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Automotive and components market in Asia

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Preface

In the automotive world, all eyes are on Asia. The region is taking an increasing share of global vehicle sales, and is the only major market expected to see strong growth over the next few years. Asia also is displaying potential as a source of components to the sector, with multinationals and local companies alike jockeying to supply major vehicle manufacturers with lower cost components.

The flip side of the coin is the challenge that Asia presents. CEOs are grappling with questions that have major strategic implications for their businesses:

- Will countries such as China, India and Thailand emerge as major vehicle exporters to challenge North American and European manufacturers on their home turf?
- As the sector develops, what regional "footprint" is likely to be most effective?
- Which markets are more attractive in terms of ease of entry and operational environment?
- Who will be the winners, and who will be the potential losers, as regional free trade agreements are implemented?

This paper does not claim to provide definitive answers to all of these questions; it has been written to provide an objective view of the Asian market and to highlight some of the major trends we are witnessing.

KPMG researched key markets in Asia and interviewed executives with local and multinational vehicle assemblers and component manufacturers across the region to provide additional industry perspective. Our thanks go to all who participated for their valuable time and insights.

Key findings are that:

- Asia Pacific markets will see strong growth over the next five years, with China becoming a market the size of Japan today.
- Japan and South Korea will see their manufacturing pre-eminence in Asia diminished as China, India and other Asian economies see their vehicle manufacturing and component sectors grow.
- Free Trade Agreements (FTAs) are beginning to impact the sector and will require many companies to rethink their strategies.

We also paint three scenarios for the development of the sector: these three contrasting visions of the future illustrate the high degree of uncertainty about how the next few years will play out.

Paul Brough
Head of Financial Advisory Services, China and Hong Kong SAR
KPMG in Hong Kong

March 2005

- The information in this report is of a general nature and is not intended to address the circumstances of any particular individual or entity. Although we endeavour to provide accurate and timely information, there can be no guarantee that such information is accurate as of the date it is received or that it will continue to be accurate in the future. No one should act on such information without appropriate professional advice after a thorough examination of the particular situation.

- KPMG in Hong Kong does not accept responsibility to any party that relies on information or views expressed in this report; companies should seek professional advice and conduct a thorough assessment of the particular situation.

- Our report is based on information available to us at the end of February, 2005. Our information and analysis is based on research and interviews conducted in December 2004 to February 2005.

Glossary of terms

AFTA	Asian Free Trade Agreement
AJCEP	ASEAN-Japan Comprehensive Free Economic Partnership
AM	Aftermarket
ASEAN	Association of South East Asian Nations
ATPM	Automotive brand sole agent in Indonesia
CAGR	Compound annual growth rate
CBU	Complete built up
CEO	Chief executive officer
CKD	Completed knocked down
FTA	Free Trade Agreement
GDP	Gross domestic product
ODM	Original design manufacture
OEM	Original equipment manufacture
SAFTA	South Asian Free Trade Agreement
SKD	Semi knocked down
USD	US dollar
VM	Vehicle manufacturer
WTO	World Trade Organisation

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Passenger car sales

"Consumers in Asia will become a major source of growth in the global demand for automobiles between now and the end of the decade", four of five executives strongly agreed

Survey findings from KPMG's Global Auto Executive Survey 2005

Growth in passenger car[a] sales will be concentrated in emerging markets — and Asia in particular

In many ways 2004 was a bounce-back year for the global automotive industry, as many economies rebounded from a less-than-stellar 2003. Higher oil prices have yet to have a major impact on passenger car sales, and from a distance, it might be easy to think that the status quo will persist. North America and Europe are still the largest markets globally, and for many companies these remain the priority.

This is changing, fast. Fuelled by rising incomes and relaxed trade policies, most countries in Asia have seen rapid growth over the past few years. We anticipate this trend will continue, and this expectation is also reflected in the latest forecasts from the Economist Intelligence Unit (EIU).

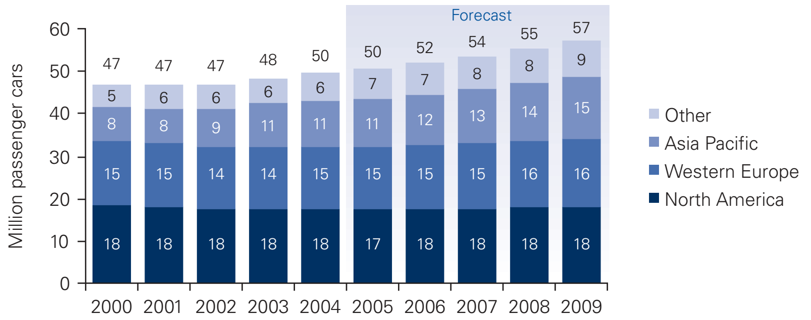
By the time the decade draws to a close, Asia Pacific will be a passenger car market as large as North America or Europe. During the course of the decade those regions will have seen virtually zero growth: in contrast, Asia Pacific will have almost doubled in size

- Global passenger car sales are forecast to grow by around 7 million units from 2004 to 2009, or just under 3 percent annually
- Asia Pacific countries will actually account for over half of this growth and key markets such as India and China will lead the way
- Sales in North America and Europe are expected to rise only 0.6 percent and 1.6 percent per year, respectively, through 2009

Today Asia Pacific is a much less homogenous market than North America or Europe, but despite its large geographic area, this too is changing.

Going forward the components sector and the vehicle manufacturing sector alike will be impacted not only by the growing Asian market, but by the increasing linkages within Asia and to the rest of the world.

Car sales by region (2000-2009)



Note: North America includes light commercial vehicles
Sources: EIU, "World automotive outlook", 25 Nov 2004; KPMG analysis

Note: (a) "Passenger car" is defined in this report as motor vehicles used for the transport of passengers, and comprising no more than eight seats in addition to the driver's seat; in some countries this may include light commercial vehicles, such as pick-up trucks, if used for non-commercial purposes

Growth drivers and growth markets

"With increasing income, the markets for new purchases and replacement of vehicles are growing rapidly…"

Vice general manager for a Shanghai-based automotive venture capital in China said in an interview with KPMG

What factors are driving the growth in Asia?

The story is simple: strong economic growth in Asia has boosted - dramatically - the purchasing power of local consumers. Asian consumers are highly aspirational, and as incomes rise and car prices fall, car ownership is a dream increasingly within reach for millions.

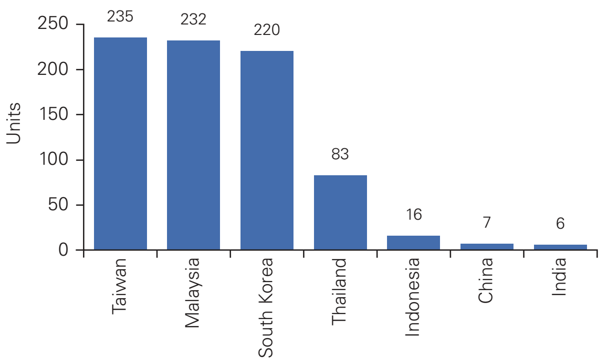
Gross Domestic Product (GDP) growth in Asian economies will maintain a Compound Annual Growth Rate (CAGR) of over five percent over the next five years (2005-09); China, South Korea, and India will see growth of close to 10 percent in the forecast period.

It is this economic growth, combined with low car ownership rates and rising incomes, that is making Asia a bright spot in the automotive industry causing major vehicle manufacturers and component manufacturers alike to focus on the region as never before.

Forecast growth by country (CAGR 2005-09)

	Passenger car sales	GDP
Thailand	15.0%	8%
China	14.1%	10%
India	13.5%	9%
Taiwan	7.9%	8%
South Korea	6.8%	9%
Indonesia	6.4%	12%
Malaysia	4.5%	6%
Japan	-0.1%	-0.1%

Passenger car stock per 1,000 people (2004)



Source: EIU "Executive briefing" 2005

In Asia, China is gaining ground on Japan as the largest single market

Japan is forecast to remain the largest sales market in Asia, although car sales are forecast to shrink slightly over the next five years. This doesn't tell the full picture though, as Japanese car makers are very active in the region and dominate sales in a number of countries in Asia.

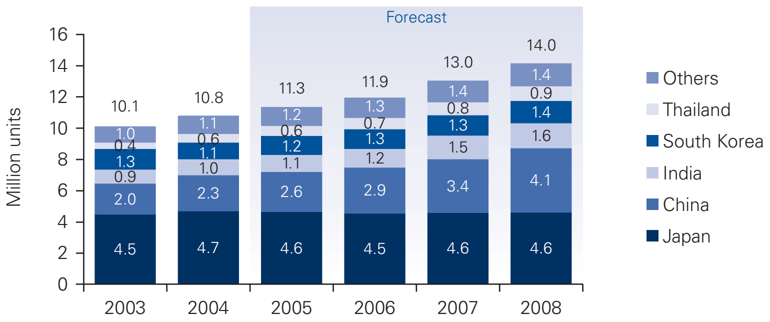
China's car market, however, is expected to grow at an average CAGR of 14.1 percent between the same period: by 2009 China will be a passenger car market similar in size to Japan at some 4.4 million units.

Driven mainly by higher income per capita and low interest rates (30-year lows), India is forecast to reach a total market of 1.8 million units by 2009, replacing South Korea to become the third largest sales market in the region.

International attention in recent years has largely been focused on China, however, it is still worth keeping a close eye on the development of ASEAN countries.

ASEAN countries combined are forecast to reach about 2.5 million units by 2008; Thailand, the largest market of all ASEAN countries, is expected to grow at around 15 percent, to reach just under a million cars by 2008.

Sales of passenger cars by country in Asia Pacific (2003-2008)



Note: "Others" includes Malaysia, Indonesia, Philippines, Taiwan and Vietnam
Source: EIU, "World automotive outlook", 2004

Free trade agreements are reshaping the landscape

"The ASEAN trade agreement will create a single market environment."

Business development director for the Thailand office of a Malaysian components manufacturer said in an interview with KPMG

The idea of freer trade in and with Asia Pacific has been "the next big thing" for decades, so taking a sceptical stance has been a pretty safe position. The past few years have seen a flurry of activity on trade agreements, however, and the remaining sceptics may find themselves wrong-footed.

A number of trade agreements and free trade agreements (FTAs) have either been established or are under discussion between countries. Some of the more significant FTAs to be established in the last decade have included

- the ASEAN Free Trade Agreement (AFTA) (1997)
- the South Asian Free Trade Agreement (SAFTA) (1 January 2006)
- the ASEAN-Japan Comprehensive Free Economic Partnership (AJCEP) (October 2006)
- China's FTA with ASEAN (1 January 2005)
- China and Taiwan entry to the World Trade Organisation (11 December 2001)

"Some ASEAN member countries have demonstrated resistance to AFTA; Malaysia has delayed the implementation of AFTA, and auto makers in Indonesia have called for a delay of its implementation as well"

Corporate general manager for a Japanese-based automotive manufacturer in Thailand commented to KPMG in an interview

Still more agreements are being actively progressed, for example China and Australia are fast-tracking a bi-lateral FTA and Japan and Korea are pursuing bi-lateral agreements with each other as well as with other ASEAN countries.

These agreements are already reshaping the landscape, with Thailand in particular looking to benefit as a number of passenger car makers are consolidating their regional manufacturing capacity in Thailand and using it as a springboard to access other ASEAN markets

- *"Thailand offers a great opportunity for Nissan. There's potential for growth, and it's an excellent base for us to expand our presence in the region"* CEO of Nissan Motor Corp said in the press.
- *"Thailand has the most to gain from AFTA implementation as it dominates the automotive industry in the ASEAN region"* the General Manager of a Japanese auto maker said in an interview with KPMG.

Similarly component companies are re-assessing the need to have multiple production sites and are now able to rationalise their ASEAN production in one location.

- Denso is but one example: they have recently centred production in Indonesia, whereas *"previously, DENSO manufactured similar products in each individual ASEAN country,"* Senior Managing Director, DENSO Sales Group commented in the press.

Two steps forward, one step back?

There is still potential for countries to erect non-tariff barriers, or to ask for delays or exceptions in implementing their trade agreements.

- Malaysia reduced import tariffs to 20 percent in accordance with AFTA, but then hiked up excise duties on all new cars sold in Malaysia to offset an expected fall in revenue.

- Both Indonesia and Malaysia have sought to delay lowering their import tariffs on ASEAN imported cars and components as part of their AFTA automotive commitment to provide more time for their local industries to adapt.

However it appears increasingly likely that Asia on balance will see much freer trade going forward, and indeed there is almost a scramble by some countries to get out in front of regional neighbours.

Vehicle manufacturing: Asia adds capacity

83 percent of respondents agreed to the statement: "I do expect the building of new manufacturing facilities in Asia to increase over the next five years"

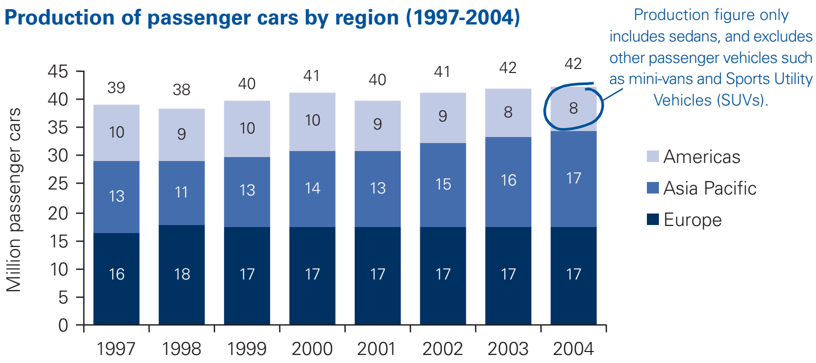
Survey findings from KPMG's Global Auto Executive Survey 2005

Asia is where capacity is being added, China in particular

In terms of production, Japan and more recently South Korea have led the way in Asia. In 2004 these two countries accounted for the lion's share (around 75 percent) of passenger car manufacturing in the region.

Over the next five years, new capacity is being added around the region particularly in China, India and Thailand. The result is that Asia in 2009 will see annual production of over 17 million cars, placing it on an equal footing with Europe for the first time.

Production of passenger cars by region (1997-2004)



Note: Figures exclude all light commercial vehicles (such as trucks and pick-ups)
Sources: Organisation Internationale Des Constructeurs D'Automobiles (OICA), "World production of passenger cars", 1997-2003; KPMG analysis

Selected automotive investments, announced since June 2004

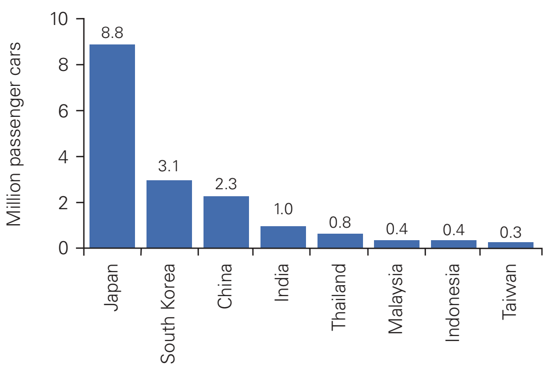
Country	Investor	Investment
China	Ford, Mazda and Changan Auto	New joint venture in Nanjing with an initial production capacity of 160,000 units
China	General Motors	Plans to nearly double capacity to 1.3 million units over the next two years
India	Maruti – Suzuki	Plans to set up a second plant with a capacity of 250,000 units a year
Malaysia	VW and Proton	Established a partnership that plans to launch its first locally assembled VW models by the end of 2005
Korea	Renault	Establishing a regional hub in Korea; a third of its investment is in a 200-300,000 capacity engine plant
Korea	Shanghai Automotive Industry Corporation	Acquired a controlling 48.9% stake in South Korea's Ssangyong Motor Co
Thailand	Toyota	Plans to increase production to 500,000 units; half to be exported by 2006
Thailand	Mitsubishi	Investing USD 525 million to increase capacity to 180,000 units

> "The thrust on infrastructure, a robust banking system, strong R&D capabilities and low costs are the major drivers of the growth of the passenger vehicle industry."
>
> Executive director of a major Indian auto manufacturer commented to KPMG in an interview

In terms of where this production will take place, several factors indicate that in a few years' time, the landscape in Asia will look very different. Japan and Korea are among the most efficient locations in the world for vehicle manufacturing, but new capacity being added in Asia is primarily going to other countries with growing markets and potential for lower production costs.

- Indigenous manufacturers, notably in China, are growing and adding production capacity in their home markets.
- Western manufacturers such as General Motors or Volkswagen are setting up new manufacturing and assembly facilities — in China primarily but not exclusively.
- Japanese and Korean manufacturers, such as Toyota, Honda and Hyundai, are actively locating new plants in the region such as Thailand and India.

Production of passenger cars in Asia (2004)



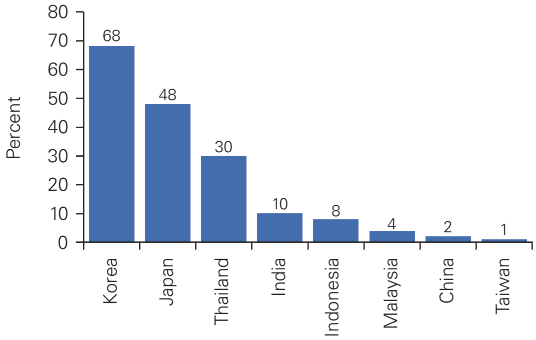
Note: Figures exclude all light commercial vehicles and include the assembly of imported CKDs and SKDs
Sources: OICA, "Production of passenger car", 2004; KPMG analysis

Many countries are gearing up for exports

For most countries — and VMs — in Asia, exports are a strategic necessity. Some markets, such as Japan and Korea, are mature and have high car ownership levels and exports have become a major revenue driver for companies based there.

For others, exports are needed to bring critical mass to operations where local demand is still low. These countries, such as Malaysia and Thailand, see an opportunity to become a manufacturing base for export around the region. And most industry watchers agree that China will soon follow in Japan and Korea's footsteps and start exporting cars on a global basis.

Passenger car exports as a percentage of production (2003)



Sources: United Nations Commodity Trade Statistics Database 2005; KPMG analysis

FTAs are expected to spur export growth around the region as countries with more efficient production capabilities take advantage of lower trade barriers. Thailand has been growing on the back of Japanese and Korean auto manufacturers circumventing high ASEAN import tariffs by establishing manufacturing facilities in Thailand; for example, Mitsubishi exported 72 percent of the vehicles it produced in Thailand in 2003.

Likewise India has been looking to take the opportunity to establish itself as a manufacturing base for export to countries in SAFTA as well as a number of ASEAN countries including Indonesia, Malaysia and the Philippines. Although exports as a percentage of production are still small, these are expected to grow at around 30 percent per year over the coming few years.

Winners and losers

The result will be an Asia with a number of major manufacturing centres: India, China and Thailand are already looking to challenge traditional Japanese and Korean auto manufacturing dominance even as these countries retain a significant technological edge. Vehicle manufacturers with operations in only one or two countries will become the exception rather than the norm.

For manufacturers able to unlock the synergies of producing in and across the region, the benefits are enormous: efficient sourcing for regional and potentially global operations, and the ability to leverage platforms and designs cross-border.

However, indigenous car companies without similar scale may find themselves at a pronounced disadvantage, particularly as tariff and non-tariff barriers come down across the region; for these companies the options may be as simple as: grow, merge, or perish.

Production of components

"China and India are expected to become key exporters of components in Asia…most automotive manufacturers are moving their base operations to China or India"

General manager for a Japanese-based vehicle manufacturer in Thailand said in an interview with KPMG

Asian made components: increasingly hard to beat

From Toledo, Ohio to Stuttgart, component manufacturers are facing a new threat: high quality components, made in Asia, at a price point that is difficult or impossible to meet. Their OEM customers are not stopping at sourcing Asian components for their manufacturing operations in Asia, they are increasingly — and aggressively — looking to source them "back home".

The components industry has traditionally been a local one. Japanese car makers sourced from a network of Japanese suppliers; Koreans from Korean component suppliers; countries with national car programmes encouraged or demanded a high degree of local content. For the most part, Western OEMs did little Asian sourcing except when needed (or mandated) for their Asian production.

This situation in Asia has changed considerably over the past decade, and will arguably change ever more dramatically over the next five years.

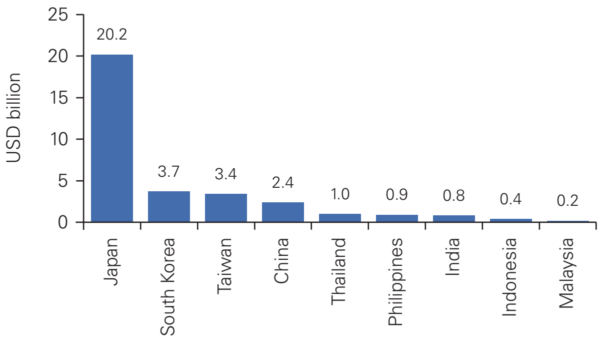
- Bi-lateral and regional trade agreements are dramatically lowering or even eliminating tariffs on components, and we are already seeing far more intra-Asia trade in components, and component manufacturers able to rationalise their manufacturing for greater efficiency.
- Multinational VMs and local OEMs are demanding higher quality parts to meet local and export market requirements.
- As local sources of components emerge that can meet more stringent VM requirements, multinational VMs are recognising that there is potential to use these suppliers not only for their in-country manufacturing but also for their regional or even global component needs.

"The production location of components is shifting from Japan to Thailand"

Business development director for a Malaysian-based components manufacturer in Thailand commented to KPMG in an interview

The past few years has seen a realignment, with component exports increasing rapidly from countries other than the traditional component powerhouses of Japan, South Korea and Taiwan. Although Japan and Korea's component exports largely serve the overseas manufacturing plants of their domestic brands and Taiwan's exports have focused on the global replacement and accessories market, China, Thailand and India are beginning to challenge the status quo.

Automotive component exports (2004)



Note: Figures do not include tyres
Sources: United Nations Commodity Trade Statistics Database 2005; Taiwan Transportation Vehicle Manufacturers Association 2005

This has led to a number of Taiwanese, Japanese and Korean component manufacturers to establish manufacturing facilities in such places as Thailand and China in order to serve the growing domestic production and take advantage of the FTAs with other countries.

Staying alive

Over the next five years, the component industry in Asia will have developed considerably with increasing investments from European and North American parts manufacturers. Not only will component companies be actively serving the 17 million unit manufacturing sector within Asia, it will also be the cost-efficient source of components for the rest of the world.

The transformation of this sector poses problems for many companies in Asia as the historically fragmented and protected industry is subject to more global competition. Some companies are thriving, to the point that vehicle manufacturers are complaining of over-concentration in some types of components, with only a handful of companies able to meet their specifications and volume requirements.

On the other hand, the long tail of smaller firms without the ability to invest in new equipment and technology will quickly find themselves with no place to go.

Similarly component companies overseas are scrambling to supply the growing OEM market in Asia, but also to compete in their home markets against made-in-Asia components. They are being forced by circumstance to come up with a strategy for Asia sooner rather than later, and increasingly this strategy involves acquiring or partnering with an Asian company.

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Three scenarios: How will auto production develop in Asia?

We have developed three scenarios which explore how automotive production may develop in the markets covered in this report over the coming 10 years. The scenarios cover a range of interrelating issues: the final outcome is likely to contain elements of all three scenarios.

- Scenario 1: The auto markets throughout Asia become closely integrated, with production moving to the most efficient markets.
- Scenario 2: China and India become dominant production centres for their own growing markets and for export to other markets.
- Scenario 3: Asian auto markets remain fragmented with little regional trade as a few countries become large domestic markets.

Scenario 1: Asia becomes closely integrated

In this scenario, the production, assembly and export of components and passenger cars throughout Asia becomes closely integrated and production activity is spread widely throughout the region. This arises through:

- the successful implementation of free trade agreements between Asia Pacific countries resulting in very low tariffs on components and passenger cars, and minimal non-tariff barriers;
- protectionist measures of domestic brands and production dismantled in favour of a more efficient and effective market throughout the region; and
- cross-border M&A and alliances create efficient, integrated operations with a pan-Asian footprint.

The impact from closer integration will result in countries specialising their production in specific areas along the supply chain. More labour intensive, lower-technology components will be manufactured in emerging countries such as Vietnam, the Philippines and Indonesia, while technology-driven components and design work will be centred in locations such as India, South Korea, China and Taiwan.

Vehicle assembly will take place in the major demand centres of Japan, China, India and South Korea resulting in a higher concentration of assembly plants in these countries and greater exports of finished passenger cars to other, import-dependent markets.

Inefficient producers throughout the region will close or be taken over. Some domestic brands will find it increasingly difficult to compete against the larger global or regional brands that have economies of scale and established production processes and are better able to compete in an environment of low trade barriers.

This scenario results in more competitively priced products, which assists in spurring growth throughout the region and improving Asia's global competitiveness.

Scenario 2: China and India dominate production

In this scenario, China and India emerge as dominant regional production centres, attracting a significant portion of new investment. Their growth will be at the expense of other markets in Asia.

The demand for passenger cars continues to increase in China and India, making them major markets for vehicles and components in their own right. The scale of the market results in substantial new investment flows directed to these markets. As these countries establish well-integrated networks of upstream suppliers and ancillary services (e.g. R&D and testing facilities), this leads to even greater advances in productivity and economies of scale that smaller markets will be unable to match.

In this scenario, China and India's component production makes the transition from lower-technology parts to higher-technology parts to the extent that neither country is reliant on imported components from the rest of the region.

Eventually, China and India are able to match or beat Korean and Japanese levels of efficiency as their automotive sectors mature and new investments bear fruit. This in turn spurs the transfer of manufacturing of export vehicles from Japan and Korea (currently several million units annually per country) to China and India, leaving Japan and Korea plants producing mainly for their own domestic markets.

For this to happen, tariff and non-tariff barriers in other Asian markets do not become more restrictive and in countries without domestic brands become increasingly less-restrictive. Over the scenario period, production costs are expected to increase in China and India, however, with increased efficiencies in the production process the impact is not expected to be significant allowing them to maintain their competitiveness.

In this scenario, foreign companies continue to increase investment in the China and India markets, in both component production and passenger car assembly. Much of this investment and subsequent growth will be at the expense of other Asian markets.

Scenario 3: Continued regional fragmentation

In this scenario, Japan and South Korea are joined by China and India as major domestic markets and attractive locations for foreign investment in component production and passenger car assembly. However, a number other Asian countries do not readily reduce tariff and non-tariff barriers, and local assembly in these countries continues to be necessary for the vehicle assemblers.

Free trade agreements continue to be signed and implemented, but tariff and non-tariff barriers in countries with national industries to protect will be greater than those without. China and India become significant producers of components for their own domestic market but inter-Asian trade in components remains limited. Passenger car assembly will remain widely spread within Asia, with most countries retaining car assembly facilities and a high degree of local content.

This scenario sees countries protecting national industries and local producers by using tariff and non-tariff barriers and other protectionist measures to limit imports from the more dominant markets. Foreign investment continues to be spread throughout the region primarily in markets with the strongest sales growth, limiting economies of scale for manufacturers.

The limited extent that Asia becomes a cost-effective export base, forces VMs and component manufacturers to maintain multiple production bases, slowing down M&A opportunities and the reorganisation of companies and industries.

Conclusion

The probability of any of these three scenarios developing in the way we have described is likely to be low, and inevitably how the Asian automotive market develops over the coming 10 years will be a combination of elements from all three scenarios.

We consider Scenario 1 to be the most likely of the three scenarios to occur, but containing elements from the other two scenarios. With Free Trade Agreements between markets increasing and barriers to trade and protectionist measures falling, it is likely that the Asian automotive market will become more closely integrated.

China and India are likely to become major production markets and significant export markets. However, they are not likely to dominate Asia to the extent described in Scenario 2. Meanwhile, as trade barriers decrease, some countries will maintain some level of protection for national industries, but again, this is not expected to be to the extent described in Scenario 3.

The development of the Asian automotive market over the next decade will be interesting and challenging to follow with significant opportunities for foreign and domestic investment throughout the region.

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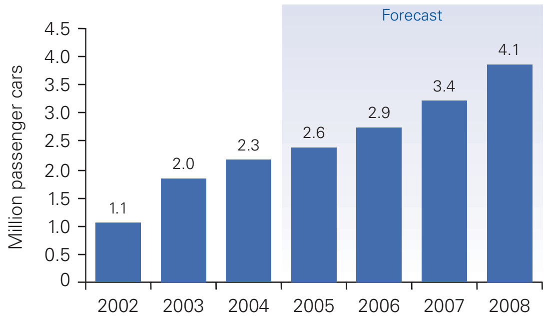
China

The interest in China's automotive sector does not appear to be abating, with expectations remaining high.

Following China's watershed year in 2003, when growth in passenger car sales increased 70 percent, 2004 experienced a few months of slow sales which reduced annual growth to around 15 percent. This more modest growth is expected to continue in 2005 with the China Association of Automobile Manufacturers predicting passenger car sales will grow around 12 percent to reach 2.6 million vehicles; longer term forecasts predict annual sales will reach around 5 million units by 2010.

Passenger car sales, China (2002-2008)

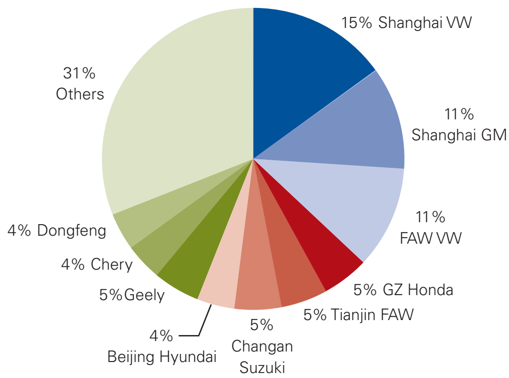


Sources: Access Asia, "Automobile parts and aftermarket in China" 2003; China Auto Monthly – July 2004; KPMG analysis

China is still largely a domestic market: although imports and exports of vehicles experienced double-digit growth during 2004, they still represent a fraction of domestic sales and production, and most automakers have favoured investing in manufacturing plants in China. A focus on the domestic market and quality issues have militated against volume exports; as a Regional Executive of a European automotive parts manufacturer told KPMG, *"Domestic vehicles still suffer from the 'Made in China' image"*.

The passenger car market is still up for grabs as it remains highly fragmented. Apart from VW, only General Motors has above 10 percent market share, with a large number of domestic and multinationals battling for the other 60 percent of the market.

Market share of passenger cars, China (June 2004)

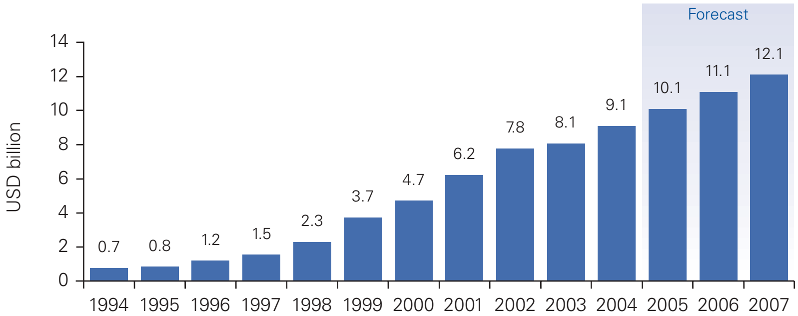


Source: China Auto Monthly– July 2004

Volkswagen traditionally dominated the passenger car market through its two joint ventures, but its market share has been cut in half from around 60 percent in 2002, with such companies as General Motors increasing market share. Conspicuous in their lack of market share have been the "big three" Japanese automotive manufacturers — Toyota, Honda and Nissan — and Korean companies, but they too are now aggressively targeting the China market.

The components sector has been growing steadily with the market value reaching USD 9 billion in 2004 and forecast to reach around USD 13 billion in 2007. China-made components are increasingly competitive and are expected to increase as China becomes a key exporter of higher value-added parts.

Auto parts and aftermarket value, China (1994-2007)



Source: Access Asia, "Automotive parts and aftermarket products in China: A market analysis", August 2003

However, the component market is still highly fragmented with the top 10 component manufacturers contributing only around 20 percent of total revenue and approximately 1,700 manufacturers registered with the government, of which around 450 are foreign invested companies. By some estimates there are another 3,000 plus smaller manufacturers in the industry, most of which manufacture products for the aftermarket.

Global vehicle assemblers appear to be betting on China's long-term development: despite a challenging and competitive market, many major manufacturers have announced ambitious plans to increase production capacity over the next few years. As the Chief Executive Officer of a US passenger car manufacturer commented in the press:

"Having a strong presence in this dynamic and growing market is not an option anymore, it's a necessity".

At this time though it remains uncertain if all expansion plans are going to be realised or whether they will be adjusted to suit changing market conditions.

China's vehicle assemblers are likely to remain focused on growing their domestic market share in the short term. However, it will not be long before the market follows the components sector and begins to export a larger number of cars as quality and production efficiencies improve — a development with clear global as well as regional repercussions.

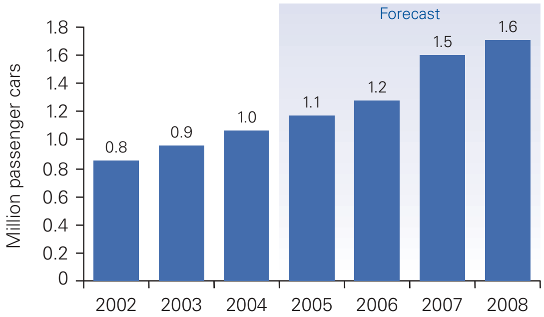
India

In the past few years India has emerged as a significant automotive market with one of the fastest growth rates in Asia. In 2004 alone, passenger car sales grew by 24 percent to reach just over 1 million for the first time. Although India still lags far behind other major Asian markets such as Japan, South Korea and China, it is gaining momentum.

While China's auto sector has been grabbing the headlines, many expect that India will become the 4th largest passenger car market in the world by 2020 and a significant export base for Asia and Western Europe.

Demand has been driven by the increasing number of double-income families and rising disposable income. Government policies have also played a role: after moves to provide easier access to car loans, over 80 percent of passenger car sales are financed by loans. *"India has emerged as a significant auto market...due to the overall shift in government policies since 2000"* – the Director General of the Society of Indian Automobile Manufacturers commented in the press.

Passenger car sales, India (2003-2008)



Source: EIU "Executive Briefing", 2005

One aspect of the Indian car market hasn't changed: the dominant position of Maruti Udyong — an Indian-Japanese joint venture — which holds around 60 percent of the market. Hyundai has just under 20 percent, and with other VMs such as Honda, Toyota, GM, Ford and Mitsubishi, they are slowly chipping away at Maruti's dominance. However, with consumers still highly price-conscious Maruti's strong position in the low-end segment has been hard to beat.

Foreign investors, on the other hand, appear to be looking beyond the car market at other possibilities in India. An increasing number of global car makers are outsourcing their R&D and engineering requirements to India to take advantage of improving capabilities and low costs.

"Foreign investment is likely to increase in the near term, as most manufacturers recognize India as a major hub in the region due to its low cost advantage in terms of labour and high technical skill base and R&D capabilities."

Executive director of a major local auto manufacturer said to KPMG in an interview

"One of my missions is to use Toyota's know-how and culture of cost-cutting to turn India intro our lowest-cost manufacturing centre in the world."

Managing officer for Africa, Oceana and Middle East for Toyota Motor Corp commented in the press

"Car makers over the world have realised that India can design cars on its own and make it globally acceptable."

Chairman of Sona Koyo Steering said in the press

"India is well on its way to becoming an outsourcing hub for global auto manufacturers and the country stands a good chance against China."

Managing director of Sundaram Mutual Fund commented in the press

Already more than 15 global car makers have established outsourcing offices, including GM, Ford, Daimler-Chrysler, Mercedes-Benz, Audi, Isuzu and Nissan, investing approximately USD 1.5 billion in the process.

"[I'm] convinced that with the increasing emphasis on quality, India is fast moving towards becoming a sourcing hub for global automobile makers."

Delphi India's recently-retired Country President said in the press

India is looking to take advantage of foreign interest and position itself as a export base for both passenger cars and components. Although export volumes are still low — around 72,000 cars in 2003 — exports have been growing rapidly at around 30 percent per year and are expected to continue at a similar pace going forward.

India is also looking to grow and improve its component sector to become a USD 2 billion export base by 2006. India's track record in components is impressive especially when considering that for the most part this is a highly fragmented industry comprising thousands of family-run firms with no significant economies of scale. There are over 300 small and medium component manufacturers servicing the VMs, which are supported by over 5,000 small firms. A shake-out in the industry would be beneficial to its international competitiveness — but rapid change is unlikely.

Nonetheless, over the next 3-4 years an additional USD 5 billion is expected to be pumped into the automotive industry, of which USD 3 billion will comes from foreign investment.

India, and Indian companies, are confident they can take on the world, and win. At the same time as the Indian market opens, local players face increasing competitive risks, as Indian import tariffs are lowered and other countries such as Thailand and China look to get a jump on the regional export market. As an Executive Director of a major Indian component manufacturer told KPMG:

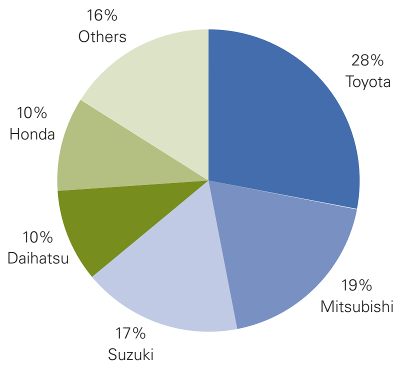
"If the Thailand FTA becomes operational, it will have a significant [negative] impact on the Indian auto components industry. How one protects one's investments in such a dynamic market is going to be a challenge".

Indonesia

Indonesia's auto industry largely operates through a vehicle assembly model, with three major assemblers: the Astra Group, the Indomobil Group and Krama Yuda Tiga Berlian producing cars from imported kits. These three companies together assemble 17 of the 22 brands in Indonesia.

The market is dominated by Japanese brand passenger cars (chiefly Toyota, Mitsubishi and Suzuki) which accounted for over 98 percent of sales in 2004. Other non-Japanese brands (such as Proton and VW) have been actively developing the market but have yet to significantly erode the position of the market leaders.

Market share, Indonesia (September 2004)

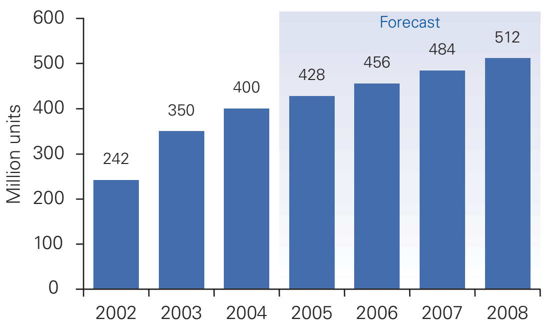


Source: Astra International, 2004

Domestic sales of passenger cars reached nearly 400,000 units in 2004 up from 350,000 units in 2003. Roughly 70 percent of this volume is 8-seater vehicles. The market is expected to continue growing to reach sales of around 480,000 units in 2005 and 760,000 units by 2009, a compound annual growth rate of around 14 percent from 2004; some industry commentators are expecting sales in Indonesia to eventually surpass those in Thailand and Malaysia.

As mentioned above, Indonesia's industry is basically a CKD assembly industry: kits account for over 90 percent of cars sold. The sector has significant unused assembly capacity as well, with the ability in theory to produce 750,000 units annually.

Passenger car sales, Indonesia (2002-2008)



Source: EIU "Executive Briefing", 2005

Over the past few years the Indonesian government has tried to open the market while still protecting the local assembly industry, and the government has had to amend or scrap a number of measures that had favoured in-country assemblers:

- removing the policy for local content requirement
- allowing assemblers to import CBU's and CKD's
- lowering overall import duties, particularly from ASEAN countries
- deregulating the role of the automotive brand sole agent (ATPM), allowing non-ATPM's to also open car assembly plants or import cars

The effect has been to make Indonesia reliant on imports.

The government is looking to increase Indonesia's exports and obtain a larger piece of intra-Asia trade; however, exports (mainly Astra Group assembled Toyotas) remain low as a percentage of domestic production: exported CKDs accounted for around 6 percent of production in 2004 while CBUs accounted for around 1.7 percent.

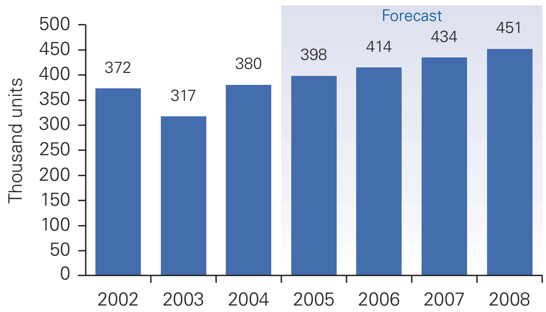
Indonesia's component sector has also been hampered by the import-driven nature of the industry and the scrapping of local content regulations. It has proven difficult for local manufacturers to meet international quality standards and as a result, Indonesia exports only 3 percent of its component production annually. Although more than 200 component companies produce a wide range of components, these are often not high-tech and mainly serve the domestic aftermarket.

However as import barriers in other countries diminish and Indonesia can take advantage of low labour costs and raw material advantages, this figure is likely to increase.

Malaysia

2004 was a bumper year for the Malaysia auto industry, as it recorded sales of around 490,000 vehicles, up 20 percent from 2003: of this total around 380,000 units were passenger cars. The Malaysian Automotive Association attributed much of this growth to the introduction of new models and brands at competitive prices, low interest rates and longer repayment periods.

Passenger car sales, Malaysia (2002-2008)



Sources: EIU "Executive Briefing", 2005; KPMG analysis

Malaysia is one of the few ASEAN countries with national vehicle manufacturers, Proton and Perouda being the largest of the four. Historically these producers were able to operate behind high tariff barriers. Tariffs started at 42 percent and went up to 190 percent, making imports uncompetitive.

These entry barriers are in the process of being dismantled, slowly. As part of its AFTA automotive commitments, tariffs on ASEAN cars were reduced to 20 percent. Malaysia has agreed to reduce tariffs to between 0 to 5 percent by 2008, but there is concern that the local industry may suffer if no offsetting measures are introduced.

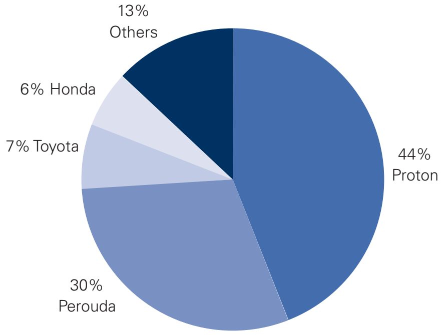
In fact, domestic producers are already feeling the heat:

- Production for domestic vehicle assemblers increased by only 5 percent in 2004 in a market that grew 20 percent overall, and compared to 28 percent for non-Malaysian brands.

- Proton, the market leader, saw its market share tumble from around 60 percent in 2002 to 44 percent in 2004.

There is concern by some industry commentators, that the number of foreign car markers looking to establish operations will lead to overcapacity. Proton and Perouda's combined capacity is around 500,000 units capacity, which appears sufficient to serve domestic demand. New assembly licenses have now pushed capacity to around 700,000 units.

Market share, Malaysia (September 2004)



Sources: EIU "Executive Briefing", 2005; KPMG analysis

As new players gain traction in the Malaysian market, existing domestic assemblers will be under increasing pressure to maintain market share and margins.

"Pure economics will tell you that many won't attain economies of scale"

Chief Executive of Protonsaid commented in the press

The market in Malaysia is relatively well penetrated, with one car for every four Malaysians, compared to one car for every 30 people in Thailand or India. Combined with lower tariffs and a new set of competitors based in Malaysia, many feel that prices have only one way to go.

"Price cuts are inevitable. A lot more brands are coming into the market offering the latest styling and attractive pricing"

President of the Malaysian Automotive Association said in the press

Proton has responded to increased competition and falling sales by introducing new models and pursuing an aggressive regional expansion plan, which has included establishing Proton plants in China and Indonesia, tying up with Volkswagen AG for the joint development of cars and increasing its exports to the region.

The passenger car market is not the only national industry to be affected by reducing tariffs and increased competition. For years the Local Material Content Points Program mandated a high degree of local content. This restriction has been scrapped. As a result, the components industry is expected to face the disappearance of many small vendors from its component parts companies as the industry restructures.

All is not doom and gloom, however: as the Executive Director of Perouda Auto Corp recently commented in the press,

"I think there are opportunities for people with deep pockets to come in and consolidate. These companies are viable businesses but they need to regroup."

In preparation of this shake-out, a number of the larger component companies have ventured overseas, with local component manufacturers such as Sunchirin, Ingress Corp and Delloyd establishing operations in Thailand.

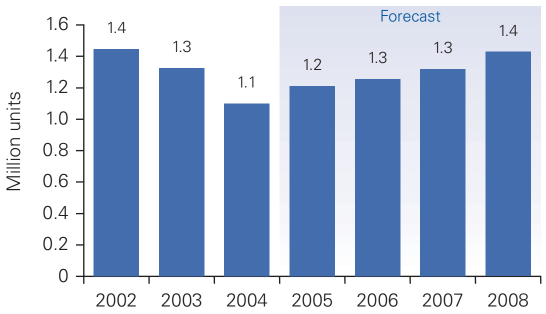
The implementation of AFTA is posing a very real threat to the existence of Malaysia's national automotive industry. The biggest challenge the industry faces is devising strategies to combat competitively priced imports and maintain market share: establishing a more regional footprint is one strategy Malaysian companies are banking on.

South Korea

South Korea is a study in contrasts. Its companies are pioneering their way towards regional market leadership and winning against global competitors regionally. Yet at home these global competitors are absent, with Korean company brands holding 95 percent of the market.

Korea had its worst year in 2004 for domestic passenger car sales since the 1998 financial crisis, with sales declining 17 percent over 2003 to around 1.1 million units; this was largely offset by very successful export growth which reached around 2.3 million units. Some analysts report that the domestic market could grow by between 7 to 8 percent over the next five years, however, others view this as overly optimistic.

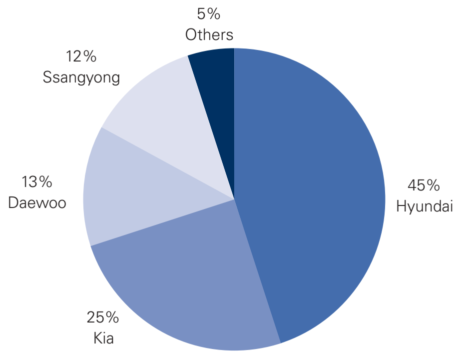
Passenger car sales, Korea (2002-2008)



Sources: EIU "Executive Briefing", 2005; KPMG analysis

After significant restructuring in the industry after the Asian financial crisis, the domestic market is now dominated by four main companies that hold 95 percent of the market. Two are Hyundai Group's dominant Hyundai and Kia brands, while the other two are foreign invested GM Daewoo and Ssangyong (recently acquired by China's Shanghai Automotive Industrial Corporation).

Share of passenger car market, Korea (September 2004)

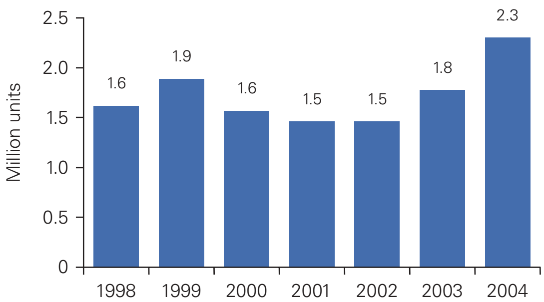


Sources: EIU "Executive Briefing", 2005; KPMG analysis

Hyundai has pursued an aggressive strategy to expand outside Korea. The export-driven strategy is now giving way to a decentralised manufacturing model, as Hyundai sets up plants around the world, from India to the US. Eventually this strategy is expected to have a negative impact on its production facilities at home, as overseas facilities reduce the need for Hyundais exported from Korea.

Likewise, GM Daewoo is exporting Daewoo CKDs and basing models manufactured in other Asian markets on Daewoo designs and platforms.

Passenger car export, Korea (1998-2004)



Sources: EIU "Executive Briefing", 2005; KPMG analysis

Local players also dominate the domestic components market, and as a result, most sourcing is done locally with Korean parts accounting for around 95 percent of the domestic component parts and accessories market. There are around 1,300 Korean companies supplying automotive parts to the Korean vehicle manufacturers and the two major service companies affiliated with Hyundai and Kia.

There are signs that South Korea's policy of high tariffs on imports may be changing. South Korea and Japan are due to conclude a free-trade agreement which would see tariffs on Japanese imported vehicles scrapped, potentially making Japanese cars only a little more expensive than Korean brands. Of the Japanese VMs Toyota has enjoyed the most success in Korea with the Lexus, and, after the free-trade agreement is concluded, more Japanese car markers are expected to increase their presence.

Korean car makers have demonstrated their ability to compete in difficult markets such as the US, and are now focusing on rapidly growing emerging markets such as China and India.

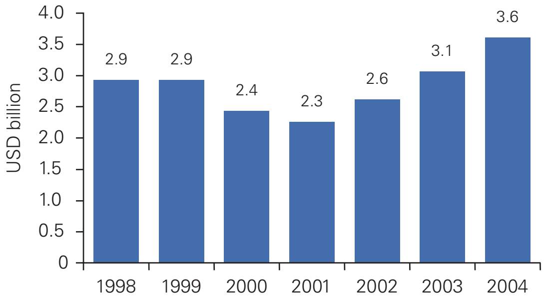
While the domestic market may take some time to recover, it is growing regional and international demand that is expected to help Korean car makers grow as they successfully forge into new markets and challenge the Japanese car makers.

Taiwan

Taiwan's car market is relatively small and it exports little. However the island is well known for its automotive components and holds a reputation globally for producing high quality, competitively priced components, particularly for the aftermarket (AM) and accessories market.

The Taiwanese components market grew by around 25 percent in 2004 reaching USD 4 billion; around 90 percent of this was AM products and over half of Taiwan's production was exported. The sector comprises around 400 OEM component producers and over 2,000 2nd and 3rd tier parts manufacturers. Alongside Korea and Japan, the Taiwan components sector is one of the more advanced and efficient markets in Asia, however, is still short on R&D capabilities for some of the top-end products.

Auto component exports, Taiwan (1998-2004)



Sources: EIU "Executive Briefing", 2005; KPMG analysis

With a small domestic car and parts market, Taiwanese component manufacturers have looked overseas for business. Producers have managed to successfully penetrate regional and US markets and have been building on this by entering the European Union following the amendment of the Block Exemption Regulation (BER). The amended regulations allow insurance companies to specify AM replacement parts as long as they have been certified by competent authorities. With the appreciation of the Euro against the New Taiwan Dollar, European certification agencies have been looking to Taiwan's high-quality AM parts suppliers.

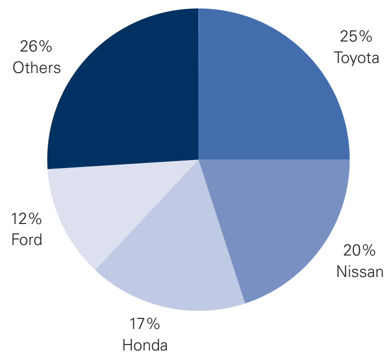
By some estimates, the AM parts market in Europe could be worth some USD 12 billion per year — a significant opportunity for Taiwanese AM producers; as the President of Gordon Auto Body Parts commented in the press:

"Taiwanese companies have a great chance to achieve unprecedented growth by exploring the market."

The vehicle market, after strong growth in the 1990s, has stabilised with just under 300,000 cars sold in 2004, of which around 24 percent were imported. Domestic sales have been growing steadily but unspectacularly, and several industry reports forecast this growth trend to continue.

Taiwan exports very few cars. The three major car groups in Taiwan are Ford Lio Ho, Yulon and Kuozi, which together have around 70 percent of domestic sales. GM and Yulon have recently formed a new joint venture agreement, Yulon GM, scheduled to begin operation in the second quarter of 2005 selling GM's Buick, Cadillac and Opel vehicles.

Share of passenger car market, Taiwan (2004)



Sources: EIU "Executive Briefing", 2005; KPMG analysis

Taiwan has high import tariffs on imported Japanese vehicles, and in response, Japanese manufacturers have penetrated the market through joint ventures and licensing agreements with Taiwanese companies: of the 10 significant auto makers producing or assembling passenger cars, 7 are teamed up with Japanese companies.

As with other component firms in the regions such as those in Malaysia, Taiwanese component manufacturers have been looking to expand into other markets with around 200 larger Taiwanese component companies so far establishing operations in China and ASEAN countries. Thailand has been a significant destination for Taiwanese component manufacturers, presenting

"... the ideal springboard for both original equipment and replacement markets in the ASEAN region and the Middle East."

Chief Executive Officer of Tong Yang Group said in the press

The future appears positive for Taiwan's component manufacturers — at least on an international level. There is some concern however, that as with many other sectors of the Taiwanese economy, as local companies increasingly move production out of the country into growth areas around the region, this will inevitably have a "hollowing out" effect on the domestic industry.

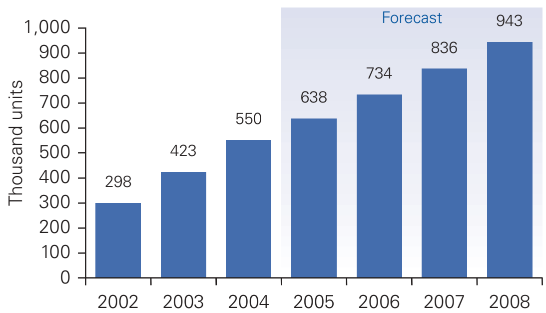
Thailand

Thailand is pulling out all the stops to establish itself as the "Detroit of Asia". It already boasts the largest passenger car production among ASEAN countries with production reaching around 800,000 units in 2004 of which around 550,000 cars were sold domestically, up 30 percent from 2003. Growth in domestic sales in 2004 are expected to be around 10 percent, while exports are forecast to grow at three times this rate.

The long term goal set by government is for Thai passenger car production to double to around 1.8 million units with exports reaching 800,000 units by the end of 2010: this would make Thailand the world's 9th largest passenger car manufacturer. Industry participants are generally positive about Thailand's prospects: as the Corporate General Manager of a Japanese auto manufacturer in Thailand told KPMG

"There is still considerable potential growth for the next several years. Thailand's automotive market is the pillar of the region."

Passenger car sales, Thailand (2002-2008)



Sources: EIU "Executive Briefing", 2005; KPMG analysis

In a way, Thailand's exports were actually helped by the financial crisis in the late 1990s. The domestic market outlook was bleak, so, aided by a substantially weaker Baht, Thai automakers looked for alternative markets. *"The crisis forced people to learn how to export"* commented the VP for sales and marketing at Chevrolet Thailand in the press. Since then, government incentives and a low-cost skilled labour force has led many manufacturers to select Thailand as a production base for exports, particularly to other ASEAN countries. Vehicle exports have risen seven-fold since 1998, to around 350,000 units in 2004.

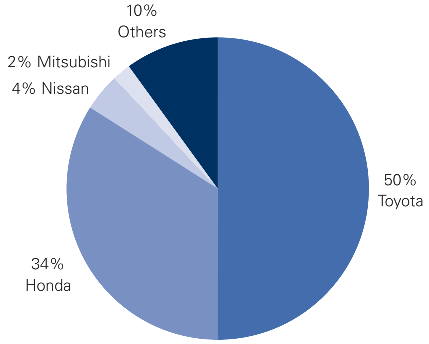
Meanwhile, foreign investment continues to pour in with around USD 2.2 billion from Toyota, Mitsubishi, Ford, Honda and Nissan recently announced going into increased capacity and R&D centres. The Chief Executive Officer of Nissan Motor Corp recently stated in the press their intentions regarding Thailand:

"Thailand offers a great opportunity for Nissan. There's potential for growth, and it's an excellent base for us to expand our presence in the region."

Although China and India are larger markets, Thailand has continued to play to its strengths and has taken advantage of its membership of ASEAN and the implementation of AFTA to promote itself as the centre of production for South East Asia.

Japanese brands dominate the domestic market (Toyota, for example, holds around 50 percent of domestic sales) and account for around 80 to 90 percent of Thai production. A number of these companies have been looking to penetrate the South East Asian market through producing in Thailand and using its FTAs with other ASEAN countries to export its passenger cars, thereby avoiding the high import tax levied by some countries on imports from Japan.

Share of passenger car market, Thailand (2004)



Sources: EIU "Executive Briefing", 2005; KPMG analysis

Thailand has also been successful in developing export-oriented component manufacturing. Exports of auto parts reached around USD 5 billion in 2004, while government plans to double this figure by the end of 2010. Investment has come from major global component companies such as Visteon and Delphi as well as regional companies from Taiwan, South Korea and Japan looking for an efficient low-cost manufacturing base in ASEAN.

Many predict that Thailand's auto sector will continue to punch above its weight, posing a significant threat to Malaysia and Indonesia once AFTA is fully implemented. In a KPMG interview the General Manager of a Japanese automaker commented:

"Thailand has the most to gain from AFTA implementation as it dominates the automotive industry in the ASEAN region."

The biggest threat to its plans to become the "Detroit of Asia" is expected to come from China. Cars made in Thailand can be imported at tariff as low as 5 percent in some ASEAN countries, while Chinese made cars can be slapped with tariffs as high as 300 percent. Eventually this will change, as China establishes more trade agreements with ASEAN countries and produces export quality cars; as the President of Automotive Resources Asia commented recently in the press

"Thailand has a few years in the sun; but it could get scary in five years."

In the meantime though, Thailand will continue with its strategy and look to establish a firm position in the region ahead of the competition.

Contact us

Please contact a KPMG member firm for more information

KPMG in China and Hong Kong SAR:

Paul Brough
Partner
Head of Financial Advisory Services, China
Hong Kong office
Tel: (852) 3121 9800
e-Mail: paul.brough@kpmg.com.hk

Warren Phillips
Partner
Head of Transaction Services, China
Hong Kong office
Tel: (852) 3121 9809
e-Mail: warren.phillips@kpmg.com.hk

Tom Stanley
Director
Strategic & Commercial Intelligence, China
Shanghai office
Tel: (86) 21 6288 3051 Ext 3884
e-Mail: thomas.stanley@kpmg.com.cn

Honson To
Partner
Transaction Services, China
Shanghai office
Tel: (86) 21 5359 4666 Ext 2708
e-Mail: honson.to@kpmg.com.cn

Ryan Reynoldson
Director
Transaction Services, China
Beijing office
Tel: (86) 10 8518 5000
e-Mail: ryan.reynoldson@kpmg.com.cn

KPMG's Global Automotive contact:

Oliver Gross
Global Automotive Executive
Berlin Office
KPMG Deutsche Treuhand-Ges. AG
Kurfürstendamm 207-208
10719 Berlin
Germany
Tel: (49) 30 2068 4254
e-Mail: olivergross@kpmg.com

www.kpmg.com.cn

www.kpmg.com.hk

KPMG offices

Hong Kong
8th Floor, Prince's Building
10 Chater Road
Central, Hong Kong
Tel : +852 2522 6022
Fax : +852 2845 2588

Beijing
8th Floor, Tower E2, Oriental Plaza
1 East Chang An Avenue
Beijing 100738, China
Tel : +86 (10) 8518 5000
Fax : +86 (10) 8518 5111

Shanghai
50th Floor, Plaza 66
1266 Nanjing West Road
Shanghai 200040, China
Tel : +86 (21) 5359 4666
Fax : +86 (21) 6288 1889

Guangzhou
29th Floor, Guangzhou International
Electronics Tower
403 Huanshi Dong Road
Guangzhou 510095, China
Tel : +86 (20) 8732 2832
Fax : +86 (20) 8732 2883

Shenzhen
Room 1016, Shun Hing Square
Di Wang Commercial Centre
5002 Shennan East Road
Shenzhen 518008, China
Tel : +86 (755) 8246 3398
Fax : +86 (755) 8246 2896

Macau
23rd Floor D, Bank of China Building
Avenida Doutor Mario Soares
Macau
Tel : +853 781 092
Fax : +853 781 096