioxide (CO₂) emissions rates of vehicles sold in the European Union. Specifically, the agreement establishes industry-wide targets for average vehicle emissions from new vehicles sold in Europe to reach 140 gCO₂/km by 2008, with the possibility of extending the agreement to 120 gCO₂/km by 2012. In addition, an intermediate target range of 165-170 gCO₂/km was established for 2003 to monitor the industry's progress towards the 2008 target.

The agreement covers all vehicles produced or imported into the EU by member companies (BMW, DaimlerChrysler (DC), Fiat, Ford, GM, Porsche, PSA Peugeot Citroën, Renault and VW Group). The Korean Automobile Manufacturers Association (KAMA), which includes Daewoo, Hyundai, Kia, Ssangyong, and the Japanese Automobile Manufacturers Association (JAMA), which includes Daihatsu, Honda, Isuzu, Mazda, Mitsubishi, Nissan, Subaru, Suzuki, and Toyota, have also joined the agreement. All together, vehicles sold by companies under the ACEA agreement make up nearly 90 percent of total EU vehicle sales.

As part of the agreement with ACEA, the Commission initiated similar negotiations in 1998 with the Korean and Japanese manufacturers, KAMA and JAMA respectively. KAMA and JAMA agreed to similar commitments to those of ACEA with the following modifications: (i) KAMA had until 2004 to achieve the intermediate target; (ii) JAMA's 2003 intermediate target range was wider at 165-175 gCO₂/km; and (iii) both KAMA and JAMA have an extra year to achieve the final 140gCO₂/km target.

The ACEA Agreement includes a monitoring scheme to be administered by the European Commission to independently verify the progress of the industry. As of 2002 the Commission monitors the progress of the Agreement through analysis of member state data on the CO₂ emissions of new vehicle sales. According to this data, in 2002 the average CO₂ emissions from ACEA's new vehicle fleet was 165 gCO₂/km (petrol-fuelled cars: 172gCO₂/km; diesel-fuelled cars: 155gCO₂/km; alternative fuelled cars: 177gCO₂/km). This is in line with the 2003 intermediate target range of 165-170 gCO₂/km. Compared to 2001 this represents a reduction of 1.2 percent in new vehicle emissions. In the final period of the commitment, OEMs will need to accelerate their efforts.

The growth in diesel made it easier for OEMs to meet their commitment in the last three years. To meet the 2008 target, OEMs will thus have to increase the annual reduction rate to about 2.3 percent a year from an average annual reduction rate of about 1.7 percent since 1995. While the 2008 target is not out of reach, meeting the voluntary commitment will be increasingly challenging for OEMs as 2008 draws closer.

As part of the 2003 review of the 120 gCO₂/km target for 2012, the industry repeatedly raised concerns about the implications of this target on competitiveness.² In this context, ACEA commissioned a report suggesting that the implications for competitiveness will be significant. OEMs will have to add on average €4,000 to the price of a car to reach a carbon dioxide emission target of 120 gCO₂/km by 2012, according to the study prepared by management consulting firm Arthur D. Little (ADL).³ Ford estimates that the regulations being introduced over the next five to ten years could add €5,000 to €10,000 to the price of each new car.⁴ In intense discussions with ACEA, the Commission expressed reservations about the results, in particular with the underlying costs associated with lower carbon technologies.

Despite challenges from the industry, the European Commission recently reaffirmed its objective to reduce per-car CO₂ emissions to the original goal of 120 gCO₂/km by 2005 (or by 2010 at the latest).⁵ While there is a clear preference to achieve the 120 gCO₂/km target based on a second phase of a voluntary ACEA commitment, the Commission is prepared to phase in legislation should the voluntary commitment not deliver.

ACEA and the EC are currently in negotiations to extend the agreement to 120 gCO₂/km [52 mpg] by 2012. The level of this target would necessitate widespread hybridization and/or bio fuel use. The repercussions of not meeting the 2008 target are unclear. On one hand, EC has repeatedly stated its intention to regulate should the agreement fail; on the other hand, it may bolster the industry's case for a less stringent 2012 target.

Canada

Canada has committed to the Kyoto Protocol and as a result has reached a voluntary agreement with the auto industry to reduce GHG emissions that equates to an overall fuel efficiency improvement of 25% from current levels by 2010.

Canada, like the EU, has committed to the Kyoto Protocol and is obligated to reduce its GHG emissions as prescribed by the treaty. For large final emitters, the Climate Change Plan for Canada establishes a three-prong approach on reduction targets, emissions trading, and technology standards.⁶ The government has also reached an agreement with the automobile industry to reduce CO₂ emissions from new vehicles by 25 percent by 2010.

In April 2005, Canada announced a voluntary agreement with the auto industry to reduce GHG emissions from the new passenger vehicle fleet by 5.3 million metric tons by 2010 – equivalent to an overall fuel efficiency improvement of 25% from current levels. If the industry does not meet this target, legislation will be enacted.

² <http://www.acea.be/ACEA/20040218PressRelease.pdf>

³ Automotive News Europe. *Scheele asks EU to analyze cost-benefit of new rules*. March 22, 2004.

⁴ Automotive News Europe. February 23, 2004.

⁵ Automotive News Europe, November 15, 2004.

⁶ *Climate Change Plan for Canada*, November 2002.

Japan has also ratified the Kyoto Protocol. This has resulted in mandatory standards to reduce fuel consumption by 23% by 2010 from a 1995 baseline. The industry is well on track to meet these regulations.

Most notable of the Japanese industry is Toyota Motor, the global leader in hybrid technology, which is largely proprietary (page 22).

In the U.S. CAFE standards, once believed to be a 'non-issue', are back on the agenda in Washington and more imminently in California. The path is unclear, but legislated fuel efficiency standards in the U.S. are very likely to increase in the coming years.

Magna International may help automakers address these increased standards through its market-leading high-pressure hydroforming business. Hydroforming is a critical technology for creating lighter (as much as 20%), stronger vehicles, which is extremely important for the U.S. light truck market (page 21).

Japan

Japan has also ratified the Kyoto Protocol and has designed an implementation plan requiring GHG-reduction targets for major economic sectors. This plan includes an increase in fuel economy standards for passenger vehicles, new standards for commercial vehicles and aircraft, tax incentives for low-emission vehicle technologies, and overall energy efficiency improvements in the economy.

The Japanese government established mandatory fuel consumption standards to reduce fuel consumption by 23% by 2010 from a 1995 baseline. The industry is well on track to meet these regulations. Nearly all of the fuel economy improvements required have already been made, particularly from the largest Japanese OEMs.

United States

The oldest regulatory regime to reduce the oil consumption of passenger vehicles is the Corporate Average Fuel Economy (CAFE) program in the United States. This program establishes two fleet-wide average fuel economy standards - one for cars (27.5 mpg) and one for light-duty trucks (22.2 mpg by 2007). Although these standards have remained virtually unchanged since the 1980's, NHTSA is currently reviewing standards for light trucks and expected to propose new standards this year. They will have another round of comments and issue a final rule by April 2006 to give manufacturers time to make changes for the 2008 model year. This review includes fundamental changes to the CAFE program, including the possibility of weight-based standards.

Recently, the administrator of the National Highway Traffic Safety Administration (NHTSA) stated that it is preparing to overhaul the existing CAFE system. While details are not clear, it is unlikely that the proposed changes would entail simply tightening current standards, which stand at 27.5 miles per gallon for passenger cars and are set to increase to 22.2 miles per gallon for light trucks in the 2007 model-year.

In many respects, the future impact on the industry of any new fuel economy rule is more a function of the structure of the new system rather than on any increase in stringency. For instance, a requirement that automakers achieve a uniform percentage increase would have very different implications than a standard based on vehicles' size or weight. Automakers that produce more fuel-efficient fleets could face higher marginal costs to achieve a uniform percent increase. The relative impact becomes much less certain if the system is based on size or weight given the varying structures this could entail.

Obviously, this is a politically charged issue. As such, it is difficult to predict what the new requirements will look like and how this will impact the industry. At this stage, what is important for investors to recognize is that CAFE standards, once believed to be a 'non-issue', are back on the agenda in Washington.

In the absence of federal action to address climate change, several states have adopted policies to limit GHG emissions in their jurisdictions. Most notable to the auto industry is California. In late 2004, the California Air Resources Board (CARB) approved a rule to reduce GHG emissions from passenger vehicles in California by approximately 30%. This regulation will likely be finalized by the California legislature by January 1, 2006, and would take effect with 2009 model year. Maine, Massachusetts, New York, Vermont, Connecticut, New Jersey, Rhode Island, Oregon and Washington State have all indicated they will follow CARB's rule if it stands. Together with Canada, this constitutes over 30% of the North American vehicle market.

On December 7, 2004 this law (also known as the Pavley law after its sponsor in the California Assembly) was challenged in a federal lawsuit filed by the Alliance of Automobile Manufacturers, Association of International Automobile Manufacturers and California auto dealers.

The lawsuit stipulates since the federal government has sole authority to regulate fuel economy, California cannot regulate GHG emission from automobiles because these emissions from cars are largely a byproduct of their fuel economy. The lawsuit is still in progress.

The fate of these legal challenges is tied to ongoing litigation over the EPA's classification of CO₂ as a "pollutant" under the Clean Air Act. A verdict on this case is expected this fall. However, it does not seem likely that a final decision on the Pavley case will be reached before 2006 or beyond.

Table 3: California Air Resources Board Approved Standards

CAFE equivalent by vehicle category (mpg)

Year	Cars and trucks less than 3,750 lbs	Trucks weighing 3,751 to 10,000 lbs
2009	28	20
2010	30	21
2011	33	23
2012	38	25
2013	39	25
2014	40	25
2015	42	26
2016	43	27

Source: Feng An and WRI, Pew Center for Global Climate Change

Australia

Over the past 25 years, the Federal Chamber of Automotive Industries (FCAI) established several voluntary codes of practice for reducing the fuel consumption of new passenger cars sold in Australia. In 2003, the FCAI and the government of Australia announced a third voluntary fuel consumption agreement, which calls on the industry to reduce fleet average fuel consumption for passenger cars by 18 percent by 2010 (based on the fuel consumption of the 2002 vehicle fleet). This agreement includes the four domestic passenger motor vehicle manufacturers and all major international brands importing and marketing passenger vehicles in Australia. As with the first two agreements, no enforcement or non-compliance penalties have been specified under this agreement.

China

One of the most recent and notable examples of regulations to improve fuel efficiency of passenger vehicles is in China. The new Chinese fuel economy standards are an ambitious effort on the part of the government to regulate oil consumption from personal vehicles in China, a large contributor to China's growing dependence on foreign oil. Over the next ten to fifteen years, China's oil consumption is expected to increase 4 percent per year, placing China as the world's second largest oil consumer behind the United States. However by 2020 China is expected to become the world's largest oil consumer.

The new standards in China are designed to rapidly bring about changes to the Chinese vehicle fleet, including the introduction of more advanced vehicle technologies, a bias against heavier vehicles and an overall more efficient fleet. However it is unclear how powerful the incentive to produce lighter vehicles will be under the Chinese standards.

The new Chinese fuel economy standards are weight-based and will be implemented in two phases (the first in 2005 and the second in 2008), with separate standards for manual and automatic transmissions. Each vehicle sold in China will be required to meet the standard for its weight class. Overall, these standards are slightly more stringent than the current CAFE program in the United

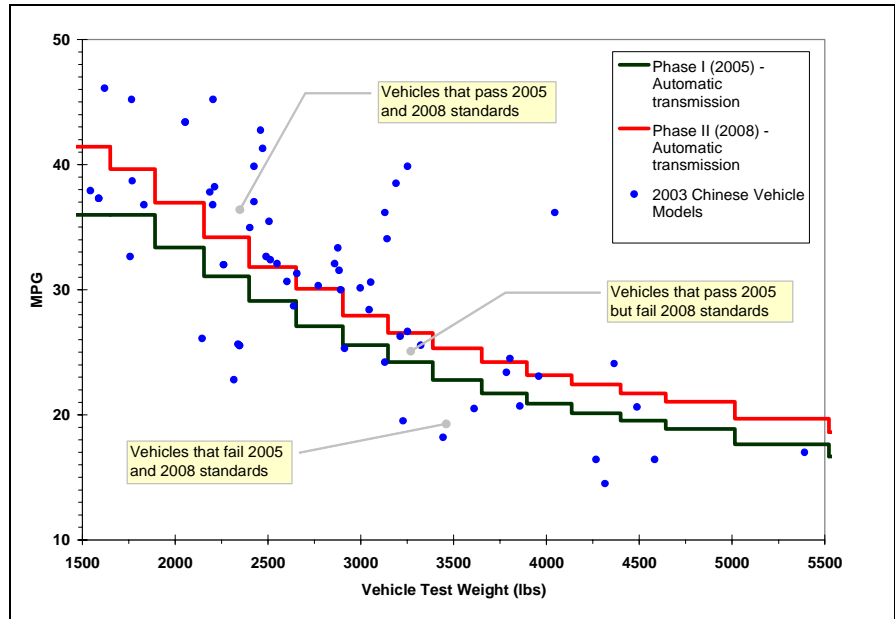
New Chinese fuel economy standards are an ambitious effort to regulate oil consumption from personal vehicles in China, a large contributor to country's growing dependence on foreign oil.

Denway Motor is a direct play on these emerging standards through its 50% stake in Guangzhou Honda, which is a primary source of profits. Guangzhou Honda is well ahead of many auto manufacturers in fuel efficiency and therefore should incur minimal additional costs to meet the new standards relative to its competitors (page 15).

States. A recent EU analysis shows 80% of U.S.-made cars and 50 percent of European cars would not meet these standards in 2005.⁷ (Reuters in Auto News on 3/18/05).

Enforcement of the standards by the Chinese government will be critical to impacts on OEMs. Because most of the foreign manufacturers in China are likely to face increased costs under the new standards, proper enforcement and penalties for non-compliance will be necessary to ensure that new vehicles meet the minimum level of fuel efficiency for their weight class. Currently the Chinese government is in the process of determining the method of enforcing the standard, which may include penalties and fees for non-compliance.

Chart 4: 2003 Chinese Vehicle Fleet Plotted Against Fuel Economy Standards



Source: WRI Capital Markets Research

⁷ Reuters in Auto News on 3/18/05

The Clean Car Revolution

Clearly, there is a discernable trend towards regulating emissions of carbon dioxide and other tailpipe emissions from the burning of fossil fuels. As the causes of human-induced climate change become more generally accepted, policies to reduce GHG emissions will continue to proliferate. When coupled with higher oil prices and energy security concerns, governments around the world are enacting new, or tightening existing, fuel economy requirements in the auto sector. Fuel economy and tailpipe emissions standards now exist in all of the world's major auto markets. Importantly, the trend seems to indicate that emerging markets will begin to regulate fuel economy as well, as evidenced by the recent policies in China.

Moreover, there are also clear trends that market demand for lighter, more fuel efficient vehicles is increasing sales while the sales of heavier body-on-frame SUVs are slowing. We believe that this shift is attributable to both higher fuel costs and changing consumer preferences.

This is not tomorrow's story – it is playing out right now in the changing competitive strategies of major automakers. For example, Toyota's and Honda's relentless improvement in powertrain technology is enabling them to offer truly new alternatives (the 2006 Lexus RX 400h luxury hybrid) and upsize their products while improving fuel economy (2005 Honda Odyssey).

These innovations, and many more by other automakers, are leading consumers to demand everything they've always wanted in cars – styling, space, speed, etc. – plus better fuel efficiency and lower emissions. This is what we mean by the Clean Car Revolution: in a world of finite resources higher consumer expectations are stimulating a technology race to meet them.

In the next section, we highlight seven companies that we believe are positioned to capitalize on and lead the revolution.

2. Ways to Play Cleaner Cars: Investment Ideas from our Global Universe

In this section, we present investment ideas and recommendations for investors looking for exposure to the clean car revolution. We highlight stocks from the U.S., Canada, Korea, China and Japan.

BorgWarner Automotive (U.S.)

■ Levered to Fuel Economy & Emissions

Almost all of BorgWarner's key products offer the benefit of higher fuel efficiency and/or lower emissions. We estimate that these products account for at least 70% of the company's 2004 revenues.

Perhaps the company in our global universe most leveraged to the trends outlined in this report is Detroit-based BorgWarner Automotive. In auto industry terms, BorgWarner is a relatively small (\$3.5 billion revenues in 2004), fast-growing (12% CAGR revenue growth implied by 2005-2007 backlog), technology-driven supplier. The company is famous for its manual transmissions, a business it has since exited, but the design, engineering, manufacturing skills honed from the development of such complex systems serve the company well today.

As shown in Table 4 below, almost all of BorgWarner's key products offer the benefit of higher fuel efficiency and/or lower emissions. We estimate that these products account for at least 70% of the company's 2004 revenues.

Table 4: BorgWarner's Key Products & Benefits

Product	Higher Fuel Efficiency	Lower Emissions	Other Key Benefits	Company Group
Air Flow Systems	X		Improved engine cooling, compact packaging in commercial vehicles	Engine Group
Clutches	X		Improved shift quality	Drivetrain Group
Diesel Cold-Start Ignitions	X	X	Faster engine start-up	Engine Group
Dualtronic Clutch Modules	X		Smooth automatic shifting with manual fuel economy	Drivetrain Group
Engine Timing Chains	X	X	Longer engine life, lower noise	Engine Group
Exhaust Gas Recirculation (EGR) Valves		X		Engine Group
Friction Products	X		Improved shift quality	Drivetrain Group
Ignition & Spark Plug Products	X	X	Reliable starting	Engine Group
Interactive Torque Management			Improved handling in all-wheel drive vehicles	Drivetrain Group
Pre-emptive Torque Management			Improved handling in all-wheel drive vehicles	Drivetrain Group
Secondary Air Pump		X		Engine Group
Tire Pressure Monitoring			Improved tire safety	Engine Group
Transfer Cases (1)			Four wheel drive for rear wheel drive vehicles	Drivetrain Group
Transmission Control Modules	X	X	Improved responsiveness	Drivetrain Group
Transmission Synchronizers			Higher torque	Drivetrain Group
Turbochargers (2)	X		Increased power in gas & diesel engines	Engine Group
Variable Cam Timing	X	X	Improved engine performance	Engine Group

(1) Represented 18% of company sales in 2004 (2) Represented 16% of company sales in 2004
Sources: BorgWarner, Bosch Automotive Handbook, 4th Edition, Merrill Lynch

The company's recent acquisition of 62% of Beru AG, materially increases BorgWarner's diesel engine content per vehicle market by combining Beru's diesel ignition products with its own diesel timing chains and turbochargers. The acquisition effectively increases the company's leverage to the continuing growth of diesels in Europe and positions the company well for growth in diesels in the U.S.

■ Recommendation

We rate BorgWarner Neutral, as the stock's current valuation appears to reflect the company's attractive growth prospects.

Denway Motor (China)

Denway is an indirect play on stricter regulation in China through its 50% stake in Guangzhou Honda. Guangzhou Honda's current vehicles are more efficient than most manufacturers in China, which implies that the additional costs to meet new standards will be minimal relative to its competitors.

■ A Pure Play on Honda in China

Denway Motor is a pure play in Honda Japan's exposure to the Chinese car market. It shares a 50% stake with Honda in Guangzhou Honda, which produces three passenger car models: Accord, Fit and Odyssey. Guangzhou Honda is also Denway's primary source of profit. Honda's brands have been well received in the Chinese market and three models altogether yielded market share of around 9% in 2004 as well as 1Q 05.

Guangzhou Honda has surpassed many auto manufacturers in China in improving its fuel emission performance. All of its Accord and Fit models have achieved Euro III requirements and the new Odyssey model launched in March 05 is even one step ahead and classified as Euro IV compliant. This implies that the additional costs to meet the new standards are minimal compared to its competitors. Honda models are also generally considered to be more fuel efficient than its European or American counterparts (Table 5 and 6).

Table 5: Emission Standards of Foreign Automakers in China

	Models	Emission standards
Guangzhou Honda	Odyssey	Euro IV
	Accord and Fit	Euro III
Beijing Hyundai	All models	Euro II
BMW Brilliance	5 Series	Euro IV
	3 Series	Euro III
Changan Ford	All models	Euro II
Changan Suzuki	All models	Euro II
Dongfeng Honda	CRV	Euro II
Dongfeng Nissan	Sunny and Teana	Euro III
	Bluebird	Euro II
Dongfeng Peugeot Citroen	Peugeot 307	Euro III
	Fukang and Picasso	Euro II - III
	Elyse and Siena	Euro II
FAW Volkswagen	Polo	Euro III - IV
	Audi A4 and A6	Euro III
	Golf	Euro II - III
FAW Toyota	Jetta	Euro II
	Vios	Euro III
	Land Cruiser Prado	Euro III
Nanjing Fiat	Other models	Euro II
Shanghai GM	All models	Euro II
	New Sail, Excelle, Excelle HRV, Cadillac and Royaum	Euro III
Shanghai Volkswagen	Buick Regal and GL8	Euro II
	Touran	Euro IV
	Gol, Bora, Santana, Passat	Euro II

Source: Car Market Guide, May 2005 Issue

Table 6: Fuel Efficiency Measurements

Model	Engine size	Liters/ 100km
Fit	1.3L	4.9-5.0
	1.5L	5.1-5.2
Accord	2.0L	6.8
	2.4L	7.3
	3.0L V6	7.8
Odyssey	2.4L	7.4

Source: Car Market Guide, May 2005 Issue

Another potential advantage to Guangzhou Honda or Denway is that the Chinese government will likely resume offering a sales tax rebate to automakers who have already reached Euro III standards. The government used to provide such rebate to those who complied with Euro II – equivalent to 30% of the sales tax payable which is 3-10% of sales revenue. However, the offer was terminated in 2004 as the country was moving towards a more stringent requirement. We expect that the resumption will not be far off as it is a major incentive for auto makers to speed up the use of advanced technologies to reduce pollution. While the whole nation is not required to meet Euro III standards until Jul 07 based on the recent timetable, there are reports that Beijing is considering pushing forward the timetable to Jul 05 in preparation for World's Olympics in 2008. Guangdong is said to be another city likely to follow suit and implement the new standards in 2006.

The absence of the sales tax rebate affected Guangzhou Honda's earnings growth in 2004. The Honda JV is paying an average sales tax rate of around 7.5%, and a rebate of 30% represents 2.25% of its revenue. Although there are speculations that China may penalize the manufacturers of larger engine size by increasing the sales tax in future, we estimate that the net impact will more likely remain favorable if the rebate is resumed.

■ Recommendation

We have a Buy rating on Denway Motors.

■ Price Objective Basis and Risks

Our price objective for Denway is \$3.4, based on a 2005 PE of 11x equivalent to around the middle of the historical 3-year range. Risks to our recommendation include a slow down in market demand, faster price reductions and cost savings behind expectations.

Faurecia (France)

■ Leader in a Critical Technology: Diesel Particulate Filters

Faurecia is a direct play on tightening emissions standards in Europe. It is the European leader for diesel particulate filters, with about 60% market share. Faurecia's current diesel particulate filter removes over 99% of the particulate matter in diesel exhaust.

Diesel penetration has risen dramatically in Europe over the last 15 years from 15% in 1990 to nearly 50% today and should continue to rise in the short-term, as European OEMs leverage on the better fuel efficiency of diesel engines (30% lower fuel consumption, 25% lower CO₂ emissions) to come closer to emissions' requirements. The relatively high level of diesel penetration in Europe is a theme that lends itself to suppliers that are exposed to diesel technology, especially exhaust systems and aftermarket treatments (diesel filters), as diesel technology drawback comes from particulate emissions.

In our opinion, Faurecia appears best positioned in the context of this trend with a large and rapidly growing exhaust division, which represents about 16% of total sales. Faurecia is today the second largest supplier of exhaust systems in the world (30%+ market share), a position we expect the company to easily maintain. In aggregate, Faurecia is the second largest OE supplier in Europe behind Bosch with EUR10.7 billion in sales in 2004.

Exhaust should remain Faurecia's fastest growing business in the foreseeable future (we assume 8% CAGR 2004-2007E), partly driven by significant mix and content enrichment. The average selling price of a diesel exhaust line has increased from EUR80 in 1990 to EUR450 in 2000 and is expected to reach EUR600 by the end of the decade. The cost of after-treatments on diesel engines to reduce emissions to compliance levels may be the main limit for further diesel penetration in Europe, in our view.

Faurecia is currently the European leader for diesel particulate filters, with about 60% market share in 2004. Faurecia sold 450,000 systems in 2004 in a 700,000 unit market. The company enjoys clear technology leadership (world first introduction of additive particulate filters with PSA in 2000 – the first diesel filter installed on a passenger car, and world first introduction of catalytic particulate filters with Mercedes in 2003) and supplies PSA, DCX and Ford. We believe that diesel particulate filters offer significant growth opportunities for Faurecia in the foreseeable future, as only 8% of the diesel vehicles produced in Europe in 2004 were equipped with diesel filters, a number we would expect to increase dramatically by the end of the decade. In this context, we believe that Faurecia could maintain a market share of 30% to 40% in diesel filters. Main competitors in this segment include Eberspraecher (private German company), ArvinMeritor and Tenneco.

■ Recommendation

We rate Faurecia Buy.

■ Price Objective Basis and Risk

Our price objective on Faurecia derives from peer group comparison and company's historical multiples analysis. At our EUR75 price objective, Faurecia's shares would trade on 10x 2005E earnings (at about 20% discount to the current average sector P/E multiple) and at about 29% EV/sales, reflecting more accurately than current multiples the company's short-term margin prospects. Faurecia's specific risks relate to its ability to manage long-term assembly contracts wisely, to pass on part of rising input costs, to implement further cost reduction and to maintain a normal business relationship with its largest customer and shareholder PSA. Industry-related risks for auto parts companies are volatility in light-vehicle production, rising raw material costs, pricing pressure from customers, increased R&D transfers from OEMs, recalls (implying potential warranty claims) and exchange rates volatility.

As a major exporter of vehicles Hyundai must focus R&D efforts to at least keep up with its global peers in complying with Kyoto Protocol and other regulatory policies. Its aggressive R&D efforts are focused on hybrid electric vehicles, fuel cell vehicles, diesel engines, and other fuel efficiency enhancements.

Hyundai Motor (Korea)

As a major automobile manufacturing country that depends on exports for nearly 70% of production (76% of which goes to Europe and North America), it is a question of survival that Korean automakers' R&D efforts at least keep up with its global peers in complying with Kyoto Protocol climate policies. We underscore such efforts by Hyundai Motor, the representative Korean automaker, that suggest the company (along with its 47% owned subsidiary Kia Motors) is likely to become a survivor.

■ Importance of Developed Export Markets Should Force Korean Automakers to Keep Up

As an emerging powerhouse in global automotive manufacturing landscape, Korea falls under compliance with stringent rules of The Kyoto Protocol, as the country is ranked 9th in GHGs emission rate in the world (based on 2002 data, with GHGs emission rate growing at 5.1% CAGR over 1990-2002 period). Although negotiation is still under way, we believe Korea should come under second compliance phase (2013-2017) rather than the delayed inclusion into third compliance phase (2018-2022) for which the government is vying.

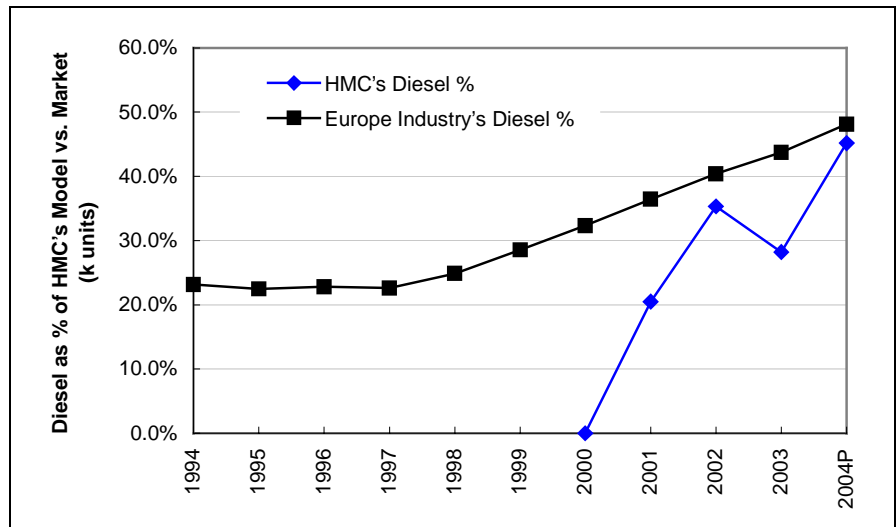
Even before Korea's implementation of related regulations, however, Korean automakers are forced to step up efforts to meet earlier Protocol implementation in developed markets, given that the industry exported 69% of its 2004 production to overseas, 76% of which are shipped to Europe and North America, according to KAMA (Korean Automobile Manufacturers Association). Hence, Korean automakers' efforts to reduce GHGs emissions and raise fuel-efficiency has become a question of survival in the strategically important export markets.

■ Hyundai's R&D Efforts to Proactively Deal with Environmental Rules

There are five major automakers in Korea: Two unlisted companies that are subsidiaries of overseas global automakers (GM-Daewoo Automotive & Technology and Renault-Samsung Motors), SsangYong Motor which is 49% owned by China's Shanghai Automotive Industries Corp., and Hyundai Motor which owns controlling 47% stake in Kia Motors. Of these, Hyundai Motor (which has merged its R&D division with that of Kia Motors) has made some proprietary advances in aforementioned efforts, which include:

1. **Hybrid Electric Vehicle:** After introducing FGV-1 prototype hybrid vehicle in Seoul Motor Show in 1995, HMC has successfully developed "soft-type" (i.e., mounting hybrid-electric engine on existing gasoline-based vehicle platform) parallel hybrid *Click/Getz* B-class car, equipped with 1.4-liter gasoline engine, 12kW electric motor and Ni-MH battery. Performance specs with fuel efficiency of 18km/liter is 50% higher than gasoline engine, but lags behind Toyota's Prius (26km/liter for U.S.-type; 36km/liter for Japan-type). Hyundai has managed to supply 50 such vehicles to Korean government in 2004, with a view to commercialize it by 2006 (with a view to introduce it in the U.S. after 2007), according to a press interview by HMC spokesperson.
2. **Fuel Cell Vehicle:** HMC appears to favor fuel-cell vehicles, a longer-term value proposition. In a U.S. government-sponsored program to develop fuel-cell test vehicles as part of President Bush's US\$1.2bn commitment to fuel cell research, HMC was chosen as one of the companies to receive a portion of the US\$350mn grant offered by US Department of Energy. In the announcement made in April 2004, the U.S. Big-3 were chosen as lead partners, while Toyota, Nissan, Honda, BMW and Hyundai were chosen as partners. HMC plans to test drive the Tucson SUV equipped with fuel cell engine (to be developed in conjunction with Chevron Texaco and UTCFC) with a view to achieve commercialization by 2010.

3. **Diesel Engine:** Following successful strategies by European carmakers in aggressively selling low-emission diesel cars to comply with environmental rules, Hyundai has also completed development of Euro-3 as well as Euro-4 compliant diesel engines, the portion of which as % of European sales have surged as shown in Chart 5. The Korean government has relaxed regulations to allow diesel-engine passenger cars from 2005 (previously, diesel engine was allowed only on commercial vehicles and SUVs), which should help Hyundai achieve scale economies on diesel line-ups.

Chart 5: HMC's Diesel Vehicle Proportion Rises Up to Market Profile


Source: JD Power-LMC, Company

4. **Fuel efficiency enhancement efforts:** Hyundai already has adopted engine-based technologies designed to raise fuel-efficiency (which are widespread by now) such as direct fuel-injection for gasoline engines and CommonRail direct injection for diesel engines, as well as CVVT (continuously variable valve timings) and “lean-burn-systems” on select models. Although still at development phase, the application of low-friction plasma coating inside engine parts is being pursued, with a view to raise fuel efficiency by as much as 4%. Efforts to reduce vehicle weight (e.g., hydro-forming chassis molding technology, increased use of aluminum, etc.) are also being pursued.

■ Recommendation

Hyundai is rated Neutral.

Keihin (Japan)

As a large supplier of injection systems and devices, and other fuel-related components for motorcycles, particularly Honda, Keihin is well positioned to take advantage of the trend towards more fuel efficient two wheel vehicles in Asia and Europe.

■ Two Wheelers: Toxic Emissions in Emerging Markets

When it comes to environmental problems, most tend to forget about toxic gas emissions from two-wheel vehicles. These vehicles’ fuel consumption has become a major social problem in Asia and Europe (not in the U.S.). This is being exacerbated by accelerating demand for two-wheel vehicles in Southeast Asia (i.e. Indonesia, Vietnam) and West Asia (i.e. India, Pakistan). Global demand for two-wheel vehicles is currently estimated at around 33mn units per year, of which about 85% is accounted for by Asian regions, including China. Considering the future growth of demand for two-wheel vehicles, it goes without saying the environmental problems associated with two-wheel vehicles will become more serious.

Chart 6: Keihin Fuel Injector



Source: Keihin

■ Switch from Two Stroke to Four Stroke Engines

One measure currently being taken by two-wheel vehicle manufacturers to attack these environmental problems is the introduction of the four stroke engine. The change from the traditional two stroke engine to the four stroke engine has reduced two-wheel vehicles' gas emissions significantly. The next step for two-wheel vehicle manufacturers to improve its effect on the environment will likely be in fuel-related components, namely a switch-over from the carburetor that is currently used to a fuel injector. The switch-over is expected to reduce gas emissions by 30% and improve fuel efficiency by 20%. This switch-over is very realistic, as Honda (7267), the world's largest two-wheel vehicle manufacturer, has already announced that it will switch over to the fuel injector for 50% of its two-wheel vehicles by the end of 2007 and the majority of its two-wheel vehicles by 2010 year-end. We believe second-ranked Yamaha Motor (7272) and third-ranked Suzuki Motor (7269) are likely to follow suit.

■ Keihin well positioned with Honda

We believe Keihin is well positioned to capitalize on this emerging trend. Keihin is the largest supplier affiliated with Honda and should benefit the most from the switch-over to the fuel injector. The company's main products include fuel control systems for motorcycles (20% of sales), fuel control systems for automobiles (36%), electronic control units for auto bodies and engines (21%), and compressors and other automotive air-conditioning systems (23%). Neither Yamaha nor Suzuki has such a large two-wheel vehicle component supplier in their groups. Also, because production expansion for fuel injectors requires large capital expenditures, incremental orders are likely to be directed toward Keihin.

■ Recommendation

Keihin is rated Buy.

■ Price Objective Basis and Risk

Our price objective for Keihin is ¥2,300. Not only has Honda's valuation been low for a long time, but Honda-affiliated parts companies' valuations have also been low. Keihin is no exception, but we find its valuation compelling and attractive, considering the continuing earnings growth from the rising worldwide demand for motorcycles; the likelihood of increased earnings in Honda's North American auto business after the automaker introduces several high value-add models; and prospects for a dividend increase, in line with Honda's strong dividend increases. We would not be surprised if Keihin's P/E valuation rose to almost the sector average (of more than 13x), and our price objective is based on our FY3/06 EPS estimate of ¥193. We see further upside potential if Honda's initiative to switch to the fuel injection system for its motorcycles is implemented as planned.

Other than downside earnings risk from a strong yen, we do not see any major near-term risk factors. However, like many other Honda-affiliated parts suppliers, Keihin is highly vulnerable to Honda's sales trends (for motorcycles and automobiles) because of the high percentage of sales accounted for by the automaker. Honda's sales are likely to be strong, but we believe it would be difficult for Keihin to recover if auto sales are weak in North America, where a number of highly anticipated new vehicles are set to come out. Despite prospects for worldwide sales growth, we also cannot rule out the possibility of a temporary decline in demand for motorcycles because of the tsunami that hit Sumatra, part of the Southeast Asian region that is a major area of competition for motorcycle companies.

Magna's market-leading high-pressure hydroforming business is a critical technology for creating lighter (as much as 20%), stronger vehicles and thus we believe it will play a key role in the intensifying drive for higher fuel economy.

Magna International (Canada)

■ Broad Capabilities

Toronto-based Magna International is the third largest auto supplier in the world, with 2004 revenues of \$20.6 billion. The company makes a variety of highly-engineered automotive products, ranging from components like seat frames to modules like cockpits to complete vehicles (see Table 7).

Table 7: Magna's Automotive Groups & Key Products

Group	Key Products	LTM EBIT % of Co. Total
Decoma	Exterior trim, running boards, bumpers, lighting, tops	7%
Intier	Interior trim, seats, closures, power lift-gates & doors	21%
Magna Steyr	Complete vehicle engineering, testing, assembly & all wheel drive systems	22%
Cosma Metals & Other Auto Ops.	Metal body stampings, hydroformed vehicle structures, mirrors	33%
Tesma	Powertrain components including front end accessory drives, oil & water pumps	9%
Corporate & Other	Primarily affiliation and service fees paid by the groups to headquarters	9%

Source: Magna

■ Hydroforming: Key Technology for Lighter Vehicles

The Cosma metal forming business, which accounts for about a third of profits, is the historical foundation of the company. Within Cosma resides Magna's market-leading high-pressure hydroforming business. Hydroforming is a critical technology for creating lighter, stronger vehicles and thus we believe it will play a key role in the intensifying drive for higher fuel economy.

Hydroforming is a process by which metal tubes are extruded into a desired shape by the injection of water at very high pressure (up to 100,000 PSI, but typically 30,000-60,000 PSI) into both ends. The process offers numerous benefits, including:

- Up to 20% lighter weight because the process offers the precision to move ("flow") metal into areas only where additional strength is needed (eliminates the need for a minimum metal thickness)
- Up to 40% parts reduction because one hydroformed part can replace a multi-part stamped assembly because of the process's ability to form complex shapes as a single piece
- Increased strength and stiffness because the material is work-hardened during forming
- Superior dimensional accuracy because removing welding reduces heat deformation
- Reduced tooling investment because the process eliminates welding and the need for an "upper" and "lower" tool in the traditional clamshell design

Applying a 20% weight reduction to a complete midsize passenger car unibody structure with a weight of 550 pounds, the implied weight savings is 110 pounds. Total vehicle weight savings should be even greater because a lighter body structure would allow for lightweighting other components.

Magna believes that hydroforming has broad applicability in lightweighting vehicle structures. As shown below, the list of new applications is long and includes some very large, high dollar value components like door ring apertures (essentially the entire side of the vehicle that surrounds the doors) and cross-car beams, which run the width of the car behind the instrument panel.

Table 8: High Pressure Hydroforming Applications

In Production Today	High Potential
Front frame rails	Front windshield (A) pillars
Engine cradles	B & C Pillars
Rear suspension members	Door ring apertures
Control arms	Cross-car (IP) beams
Radiator supports	Impact bars
Roof rails	Sills
Front end structural modules	Hydroformed-intensive closures (doors, liftgates, etc.)

Source: Magna, Merrill Lynch

■ Recommendation

Magna is rated Buy.

■ Price Objective Basis and Risk

We believe that a realistic multiple target is close to the company’s recent historical average of 12.0x on a P/E basis and an EV/EBITDA ratio of 5.5x. Based on our 2005 estimates this implies a value of about \$92. This is further supported by our discounted cash flow analysis, which implies even further upside. Hence, we maintain our price objective of \$92.00.

Risks to achieving our PO are: 1) control of the company by insiders through super voting shares; 2) key model program concentration; and 3) a traditional cyclical downturn in U.S. Auto demand.

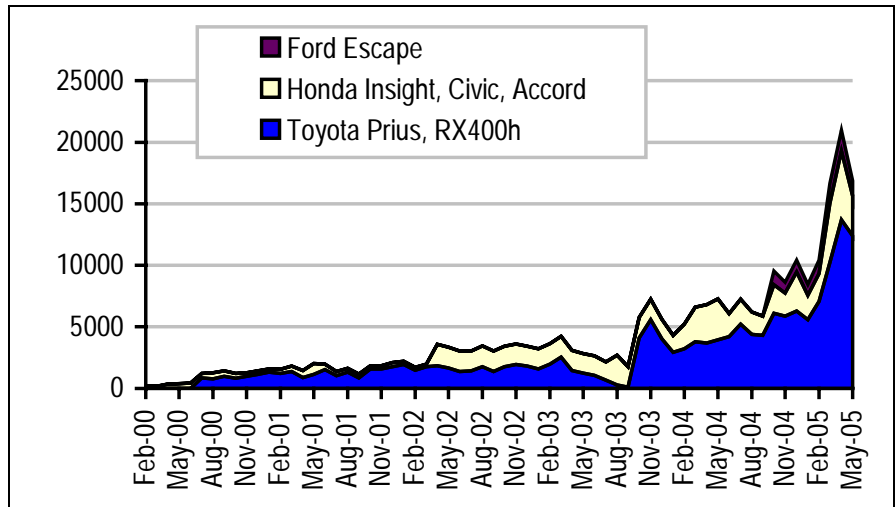
Toyota Motor (Japan)

■ Leading in Hybrids

Toyota Motor is the global leader in hybrid technology selling vehicles in Japan, US, Europe, and China. The company has about 65% of the small, but rapidly growing hybrid vehicle market in the U.S., which is supported by largely proprietary technology.

Toyota Motor, the world’s second largest automaker, is consolidating its position as the global leader in hybrid technology by selling vehicles in Japan, US, Europe, and China. The company committed to producing 300,000 hybrid vehicles in 2005. As shown in Chart 7 below, the company has about 65% of the small but rapidly growing hybrid vehicle market in the U.S (we estimate that hybrids account for only about 1.2% of the U.S. light vehicle market year-to-date).

Chart 7: Monthly US Hybrid Sales



Source: Company Reports, Merrill Lynch

■ Hybrid Benefits & Costs

A debate continues to rage in the auto industry about cost/benefit trade-off of hybrids. In terms of benefits, hybrids take advantage of the fact that most driving conditions only require a fraction of the power available from a car's engine. At steady highway speeds, the average car needs about only 20 horsepower. Power is needed for electric accessories, to overcome rolling resistance between the tires and the road, and to overcome wind resistance against the car's windshield. The rest of the engine's horsepower is needed for starting, stopping or passing. In fact, most drivers use the full power of their vehicles only 1% of the time.

A hybrid vehicle combines an electric motor with the regular gas engine so that the engine size can be optimized (i.e. be smaller) to run at peak efficiency (say 100hp). The electric motor comes into play to provide additional power when needed to accelerate and is partially charged through a concept called regenerative braking. The smaller, more efficient engine used on a hybrid vehicle, results in materially higher fuel economy and lower overall emissions (see Table 9).

Table 9: Hybrid Benefits – Comparing Hybrid Honda Civic Hybrid & Gasoline Honda Civic

Fuel consumption per year:	-29%
Carbon Dioxide:	-29%
Carbon Monoxide:	-41%
Nitrogen Oxides:	-89%
Hydrocarbons:	-27%

Note: 2003 Model Year Source: Honda Motor

Hybrid vehicles cost more than vehicles with traditional internal combustion engines (ICEs) for a simple reason: they have two separate powertrains. As shown below, one estimate puts the cost premium at \$3,500. Higher volume should lower cost per unit over time, and lower fuel consumption and a one-time tax deduction (\$1,000 in 2005) help lower the cost for hybrid vehicle purchasers. Nonetheless, these factors collectively don't seem to be enough to eliminate the considerable cost premium over traditional ICE cars (see Table 10).

Table 10: Cost of Additional Parts in Hybrid Car

Battery, cooling system and battery controller	\$ 1,400
Electronic Controls and Inverter	\$ 1,400
Electric Motor (50kW)	\$ 600
Harness, safety circuitry, AC/DC converter	\$ 600
<u>Remove Transmission</u>	<u>\$ (500)</u>
Total Cost	\$ 3,500

Source: Energy & Environmental Analysis, Inc.

As a result, after a resounding success of the purpose-build second generation U.S. model Prius, which is priced comparably to a gas powered Camry, Toyota will begin to charge a hefty premium for future models. The company will package the hybrid powertrain with other equipment and position these models at the high end of each nameplates price range. For example, the just-launched Lexus RX400h will be priced at \$48,535 about \$9,000 more than the gasoline RX330.

Chart 8: 2006 Toyota RX400h



Source: Toyota

■ Toyota Forging Ahead

Toyota is more emphatic than ever that despite the price premium, there exists a growing, profitable market for hybrid vehicles in the U.S. Toyota recently announced plans to build a hybrid version of the Camry, best-selling passenger car in the U.S. at the Georgetown, Kentucky plant. The company will tool for capacity of 48,000 units, or almost 11% of last year's total Camry sales (in the U.S. and Canada).

In addition, the head of the company's U.S. unit, Jim Press, has said that eventually all of its vehicles will be offered with a hybrid powertrain option. As shown in Table 11, we expect Toyota to account for at least 10 of the 38 hybrid models to be offered in the U.S. by 2010.

Table 11: Hybrid Vehicle Product Plans, U.S. Market

Passenger Car		Light Trucks	
Honda Insight	1999	Dodge Ram	2005
Honda Civic	2003	Ford Escape	2005
Toyota Prius	2005	Infiniti FX	2006
Honda Accord	2005	Lexus RX400h	2006
Toyota Camry	2006	Mazda Tribute	2006
Lexus GS450h	2006	Mercury Mariner	2006
Nissan Altima	2007	Toyota Highlander	2006
Subaru Impreza	2007	Toyota Sienna	2006
Hyundai Accent	2007	Saturn Vue	2007
Mercury Milan	2008	Chevy Equinox	2007
Scion xA	2008	Acura MDX	2008
Scion Tc	2008	Chevy Silverado Full Hybrid	2008
Chevy Malibu	2008	Tahoe Full Hybrid	2008
Ford Fusion	2008	GMC Sierra	2008
Hyundai Elantra	2008	GMC Yukon	2008
Lexus LS 430	2008	Honda CRV	2008
Acura RL	2009	Hyundai Tucson	2008
		Toyota Tundra	2008
		Honda Pilot	2009
		Porsche Cayenne	2009
		Honda Odyssey	2010

Source: Merrill Lynch

If the Camry's 10%+ model line penetration holds, Toyota will likely be selling 250,000 hybrids a year not long after 2010 in North America. While 250,000 units spread across multiple product lines may not qualify as a mass market success, at a 20% price premium it would represent a very profitable niche business.

■ **Recommendation**

Toyota is rated Buy.

■ **Price Objective Basis and Risk**

Our share price objective under the discount economic earnings model is ¥4,740, based on our FY3/06 estimates. It is currently trading at a PER of 11x our FY3/06E, far below its five-year historical average (21x), so we reiterate our Buy rating. We see the risks as forex movements, global auto demand and price trends, reaction to new models and raw materials costs.

3. *iQprofile*SM BorgWarner Inc.

Key Income Statement Data (Dec) (USD Millions)	2003A	2004A	2005E	2006E
Sales	3,069	3,525	4,364	4,717
Gross Profit	587	651	834	888
Sell General & Admin Expense	(317)	(339)	(464)	(472)
EBITDA	431	486	620	686
Depreciation & Amortization	(161)	(177)	(250)	(270)
Net Interest & Other Income	(13)	(1)	(6)	(15)
Tax Expense / Benefit	(73)	(93)	(105)	(117)
Net Income (Adjusted)	175	207	248	273
Average Fully Diluted Shares Outstanding	55	57	57	57
Key Cash Flow Statement Data				
Net Income (GAAP)	175	207	248	273
Depreciation & Amortization	161	177	250	270
Change in Working Capital	(79)	(14)	(112)	(50)
Deferred Taxation Charge	40	14	0	0
Other Adjustments, Net	9	43	10	35
Cash Flow from Operations	307	427	396	529
Capital Expenditure (Acquisition) / Disposal of Investments	(172)	(205)	(250)	(283)
Other Cash Inflow (Outflow)	(56)	(52)	(835)	(68)
Cash Flow from Investing	(228)	(257)	(1,085)	(351)
Share Issue / (Repurchase)	(3)	0	0	0
Cost of Dividends Paid	(19)	(28)	(32)	(33)
Cash Flow from Financing	(4)	(69)	543	(183)
Net Debt	531	355	1,056	911
Change in Net Debt	(79)	(176)	721	(145)
Key Balance Sheet Data				
Property, Plant & Equipment	985	1,077	1,117	1,117
Other Non-Current Assets	1,229	1,378	1,705	1,843
Trade Receivables	415	499	598	672
Cash & Equivalents	113	230	104	98
Other Current Assets	297	346	342	371
Total Assets	3,039	3,529	3,866	4,101
Long-Term Debt	634	568	1,143	993
Other Non-Current Liabilities	657	741	746	795
Short-Term Debt	10	17	17	17
Other Current Liabilities	460	647	697	750
Total Liabilities	1,761	1,973	2,603	2,555
Total Equity	1,278	1,579	1,264	1,546
Total Equity & Liabilities	3,039	3,551	3,866	4,101
<i>iQmethod</i>SM – Business Performance				
Return On Capital Employed	12.3%	11.5%	12.2%	12.3%
Return On Equity	15.6%	14.7%	17.6%	19.5%
Operating Margin	8.8%	8.8%	8.5%	8.8%
Free Cash Flow	135	222	146	246
<i>iQmethod</i>SM – Quality of Earnings				
Cash Realization Ratio	1.8x	2.1x	1.6x	1.9x
Asset Replacement Ratio	1.1x	1.2x	1.0x	1.0x
Tax Rate	28.5%	30.0%	28.7%	29.0%
Net Debt-to-Equity Ratio	41.6%	22.5%	83.6%	58.9%
Interest Cover	8.1x	10.4x	10.3x	9.3x

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*iQmethod*SM Measures Definitions

Business Performance

Return On Capital Employed = $\frac{[\text{NOPAT} = (\text{EBIT} + \text{Interest Income}) * (1 - \text{Tax Rate}) + \text{Goodwill Amortization}] / [\text{Avg} (\text{Total Assets} - \text{Current Liabilities} + \text{ST Debt} + \text{Accumulated Goodwill Amortization})]}{}$

Return On Equity = $\frac{[\text{Net Income}] / [\text{Avg Shareholders' Equity}]}{}$

Operating Margin = $\frac{[\text{Operating Profit}] / [\text{Sales}]}{}$

Earnings Growth = $\frac{[\text{Expected 5-Year CAGR From Latest Actual}] \text{ or the analysts' estimate of the sustainable growth rate}}{}$

Free Cash Flow = $\frac{[\text{Cash Flow From Operations} - \text{Total Capex}]}{}$

Quality of Earnings

Cash Realization Ratio = $\frac{[\text{Cash Flow From Operations}] / [\text{Net Income}]}{}$

Asset Replacement Ratio = $\frac{[\text{Capex}] / [\text{Depreciation}]}{}$

Tax Rate = $\frac{[\text{Tax Charge}] / [\text{Pre-Tax Income}]}{}$

Net Debt-To-Equity Ratio = $\frac{[\text{Net Debt} = \text{Total Debt, Less Cash \& Equiv}] / [\text{Total Equity}]}{}$

Interest Cover = $\frac{[\text{EBIT}] / [\text{Interest Expense}]}{}$

Valuation

Price / Book Value = $\frac{[\text{Current Sh Price}] / [\text{Shareholders' Equity} / \text{Current Basic Sh}]}{}$

Dividend Yield = $\frac{[\text{Annualized Declared Cash Div}] / [\text{Current Sh Price}]}{}$

iQprofileSM Denway Motors

Key Income Statement Data (Dec) (HKD Millions)	2003A	2004A	2005E	2006E
Sales	1,535	1,315	1,395	1,482
Gross Profit	3,518	4,976	5,273	5,798
Sell General & Admin Expense	(160)	(169)	(178)	(187)
EBITDA	1,823	2,247	2,621	3,093
Depreciation & Amortization	(16)	(16)	(16)	(16)
Net Interest & Other Income	25	29	30	36
Tax Expense / Benefit	(153)	(200)	(400)	(467)
Net Income (Adjusted)	1,687	2,062	2,239	2,649
Average Fully Diluted Shares Outstanding	6,899	7,168	7,505	7,505
Key Cash Flow Statement Data				
Net Income (GAAP)	1,687	2,062	2,239	2,649
Depreciation & Amortization	16	16	16	16
Change in Working Capital	126	(7)	2	1
Deferred Taxation Charge				
Other Adjustments, Net				
Cash Flow from Operations	885	1,233	1,533	1,803
Capital Expenditure	(195)	(20)	(20)	(20)
(Acquisition) / Disposal of Investments	2	0	(789)	0
Other Cash Inflow (Outflow)				
Cash Flow from Investing	(93)	70	(1,216)	(540)
Share Issue / (Repurchase)	247	0	0	0
Cost of Dividends Paid	(308)	(815)	(612)	(679)
Cash Flow from Financing	(60)	(976)	(612)	(679)
Net Debt				
Change in Net Debt				
Key Balance Sheet Data				
Property, Plant & Equipment	288	292	296	300
Other Non-Current Assets				
Trade Receivables	254	222	234	234
Cash & Equivalents	1,968	2,295	2,001	2,584
Other Current Assets				
Total Assets	5,830	7,117	8,964	10,884
Long-Term Debt	12	12	12	12
Other Non-Current Liabilities				
Short-Term Debt	45	45	45	45
Other Current Liabilities				
Total Liabilities	503	442	464	488
Total Equity	5,327	6,675	8,500	10,411
Total Equity & Liabilities	5,830	7,117	8,964	10,899
iQmethodSM – Business Performance				
Return On Capital Employed				
Return On Equity				
Operating Margin				
Free Cash Flow				
iQmethodSM – Quality of Earnings				
Cash Realization Ratio				
Asset Replacement Ratio				
Tax Rate				
Net Debt-to-Equity Ratio				
Interest Cover				

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Business Performance

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Return On Equity = $\frac{[\text{Net Income}] / [\text{Avg Shareholders' Equity}]}{}$

Operating Margin = $\frac{[\text{Operating Profit}] / [\text{Sales}]}{}$

Earnings Growth = $\frac{[\text{Expected 5-Year CAGR From Latest Actual}] \text{ or the analysts' estimate of the sustainable growth rate}}{}$

Free Cash Flow = $\frac{[\text{Cash Flow From Operations} - \text{Total Capex}]}{}$

Quality of Earnings

Cash Realization Ratio = $\frac{[\text{Cash Flow From Operations}] / [\text{Net Income}]}{}$

Asset Replacement Ratio = $\frac{[\text{Capex}] / [\text{Depreciation}]}{}$

Tax Rate = $\frac{[\text{Tax Charge}] / [\text{Pre-Tax Income}]}{}$

Net Debt-To-Equity Ratio = $\frac{[\text{Net Debt} = \text{Total Debt, Less Cash \& Equiv}] / [\text{Total Equity}]}{}$

Interest Cover = $\frac{[\text{EBIT}] / [\text{Interest Expense}]}{}$

Valuation

Price / Book Value = $\frac{[\text{Current Sh Price}] / [\text{Shareholders' Equity} / \text{Current Basic Sh}]}{}$

Dividend Yield = $\frac{[\text{Annualized Declared Cash Div}] / [\text{Current Sh Price}]}{}$

iQprofileSM Faurecia SA

Key Income Statement Data (Dec)	2003A	2004A	2005E	2006E
(EUR Millions)				
Sales	10,123	10,720	11,200	11,781
Gross Profit	10,123	10,720	11,200	11,781
Sell General & Admin Expense				
EBITDA	666	729	734	827
Depreciation & Amortization	(330)	(346)	(364)	(377)
Net Interest & Other Income	(116)	(92)	(95)	(85)
Tax Expense / Benefit	(55)	(72)	(69)	(94)
Net Income (Adjusted)	121	198	173	238
Average Fully Diluted Shares Outstanding	24	24	24	24
Key Cash Flow Statement Data				
Net Income (GAAP)	10	84	173	238
Depreciation & Amortization	441	460	364	377
Change in Working Capital	(97)	3	7	(12)
Deferred Taxation Charge	0	0	0	0
Other Adjustments, Net				
Cash Flow from Operations	338	535	555	614
Capital Expenditure	(345)	(378)	(403)	(412)
(Acquisition) / Disposal of Investments	16	1	0	0
Other Cash Inflow (Outflow)				
Cash Flow from Investing	(321)	(310)	(403)	(412)
Share Issue / (Repurchase)	5	0	0	0
Cost of Dividends Paid	(22)	(22)	(26)	(29)
Cash Flow from Financing	19	(3)	(26)	(29)
Net Debt	1,696	1,498	1,372	1,199
Change in Net Debt	(9)	(212)	(125)	(173)
Key Balance Sheet Data				
Property, Plant & Equipment	1,484	1,489	1,532	1,573
Other Non-Current Assets				
Trade Receivables	2,102	2,122	2,218	2,333
Cash & Equivalents	514	748	873	1,047
Other Current Assets				
Total Assets	7,040	7,239	7,529	7,909
Long-Term Debt	610	507	507	507
Other Non-Current Liabilities				
Short-Term Debt	1,600	1,738	1,738	1,738
Other Current Liabilities				
Total Liabilities	5,147	5,282	5,414	5,573
Total Equity	1,893	1,957	2,115	2,335
Total Equity & Liabilities	7,040	7,239	7,529	7,909
iQmethodSM – Business Performance				
Return On Capital Employed	12.9%	13.9%	12.6%	14.4%
Return On Equity	0.5%	4.5%	8.8%	11.1%
Operating Margin				
Free Cash Flow	(7)	156	152	202
iQmethodSM – Quality of Earnings				
Cash Realization Ratio				
Asset Replacement Ratio				
Tax Rate				
Net Debt-to-Equity Ratio	89.6%	76.5%	64.9%	51.3%
Interest Cover	4.0x	5.2x	5.7x	8.2x

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Return On Equity = $\frac{[\text{Net Income}] / [\text{Avg Shareholders' Equity}]}{}$

Operating Margin = $\frac{[\text{Operating Profit}] / [\text{Sales}]}{}$

Earnings Growth = $\frac{[\text{Expected 5-Year CAGR From Latest Actual}] \text{ or the analysts' estimate of the sustainable growth rate}}{}$

Free Cash Flow = $\frac{[\text{Cash Flow From Operations} - \text{Total Capex}]}{}$

Quality of Earnings

Cash Realization Ratio = $\frac{[\text{Cash Flow From Operations}] / [\text{Net Income}]}{}$

Asset Replacement Ratio = $\frac{[\text{Capex}] / [\text{Depreciation}]}{}$

Tax Rate = $\frac{[\text{Tax Charge}] / [\text{Pre-Tax Income}]}{}$

Net Debt-to-Equity Ratio = $\frac{[\text{Net Debt} = \text{Total Debt, Less Cash \& Equip}] / [\text{Total Equity}]}{}$

Interest Cover = $\frac{[\text{EBIT}] / [\text{Interest Expense}]}{}$

Valuation

Price / Book Value = $\frac{[\text{Current Sh Price}] / [\text{Shareholders' Equity} / \text{Current Basic Sh}]}{}$

Dividend Yield = $\frac{[\text{Annualized Declared Cash Div}] / [\text{Current Sh Price}]}{}$

iQprofileSM Hyundai Motor

Key Income Statement Data (Dec)	2003A	2004A	2005E	2006E
(KRW Millions)				
Sales	24,967,265	27,472,000	27,660,577	30,318,422
Gross Profit	6,718,671	6,673,994	5,705,076	6,479,968
Sell General & Admin Expense	(4,482,953)	(4,693,037)	(3,915,563)	(4,182,988)
EBITDA	3,135,507	2,920,661	2,850,983	3,446,822
Depreciation & Amortization	(899,789)	(939,704)	(1,061,470)	(1,149,842)
Net Interest & Other Income	111,661	536,039	799,665	1,130,583
Tax Expense / Benefit	(598,008)	(713,253)	(724,970)	(959,718)
Net Income (Adjusted)	1,749,371	1,803,743	1,864,208	2,467,845
Average Fully Diluted Shares Outstanding	285	284	284	284
Key Cash Flow Statement Data				
Net Income (GAAP)	1,749,371	1,803,743	1,864,208	2,467,845
Depreciation & Amortization	899,789	939,704	1,061,470	1,149,842
Change in Working Capital	(417,256)	454,197	177,494	93,733
Deferred Taxation Charge				
Other Adjustments, Net				
Cash Flow from Operations	3,338,614	3,589,370	2,713,264	3,022,603
Capital Expenditure	(897,665)	(921,201)	(1,215,333)	(1,231,909)
(Acquisition) / Disposal of Investments	192,373	579,388	0	0
Other Cash Inflow (Outflow)				
Cash Flow from Investing	(2,198,833)	(2,903,854)	(1,937,647)	(1,875,831)
Share Issue / (Repurchase)	0	0	0	0
Cost of Dividends Paid	(243,079)	(285,674)	(326,405)	(337,789)
Cash Flow from Financing	(974,636)	(1,121,333)	(1,095,120)	(1,337,789)
Net Debt				
Change in Net Debt				
Key Balance Sheet Data				
Property, Plant & Equipment	8,475,827	8,733,403	9,132,813	9,514,683
Other Non-Current Assets				
Trade Receivables	1,463,770	1,011,508	1,018,451	1,116,312
Cash & Equivalents	5,044,367	5,886,195	5,566,692	5,375,675
Other Current Assets				
Total Assets	24,280,344	24,728,658	25,798,022	27,389,128
Long-Term Debt	1,013,680	1,101,414	1,000,000	0
Other Non-Current Liabilities				
Short-Term Debt	1,574,632	767,301	100,000	100,000
Other Current Liabilities				
Total Liabilities	11,752,220	11,335,743	10,895,152	10,356,202
Total Equity	12,497,925	13,365,067	14,902,870	17,032,926
Total Equity & Liabilities	24,250,145	24,700,810	25,798,022	27,389,128
iQmethodSM – Business Performance				
Return On Capital Employed				
Return On Equity				
Operating Margin				
Free Cash Flow				
iQmethodSM – Quality of Earnings				
Cash Realization Ratio				
Asset Replacement Ratio				
Tax Rate				
Net Debt-to-Equity Ratio				
Interest Cover				

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Return On Equity = $\frac{[\text{Net Income}] / [\text{Avg Shareholders' Equity}]}{}$

Operating Margin = $\frac{[\text{Operating Profit}] / [\text{Sales}]}{}$

Earnings Growth = $\frac{[\text{Expected 5-Year CAGR From Latest Actual}] \text{ or the analysts' estimate of the sustainable growth rate}}{}$

Free Cash Flow = $\frac{[\text{Cash Flow From Operations} - \text{Total Capex}]}{}$

Quality of Earnings

Cash Realization Ratio = $\frac{[\text{Cash Flow From Operations}] / [\text{Net Income}]}{}$

Asset Replacement Ratio = $\frac{[\text{Capex}] / [\text{Depreciation}]}{}$

Tax Rate = $\frac{[\text{Tax Charge}] / [\text{Pre-Tax Income}]}{}$

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Interest Cover = $\frac{[\text{EBIT}] / [\text{Interest Expense}]}{}$

Valuation

Price / Book Value = $\frac{[\text{Current Sh Price}] / [\text{Shareholders' Equity} / \text{Current Basic Sh}]}{}$

Dividend Yield = $\frac{[\text{Annualized Declared Cash Div}] / [\text{Current Sh Price}]}{}$

iQprofileSM KEIHIN CORPORATION

Key Income Statement Data (Mar)	2004A	2005A	2006E	2007E	2008E
(JPY Millions)					
Sales	253,051	271,495	284,500	300,000	327,000
Gross Profit					
Sell General & Admin Expense	(17,011)	(20,712)	(20,000)	(21,000)	(23,500)
EBITDA	28,870	32,635	38,200	42,000	46,200
Depreciation & Amortization	(11,743)	(11,762)	(13,200)	(14,000)	(14,200)
Net Interest & Other Income	(723)	182	0	50	150
Tax Expense / Benefit	(5,570)	(6,549)	(8,200)	(9,300)	(10,800)
Net Income (Adjusted)	8,383	10,858	13,300	15,200	17,500
Average Fully Diluted Shares Outstanding	74	74	74	74	74
Key Cash Flow Statement Data					
Net Income (GAAP)	8,815	11,424	13,300	15,200	17,500
Depreciation & Amortization	11,743	11,762	13,200	14,000	14,200
Change in Working Capital	4,221	(4,601)	(4,600)	(1,500)	(2,000)
Deferred Taxation Charge					
Other Adjustments, Net					
Cash Flow from Operations	19,091	15,878	13,700	16,420	15,890
Capital Expenditure	(16,749)	(14,109)	(17,800)	(18,300)	(17,000)
(Acquisition) / Disposal of Investments	(1,003)	(31)	0	0	0
Other Cash Inflow (Outflow)					
Cash Flow from Investing	(17,270)	(15,532)	(21,200)	(22,300)	(22,000)
Share Issue / (Repurchase)	35	(2)	(10)	(20)	(20)
Cost of Dividends Paid	(1,035)	(1,109)	(1,331)	(1,627)	(1,997)
Cash Flow from Financing	(4,628)	(1,074)	(1,891)	(3,697)	(4,567)
Net Debt					
Change in Net Debt					
Key Balance Sheet Data					
Property, Plant & Equipment	58,137	60,567	67,100	73,100	78,100
Other Non-Current Assets					
Trade Receivables	36,237	42,011	45,500	47,000	48,500
Cash & Equivalents	13,997	23,787	25,000	28,000	32,000
Other Current Assets					
Total Assets	150,769	170,360	186,200	199,800	214,450
Long-Term Debt	0	0	0	0	0
Other Non-Current Liabilities					
Short-Term Debt	3,912	4,465	5,000	5,000	5,000
Other Current Liabilities					
Total Liabilities	60,295	67,389	71,950	73,000	74,100
Total Equity	90,475	102,909	114,249	126,891	140,364
Total Equity & Liabilities	150,770	170,298	186,199	199,891	214,464
iQmethodSM – Business Performance					
Return On Capital Employed					
Return On Equity					
Operating Margin					
Free Cash Flow					
iQmethodSM – Quality of Earnings					
Cash Realization Ratio					
Asset Replacement Ratio					
Tax Rate					
Net Debt-to-Equity Ratio					
Interest Cover					

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Return On Equity = $\frac{[\text{Net Income}] / [\text{Avg Shareholders' Equity}]}{}$

Operating Margin = $\frac{[\text{Operating Profit}] / [\text{Sales}]}{}$

Earnings Growth = $\frac{[\text{Expected 5-Year CAGR From Latest Actual}] \text{ or the analysts' estimate of the sustainable growth rate}}{}$

Free Cash Flow = $\frac{[\text{Cash Flow From Operations} - \text{Total Capex}]}{}$

Quality of Earnings

Cash Realization Ratio = $\frac{[\text{Cash Flow From Operations}] / [\text{Net Income}]}{}$

Asset Replacement Ratio = $\frac{[\text{Capex}] / [\text{Depreciation}]}{}$

Tax Rate = $\frac{[\text{Tax Charge}] / [\text{Pre-Tax Income}]}{}$

Net Debt-To-Equity Ratio = $\frac{[\text{Net Debt} = \text{Total Debt, Less Cash \& Equiv}] / [\text{Total Equity}]}{}$

Interest Cover = $\frac{[\text{EBIT}] / [\text{Interest Expense}]}{}$

Valuation

Price / Book Value = $\frac{[\text{Current Sh Price}] / [\text{Shareholders' Equity} / \text{Current Basic Sh}]}{}$

Dividend Yield = $\frac{[\text{Annualized Declared Cash Div}] / [\text{Current Sh Price}]}{}$

iQprofileSM Magna International Inc.

Key Income Statement Data (Dec) (USD Millions)	2003A	2004A	2005E	2006E
Sales	15,345	20,653	22,871	24,717
Gross Profit	2,540	2,928	3,140	3,574
Sell General & Admin Expense	(1,005)	(1,210)	(1,342)	(1,471)
EBITDA	1,567	1,732	1,811	2,119
Depreciation & Amortization	(505)	(598)	(648)	(664)
Net Interest & Other Income	13	5	(4)	10
Tax Expense / Benefit	(383)	(391)	(358)	(507)
Net Income (Adjusted)	601	667	790	958
Average Fully Diluted Shares Outstanding	96	97	108	109
Key Cash Flow Statement Data				
Net Income (GAAP)	615	683	790	958
Depreciation & Amortization	505	598	648	664
Change in Working Capital	(72)	(95)	43	(95)
Deferred Taxation Charge	63	79	0	0
Other Adjustments, Net	105	141	0	0
Cash Flow from Operations	1,216	1,406	1,481	1,527
Capital Expenditure	(801)	(859)	(896)	(963)
(Acquisition) / Disposal of Investments	(160)	(77)	0	0
Other Cash Inflow (Outflow)	(41)	(338)	0	0
Cash Flow from Investing	(1,002)	(1,274)	(896)	(963)
Share Issue / (Repurchase)	32	(268)	0	0
Cost of Dividends Paid	(163)	(164)	(122)	(122)
Cash Flow from Financing	2	(255)	(122)	(122)
Net Debt	(928)	(531)	(995)	(1,437)
Change in Net Debt	(350)	397	(464)	(442)
Key Balance Sheet Data				
Property, Plant & Equipment	3,313	3,967	4,215	4,513
Other Non-Current Assets	1,145	1,361	1,361	1,361
Trade Receivables	2,615	3,276	3,760	4,063
Cash & Equivalents	1,528	1,519	1,983	2,425
Other Current Assets	1,228	1,486	1,642	1,751
Total Assets	9,829	11,609	12,959	14,113
Long-Term Debt	267	768	768	768
Other Non-Current Liabilities	558	636	636	636
Short-Term Debt	333	220	220	220
Other Current Liabilities	3,102	3,841	4,523	4,841
Total Liabilities	4,260	5,465	6,147	6,465
Total Equity	5,910	6,144	6,812	7,648
Total Equity & Liabilities	10,170	11,609	12,959	14,113
iQmethodSM – Business Performance				
Return On Capital Employed	9.7%	10.3%	9.9%	10.8%
Return On Equity	11.6%	12.8%	13.7%	14.7%
Operating Margin	6.8%	5.5%	5.1%	5.9%
Free Cash Flow	415	547	586	564
iQmethodSM – Quality of Earnings				
Cash Realization Ratio	2.0x	2.1x	1.9x	1.6x
Asset Replacement Ratio	1.6x	1.4x	1.4x	1.4x
Tax Rate	35.6%	34.3%	30.9%	34.6%
Net Debt-to-Equity Ratio	-15.7%	-8.6%	-14.6%	-18.8%
Interest Cover			290.7x	

iQmethodSM

iQmethod is the set of Merrill Lynch standard measures that serve to maintain global consistency under three broad headings: Business Performance, Quality of Earnings, and Valuation.

The key features of iQmethod are:

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- Guidelines to maximize the effectiveness of the comparative valuation process, and to identify some common pitfalls.

iQdatabaseSM

The iQdatabase is our real-time global research database that is sourced directly from our equity analysts' earnings models and includes forecasted as well as historical data for income statements, balance sheets, and cash flow statements for companies covered by Merrill Lynch.

iQprofile, iQmethod, iQdatabase are service marks of Merrill Lynch & Co., Inc.

iQmethodSM Measures Definitions
Business Performance

Return On Capital Employed = $\frac{[\text{NOPAT} = (\text{EBIT} + \text{Interest Income}) * (1 - \text{Tax Rate}) + \text{Goodwill Amortization}] / [\text{Avg} (\text{Total Assets} - \text{Current Liabilities} + \text{ST Debt} + \text{Accumulated Goodwill Amortization})]}{}$

Return On Equity = $\frac{[\text{Net Income}] / [\text{Avg Shareholders' Equity}]}{}$

Operating Margin = $\frac{[\text{Operating Profit}] / [\text{Sales}]}{}$

Earnings Growth = $\frac{[\text{Expected 5-Year CAGR From Latest Actual}] \text{ or the analysts' estimate of the sustainable growth rate}}{}$

Free Cash Flow = $\frac{[\text{Cash Flow From Operations} - \text{Total Capex}]}{}$

Quality of Earnings

Cash Realization Ratio = $\frac{[\text{Cash Flow From Operations}] / [\text{Net Income}]}{}$

Asset Replacement Ratio = $\frac{[\text{Capex}] / [\text{Depreciation}]}{}$

Tax Rate = $\frac{[\text{Tax Charge}] / [\text{Pre-Tax Income}]}{}$

Net Debt-To-Equity Ratio = $\frac{[\text{Net Debt} = \text{Total Debt, Less Cash \& Equiv}] / [\text{Total Equity}]}{}$

Interest Cover = $\frac{[\text{EBIT}] / [\text{Interest Expense}]}{}$

Valuation

Price / Book Value = $\frac{[\text{Current Sh Price}] / [\text{Shareholders' Equity} / \text{Current Basic Sh}]}{}$

Dividend Yield = $\frac{[\text{Annualized Declared Cash Div}] / [\text{Current Sh Price}]}{}$

iQprofileSM Toyota Motor Co

Key Income Statement Data (Mar)	2004A	2005A	2006E	2007E
(JPY Millions)				
Sales	17,294,760	18,551,526	19,043,974	20,407,929
Gross Profit				
Sell General & Admin Expense	(1,757,356)	(2,009,213)	(1,740,790)	(1,832,823)
EBITDA	2,636,794	2,669,166	2,794,101	3,104,057
Depreciation & Amortization	(969,904)	(996,979)	(1,033,974)	(1,084,405)
Net Interest & Other Income	73,110	69,982	33,590	39,374
Tax Expense / Benefit	(681,304)	(657,910)	(747,074)	(860,444)
Net Income (Adjusted)	1,162,098	1,171,260	1,206,167	1,472,507
Average Fully Diluted Shares Outstanding	3,389	3,296	3,282	3,282
Key Cash Flow Statement Data				
Net Income (GAAP)	1,162,098	1,171,260	1,206,167	1,472,507
Depreciation & Amortization	969,904	996,979	1,033,974	1,084,405
Change in Working Capital	64,450	(20,612)	(23,955)	(61,314)
Deferred Taxation Charge				
Other Adjustments, Net				
Cash Flow from Operations	2,410,938	2,153,540	2,271,336	2,586,607
Capital Expenditure	(1,120,672)	(1,195,110)	(1,147,022)	(1,300,428)
(Acquisition) / Disposal of Investments				
Other Cash Inflow (Outflow)				
Cash Flow from Investing	(2,591,711)	(2,232,513)	(1,287,426)	(1,766,410)
Share Issue / (Repurchase)	(357,457)	(413,834)	(413,834)	(413,834)
Cost of Dividends Paid	(137,678)	(167,387)	(213,037)	(258,688)
Cash Flow from Financing	331,588	5,857	(467,811)	(98,973)
Net Debt				
Change in Net Debt				
Key Balance Sheet Data				
Property, Plant & Equipment	5,354,647	5,552,778	5,665,825	5,881,848
Other Non-Current Assets				
Trade Receivables	1,531,651	1,578,299	1,627,086	1,728,540
Cash & Equivalents	2,246,706	2,303,143	2,819,242	3,540,467
Other Current Assets				
Total Assets	22,040,228	23,385,121	24,279,294	25,912,416
Long-Term Debt	4,247,266	4,542,719	4,633,492	4,934,755
Other Non-Current Liabilities				
Short-Term Debt	3,314,219	3,417,417	3,485,704	3,712,339
Other Current Liabilities				
Total Liabilities	13,415,368	13,923,046	14,237,923	15,025,409
Total Equity	8,624,860	9,462,075	10,041,371	10,887,007
Total Equity & Liabilities	22,040,228	23,385,121	24,279,294	25,912,416
iQmethodSM – Business Performance				
Return On Capital Employed				
Return On Equity				
Operating Margin				
Free Cash Flow				
iQmethodSM – Quality of Earnings				
Cash Realization Ratio				
Asset Replacement Ratio				
Tax Rate				
Net Debt-to-Equity Ratio				
Interest Cover				

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Business Performance

Return On Capital Employed =	$[\text{NOPAT} = (\text{EBIT} + \text{Interest Income}) * (1 - \text{Tax Rate}) + \text{Goodwill Amortization}] / [\text{Avg} (\text{Total Assets} - \text{Current Liabilities} + \text{ST Debt} + \text{Accumulated Goodwill Amortization})]$
Return On Equity =	$[\text{Net Income}] / [\text{Avg Shareholders' Equity}]$
Operating Margin =	$[\text{Operating Profit}] / [\text{Sales}]$
Earnings Growth =	$[\text{Expected 5-Year CAGR From Latest Actual}]$ or the analysts' estimate of the sustainable growth rate
Free Cash Flow =	$[\text{Cash Flow From Operations} - \text{Total Capex}]$

Quality of Earnings

Cash Realization Ratio =	$[\text{Cash Flow From Operations}] / [\text{Net Income}]$
Asset Replacement Ratio =	$[\text{Capex}] / [\text{Depreciation}]$
Tax Rate =	$[\text{Tax Charge}] / [\text{Pre-Tax Income}]$
Net Debt-To-Equity Ratio =	$[\text{Net Debt} = \text{Total Debt, Less Cash \& Equiv}] / [\text{Total Equity}]$
Interest Cover =	$[\text{EBIT}] / [\text{Interest Expense}]$

Valuation

Price / Book Value =	$[\text{Current Sh Price}] / [\text{Shareholders' Equity} / \text{Current Basic Sh}]$
Dividend Yield =	$[\text{Annualized Declared Cash Div}] / [\text{Current Sh Price}]$

4. Stock Universe/Global Comparatives

Table 12: Global Auto iQ Table

Company	Country	Analyst	Symbol	Opinion	QRQ Rating	Local Curr.	Local Price	Market Capitalization		Last FY End	Earnings Per Share			P/E Ratio		
								Local	US\$		FY End	FY1 Est.	FY2 Est.	FY End	FY1 Est.	FY2 Est.
American Axle & Mfg.	US	Casesa	AXL	1 - Buy	C-1-7	USD	23.00	1,185	1,185	Dec-04	3.41	1.40	2.50	6.7	16.4	9.2
ArvinMeritor	US	Casesa	ARM	2 - Neutral	C-2-8	USD	18.59	1,283	1,283	Sep-04	1.75	1.51		10.6	12.3	
Autoliv	Sweden	Besson	AUTVF	2 - Neutral	B-2-7	USD	45.29	4,160	4,160	Dec-04	3.40	3.66	4.28	13.3	12.4	10.6
BMW	Germany	Reitman	BAMXF	1 - Buy	B-1-7	EUR	37.26	25,102	30,216	Dec-04	3.30	3.30	3.47	11.3	11.3	10.7
BorgWarner	US	Casesa	BWA	2 - Neutral	B-2-7	USD	54.93	3,126	3,126	Dec-04	3.66	4.30	4.78	15.0	12.8	11.5
Brilliance China	Hong Kong	Mak	CBAMF	1 - Buy	C-1-7	HKD	1.53	5,612	722	Dec-04	0.01	0.07	0.11	124.1	23.8	15.5
Changan Auto	China	Mak	XCSZF	1 - Buy	C-1-7	CNY	6.32	9,617	1,162	Dec-04	0.87	0.86	0.94	7.2	7.3	6.7
Continental AG	Germany	Besson	CTTAF	1 - Buy	B-1-7	EUR	57.90	8,420	10,135	Dec-04	4.89	5.98	6.50	11.8	9.7	8.9
DaimlerChrysler	Germany	Reitman	DCXGF	3 - Sell	C-3-7	EUR	33.74	34,172	41,134	Dec-04	2.43	1.71	2.86	13.9	19.8	11.8
Dana Corp	US	Casesa	DCN	2 - Neutral	C-2-7	USD	14.54	2,196	2,196	Dec-04	1.64	1.25	1.52	8.9	11.6	9.6
Delphi Auto Sys	US	Casesa	DPH	3 - Sell	C-3-8	USD	4.61	2,586	2,586	Dec-04	0.28	-1.75	-0.45	16.5	NM	NM
Denway Motor	Hong Kong	Mak	DENMF	1 - Buy	C-1-7	HKD	2.93	21,953	2,823	Dec-04	0.29	0.30	0.35	10.2	9.8	8.3
Faurecia	France	Besson	ZFRXF	1 - Buy	B-1-7	EUR	62.50	1,486	1,789	Dec-04	3.51	7.25	9.99	17.8	8.6	6.3
Fiat	Italy	Reitman	FIADF	2 - Neutral	C-2-9	EUR	5.97	5,875	7,072	Dec-03	-1.42	0.01		NM	587.5	
Ford	US	Casesa	F	2 - Neutral	B-2-8	USD	10.52	22,366	22,366	Dec-04	2.11	1.25	1.45	5.0	8.4	7.3
Fuji Heavy	Japan	Mochimaru	FUJHF	2 - Neutral	B-2-7	JPY	443.00	345,097	3,149	Mar-05	30.18	23.74	26.63	14.7	18.7	16.6
General Motors	US	Casesa	GM	2 - Neutral	B-2-8	USD	34.45	19,464	19,464	Dec-04	6.40	0.50	2.40	5.4	68.9	14.4
Gentex	US	Murphy	GNTX	1 - Buy	C-1-7	USD	17.88	2,802	2,802	Dec-04	0.72	0.74	0.90	24.8	24.2	19.9
Genuine Parts	US	Casesa	GPC	2 - Neutral	A-2-7	USD	42.67	7,514	7,514	Dec-04	2.25	2.46	2.64	19.0	17.3	16.2
Honda	Japan	Mochimaru	HNDAF	2 - Neutral	B-2-7	JPY	5,370.00	5,015,580	45,773	Mar-05	512.10	557.03	699.78	10.5	9.6	7.7
Hyundai Motor	Korea	Yoon	HYMLF	2 - Neutral	C-2-7	KRW	57,500.00	16,346,733	16,145	Dec-04	6355.00	6568.03	8694.79	9.0	8.8	6.6
Johnson Controls	US	Casesa	JCI	2 - Neutral	A-2-7	USD	56.43	10,925	10,925	Sep-04	4.31	4.62		13.1	12.2	
Keihin Corporation	Japan	Mochimaru	XKHNF	1 - Buy	B-1-7	JPY	1,739.00	128,686	1,174	Mar-05	146.76	179.80	205.49	11.8	9.7	8.5
Kia Motors	Korea	Yoon	KIMTF	3 - Sell	C-3-7	KRW	13,750.00	4,774,413	4,715	Dec-04	1915.82	1768.86	2110.17	7.2	7.8	6.5
Lear Corp	US	Casesa	LEA	2 - Neutral	B-2-7	USD	38.03	2,596	2,596	Dec-04	5.58	2.30	3.30	6.8	16.5	11.5
Magna Int'l	Canada	Casesa	MGA	1 - Buy	B-1-7	USD	69.60	6,779	6,779	Dec-04	6.84	7.35	8.77	10.2	9.5	7.9
Mazda	Japan	Mochimaru	MZDAF	2 - Neutral	B-2-7	JPY	403.00	492,666	4,496	Mar-05	35.15	44.28	47.40	11.5	9.1	8.5
Nissan	Japan	Mochimaru	NSANF	1 - Buy	B-1-7	JPY	1,080.00	4,423,680	40,371	Mar-05	124.33	129.59	149.79	8.7	8.3	7.2
Peugeot	France	Reitman	PEUGF	2 - Neutral	B-2-7	EUR	47.61	11,518	13,865	Dec-04	5.64	6.00	7.89	8.4	7.9	6.0
Porsche	Germany	Reitman	PSEPF	1 - Buy	C-1-7	EUR	605.75	10,601	12,761	Jul-04	40.94	46.35		14.8	13.1	
Qingling	China	Mak	QGLHF	1 - Buy	C-1-7	HKD	1.52	3,773	485	Dec-04	0.04	0.05	0.08	36.5	29.5	20.4
Renault	France	Reitman	RNSDF	1 - Buy	B-1-7	EUR	70.05	19,960	24,027	Dec-04	13.35	11.90	13.86	5.2	5.9	5.1
SsangYong Motor	Korea	Yoon	SYGMF	1 - Buy	C-1-9	KRW	6,900.00	833,520	823	Dec-04	-113.81	593.48	2477.22	NM	11.6	2.8
Suzuki	Japan	Mochimaru	SZKMF	1 - Buy	B-1-7	JPY	1,725.00	933,366	8,518	Mar-05	103.83	132.58	171.18	16.6	13.0	10.1
Toyota	Japan	Mochimaru	TOYOF	1 - Buy	B-1-7	JPY	3,880.00	12,734,160	116,214	Mar-05	352.20	364.45	428.40	11.0	10.6	9.1
Trelleborg AB	Sweden	Besson	TBABF	3 - Sell	B-3-8	SEK	114.00	10,228	1,325	Dec-04	11.19	11.24	12.18	10.2	10.1	9.4
TRW Automotive	US	Murphy	TRW	2 - Neutral	C-2-9	USD	22.00	2,229	2,229	Dec-04	1.72	1.60	1.86	12.8	13.8	11.8
Visteon	US	Casesa	VC	1 - Buy	C-1-9	USD	6.77	848	848	Dec-04	-1.88	-0.85	1.00	NM	NM	6.8
Volkswagen	Germany	Reitman	VLKAF	3 - Sell	B-3-7	EUR	36.97	14,189	17,081	Dec-04	1.76	2.15	2.61	21.0	17.2	14.1

Source: Merrill Lynch estimates

5. Global Auto Team

Global Automotive Research Team

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Price Objective Basis and Risks for Buy Rated Stocks

■ Denway Motor

Our price objective for Denway is \$3.4, based on a 2005 PE of 11x equivalent to around the middle of the historical 3-year range. Risks to our recommendation include a slow down in market demand, faster price reductions and cost savings behind expectations. We have a Buy rating on Denway Motors.

■ Faurecia

Our price objective on Faurecia derives from peer group comparison and company's historical multiples analysis. At our EUR75 price objective, Faurecia's shares would trade on 10x 2005E earnings (at about 20% discount to the current average sector P/E multiple) and at about 29% EV/sales, reflecting more accurately than current multiples the company's short-term margin prospects. Faurecia's specific risks relate to its ability to manage long-term assembly contracts wisely, to pass on part of rising input costs, to implement further cost reduction and to maintain a normal business relationship with its largest customer and shareholder PSA. Industry-related risks for auto parts companies are volatility in light-vehicle production, rising raw material costs, pricing pressure from customers, increased R&D transfers from OEMs, recalls (implying potential warranty claims) and exchange rates volatility.

■ Keihin

Our price objective for Keihin is ¥2,300. Not only has Honda's valuation been low for a long time, but Honda-affiliated parts companies' valuations have also been low. Keihin is no exception, but we find its valuation compelling and attractive, considering the continuing earnings growth from the rising worldwide demand for motorcycles; the likelihood of increased earnings in Honda's North American auto business after the automaker introduces several high value-add models; and prospects for a dividend increase, in line with Honda's strong dividend increases. We would not be surprised if Keihin's P/E valuation rose to almost the sector average (of more than 13x), and our price objective is based on our FY3/06 EPS estimate of ¥193. We see further upside potential if Honda's initiative to switch to the fuel injection system for its motorcycles is implemented as planned.

Other than downside earnings risk from a strong yen, we do not see any major near-term risk factors. However, like many other Honda-affiliated parts suppliers, Keihin is highly vulnerable to Honda's sales trends (for motorcycles and automobiles) because of the high percentage of sales accounted for by the automaker. Honda's sales are likely to be strong, but we believe it would be difficult for Keihin to recover if auto sales are weak in North America, where a number of highly anticipated new vehicles are set to come out. Despite prospects for worldwide sales growth, we also cannot rule out the possibility of a temporary decline in demand for motorcycles because of the tsunami that hit Sumatra, part of the Southeast Asian region that is a major area of competition for motorcycle companies.

■ Magna International

We believe that a realistic multiple target is close to the company's recent historical average of 12.0x on a P/E basis and an EV/EBITDA ratio of 5.5x. Based on our 2005 estimates this implies a value of about \$92. This is further supported by our discounted cash flow analysis, which implies even further upside. Hence, we maintain our price objective of \$92.00.

Risks to achieving our PO are: 1) control of the company by insiders through super voting shares; 2) key model program concentration; and 3) a traditional cyclical downturn in U.S. Auto demand.

■ Toyota Motor

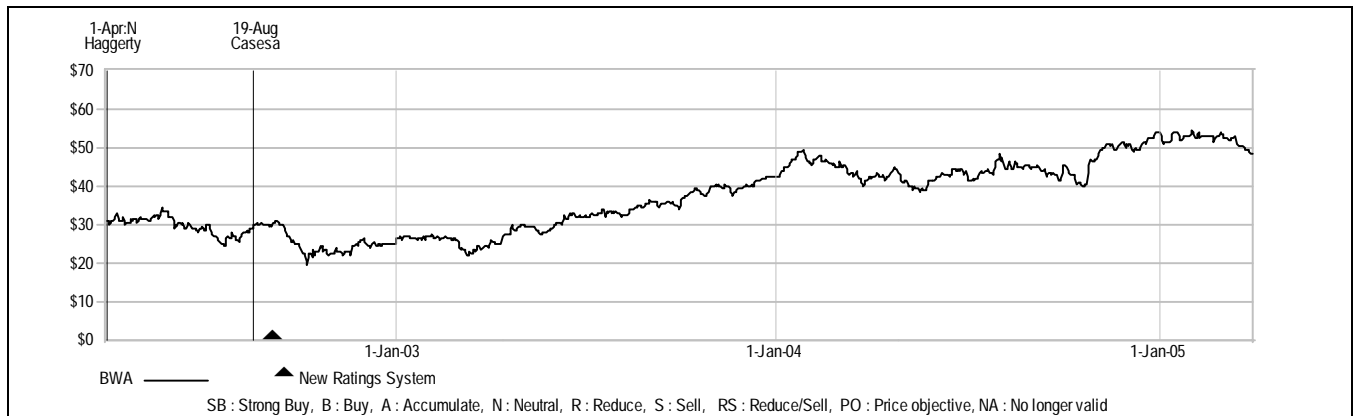
Our share price objective under the discount economic earnings model is ¥4,740, based on our FY3/06 estimates. It is currently trading at a PER of 11x our FY3/06E, far below its five-year historical average (21x), so we reiterate our Buy rating. We see the risks as forex movements, global auto demand and price trends, reaction to new models and raw materials costs.

Analyst Certification

We, John Casesa, Thomas Besson, Mark Yoon, Grace Mak and Tsuyoshi Mochimaru, hereby certify that the views each of us has expressed in this research report accurately reflect each of our respective personal views about the subject securities and issuers. We also certify that no part of our respective compensation was, is, or will be, directly or indirectly, related to the specific recommendations or view expressed in this research report.

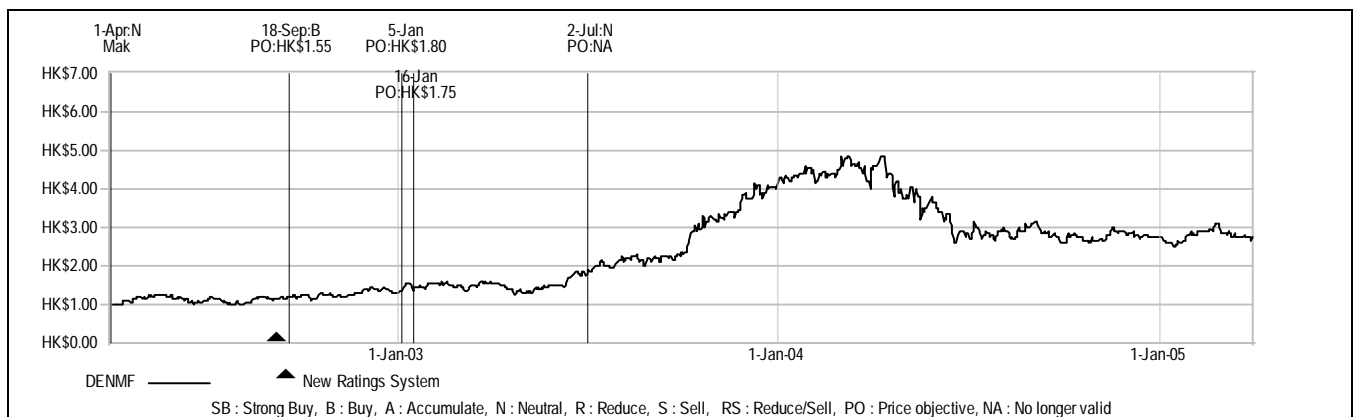
Important Disclosures

BWA Price Chart

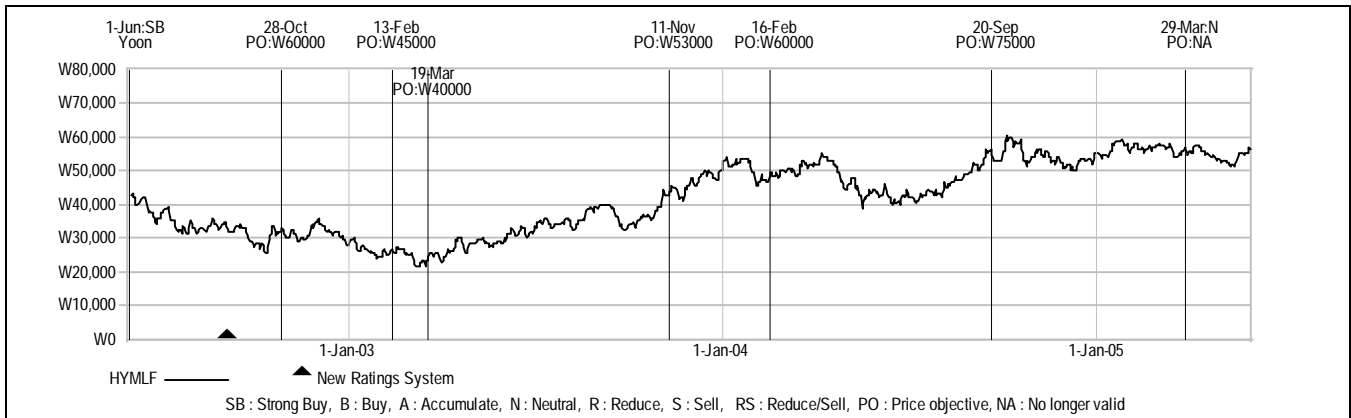


From 8 Dec. 2001 to 6 Sep. 2002, the Investment Opinion System included: Strong Buy, Buy, Neutral, and Reduce/Sell. On 6 Sep. 2002, Strong Buy and Buy ratings became Buy, and Reduce/Sell became Sell. Any exceptions to these rating revisions are reflected in the chart. All price objectives for Neutral and Sell rated securities established before 6 Sep. 2002 were eliminated as of that date. The current Investment Opinion System is contained at the end of the report under the heading "Fundamental Equity Opinion Key". Dark Grey shading indicates the security is restricted with the opinion suspended. Light Grey shading indicates the security is under review with the opinion withdrawn.

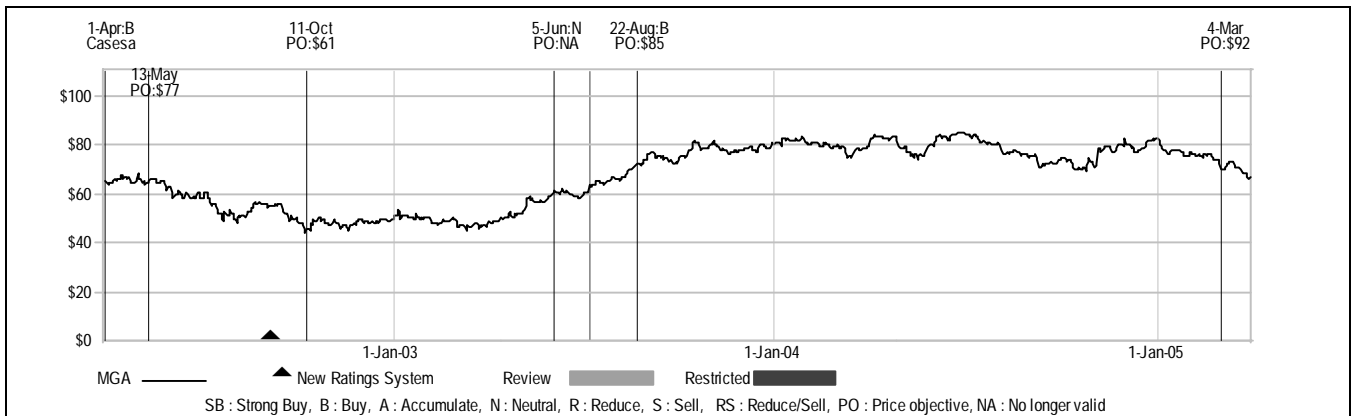
DENMF Price Chart



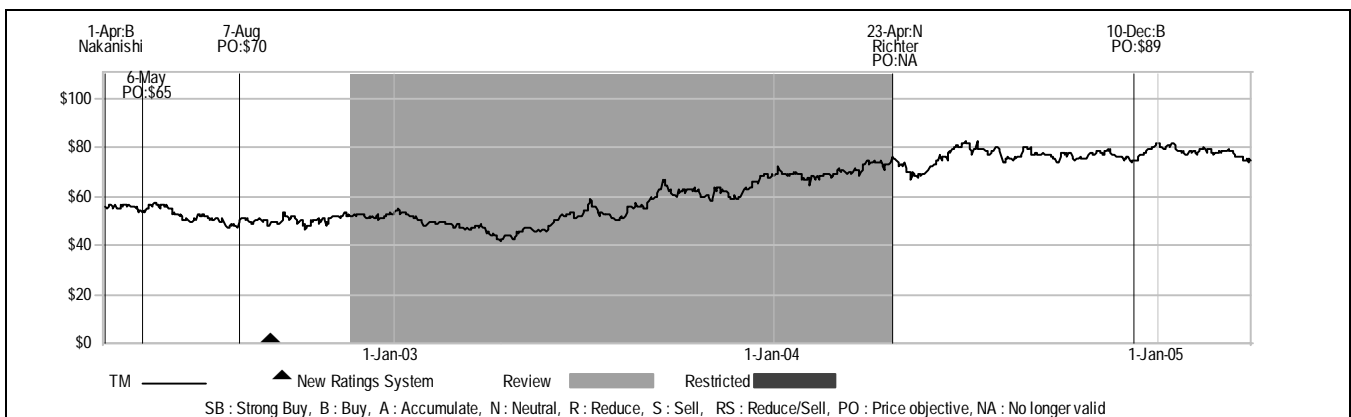
From 8 Dec. 2001 to 6 Sep. 2002, the Investment Opinion System included: Strong Buy, Buy, Neutral, and Reduce/Sell. On 6 Sep. 2002, Strong Buy and Buy ratings became Buy, and Reduce/Sell became Sell. Any exceptions to these rating revisions are reflected in the chart. All price objectives for Neutral and Sell rated securities established before 6 Sep. 2002 were eliminated as of that date. The current Investment Opinion System is contained at the end of the report under the heading "Fundamental Equity Opinion Key". Dark Grey shading indicates the security is restricted with the opinion suspended. Light Grey shading indicates the security is under review with the opinion withdrawn.

HYMLF Price Chart


From 8 Dec. 2001 to 6 Sep. 2002, the Investment Opinion System included: Strong Buy, Buy, Neutral, and Reduce/Sell. On 6 Sep. 2002, Strong Buy and Buy ratings became Buy, and Reduce/Sell became Sell. Any exceptions to these rating revisions are reflected in the chart. All price objectives for Neutral and Sell rated securities established before 6 Sep. 2002 were eliminated as of that date. The current Investment Opinion System is contained at the end of the report under the heading "Fundamental Equity Opinion Key". Dark Grey shading indicates the security is restricted with the opinion suspended. Light Grey shading indicates the security is under review with the opinion withdrawn.

MGA Price Chart


From 8 Dec. 2001 to 6 Sep. 2002, the Investment Opinion System included: Strong Buy, Buy, Neutral, and Reduce/Sell. On 6 Sep. 2002, Strong Buy and Buy ratings became Buy, and Reduce/Sell became Sell. Any exceptions to these rating revisions are reflected in the chart. All price objectives for Neutral and Sell rated securities established before 6 Sep. 2002 were eliminated as of that date. The current Investment Opinion System is contained at the end of the report under the heading "Fundamental Equity Opinion Key". Dark Grey shading indicates the security is restricted with the opinion suspended. Light Grey shading indicates the security is under review with the opinion withdrawn.

TM Price Chart


From 8 Dec. 2001 to 6 Sep. 2002, the Investment Opinion System included: Strong Buy, Buy, Neutral, and Reduce/Sell. On 6 Sep. 2002, Strong Buy and Buy ratings became Buy, and Reduce/Sell became Sell. Any exceptions to these rating revisions are reflected in the chart. All price objectives for Neutral and Sell rated securities established before 6 Sep. 2002 were eliminated as of that date. The current Investment Opinion System is contained at the end of the report under the heading "Fundamental Equity Opinion Key". Dark Grey shading indicates the security is restricted with the opinion suspended. Light Grey shading indicates the security is under review with the opinion withdrawn.

Investment Rating Distribution: Autos Group (as of 31 March 2005)					
Coverage Universe	Count	Percent	Inv. Banking Relationships*	Count	Percent
Buy	36	44.44%	Buy	11	30.56%
Neutral	30	37.04%	Neutral	11	36.67%
Sell	15	18.52%	Sell	3	20.00%
Investment Rating Distribution: Global Group (as of 31 March 2005)					
Coverage Universe	Count	Percent	Inv. Banking Relationships*	Count	Percent
Buy	1060	39.91%	Buy	368	34.72%
Neutral	1379	51.92%	Neutral	403	29.22%
Sell	217	8.17%	Sell	44	20.28%

* Companies in respect of which MLPF&S or an affiliate has received compensation for investment banking services within the past 12 months.

FUNDAMENTAL EQUITY OPINION KEY: Opinions include a Volatility Risk Rating, an Investment Rating and an Income Rating. **VOLATILITY RISK RATINGS,** indicators of potential price fluctuation, are: A - Low, B - Medium, and C - High. **INVESTMENT RATINGS,** indicators of expected total return (price appreciation plus yield) within the 12-month period from the date of the initial rating, are: 1 - Buy (10% or more for Low and Medium Volatility Risk Securities - 20% or more for High Volatility Risk securities); 2 - Neutral (0-10% for Low and Medium Volatility Risk securities - 0-20% for High Volatility Risk securities); 3 - Sell (negative return); and 6 - No Rating. **INCOME RATINGS,** indicators of potential cash dividends, are: 7 - same/higher (dividend considered to be secure); 8 - same/lower (dividend not considered to be secure); and 9 - pays no cash dividend.

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