

Penang's Potential as a Regional Automotive Manufacturing Hub

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Introduction

April 22, 2006 witnessed yet another milestone for Penang as Prime Minister, Datuk Seri Abdullah Ahmad Badawi officiated the ground-breaking ceremony of Naza Group of Companies' new venture in Bertam. The strong growing Naza Group, whose founder has been involved in the automotive industry since 1976, is set to build an integrated automotive manufacturing plant and vendor park in Bertam, which will see an inflow of more than RM1 billion worth of investments into the State. The project has drawn much attention and interest of many Penangites as the manufacturing plant and the vendor park are believed to be a shot in the arm in terms of job creation and expansion of the State's economy, as well as to help diversify the State's industrial base.

This article attempts to present an overview of the automotive industry in Malaysia and Penang, and also examines in some details what is being installed in the Bertam's Naza project - Why did Naza choose Bertam as their new manufacturing base? In addition, potential employment generation from the industry, its vendor development programme, opportunities and challenges, and the potential spin-off from the automotive hub will be discussed.

Overview of the Automotive Industry in Malaysia

Prior to the mid 1960s, most motor vehicles were imported to the country as completely built-up units (CBUs). Later in the same decade, several automotive companies began to assemble from imported completely knocked-down (CKD) parts. In the late 1970s, decision was made to develop a local automotive and components/parts industry. The Government initiated several measures which include local content requirements, tariff and non-tariff measures on CBU imports, and the Mandatory Deletion Programme (MDP), a requirement which makes it a prerequisite that a certain proportion of the components have to be sourced locally. However, in order for Malaysia to stay competitive in an increasingly globalised environment, most of the measures have been lifted or discontinued since 2000s.

The establishment of the first national car project, Perusahaan Otomobil Nasional (Proton) in 1983, marked an important milestone to the development of the country's automotive industry. The second national car project, Perusahaan Otomobil Kedua (Perodua) was launched in 1993. Subsequently in 1996, the national motorcycle project, Motorsikal Dan Enjin Nasional Sdn Bhd or MODENAS was born. A year later, the national truck programme, Malaysia Truck and Bus Sdn Bhd was created to produce heavy vehicles. These developments have fostered the growth of a wide network of local automotive components and parts manufacturers.

As of 2005, there are six motor vehicle manufacturers and nine motor vehicle assemblers here in Malaysia (Table 1). There are also 10 motorcycle and scooter manufacturers / assemblers, which together produced a total installed capacity of over a million units per year. In 2005, the automotive industry generated about 57,400 jobs. This figure has not taken into account the workforce who have already been employed in other related downstream industries. In terms of local content, motor vehicle manufacturers managed to realise 60 - 90 percent of local content in the vehicles made while the assemblers achieved 30 - 60 percent of local content in their assembled models.

Table 1: Profile of Automotive Industry in Malaysia, 2005

	No. of firms	Annual Production Capacity (unit)	Total Employment	Local Content
Motor Vehicle Manufacturers	6	785,000	57,400	60% - 90%
Motor Vehicle Assemblers	9	111,000		30% - 60%
Manufacturers / Assemblers of motorcycles and scooters	10	1,063,000		n.a

Source: MIDA, 'Performance of The Manufacturing and Related Services Sectors 2005'.

At present, most of the automotive manufacturers/ assemblers are located at Shah Alam, Pekan, Gurun and Kulim. However, Table 2 shows that besides national cars, various international automotive manufacturers also have a presence here in Malaysia.

Table 2: Manufacturing & Assembly Plants in Malaysia

Company	Location	Vehicle Make
Naza Automotive Manufacturing S/B	Gurun, Kedah	Naza Ria, Naza Citra
Inokom Corporation S/B	Kulim, Kedah	Atos, Matrix, Lorimas, Renault
Proton Tanjung Malim S/B	Tanjung Malim, Perak	Proton
Perusahaan Otomobil Nasional Bhd	Shah Alam, Selangor	Proton
Perodua Manufacturing S/B	Rawang, Selangor	Kancil, Kenari, Kelisa, MyVi, Kembara, Rusa, Toyota Avanza
Assembly Services S/B	Shah Alam, Selangor	Toyata, Hino, Daihatsu
Associated Motor Industries (M) S/B	Shah Alam, Selangor	Ford, BMW, Land Rover, Mazda, Scania
Swedish Motor Assemblies S/B	Shah Alam, Selangor	Volvo, Land Rover, Perodua Rusa
Tan Chong Motor Assemblies S/B	Segambut, K/Lumpur	Nissan, Renault
Automotive Manufacturers (M) S/B	Pekan, Pahang	BMC, Kia , Tata
Malaysian Truck & Bus S/B	Pekan, Pahang	Isuzu, Mitsubishi, Musso, Perkasa, Tata, BMC, Mercedes Benz
Honda Malaysia S/B	Alor Gajah, Melaka	Honda
Oriental Assemblers S/B	Johor Bahru, Johor	Hyundai
Kinabalu Motor Assembly S/B	Kota Kinabalu, Sabah	Isuzu, Dong Feng, Jac Tuah

Source: Malaysian Automotive Association, www.maa.org.my

The total amount of vehicles assembled in Malaysia increased from 365,121 in 1996 to 563,408 in 2005, registering a compound annual growth rate (CAGR) of 4.4 percent over the past ten years (Table 3). The Asian economic crisis had hit the automotive industry quite badly as the volume of vehicle production shrunk drastically from 438,693 units in 1997 to 161,456 in 1998, especially in the production of both passenger cars and commercial vehicles. However, it has rebounded and the new millennium has seen more stability and consistent increase in annual productions. In 2005, passenger cars production has surpassed 400,000 units and this category accounted for nearly 75 percent of the total vehicles manufactured / assembled locally. This is probably attributed to the government

...total amount of vehicles assembled in Malaysia registered a compound annual growth rate (CAGR) of 4.4 percent over the past ten years.



policy to promote car ownership. Malaysia is one of the two biggest car producers in the region along with Thailand whereby our northern neighbour dominates the production of pick-up trucks. Malaysia and Philippines are more involved in passenger car manufacturing while Indonesia's core production lies in utility vehicles and passenger vans.

Table 3: Passenger Cars, Commercial Vehicles and Four-Wheel Drives Assembled In Malaysia (in unit), 1996 - 2005

Year	Passenger Cars	Commercial Vehicles	Four-Wheel Drives	Total Vehicles
1996	280,222	65,751	19,148	365,121
1997	337,717	77,784	23,192	438,693
1998	143,756	10,337	7,363	161,456
1999	257,607	25,898	20,474	303,979
2000	295,318	37,552	27,235	360,105
2001	355,863	40,916	31,922	428,701
2002	380,050	44,045	32,727	456,822
2003	327,450	65,554	33,642	426,646
2004	364,852	75,384	31,739	471,975
2005	422,225	95,560	45,623	563,408
Compound Annual Growth Rate (CAGR) (%)				
1996-2000	1.1	-10.6	7.3	-0.3
2001-2005	3.5	18.5	7.4	5.6
1996-2005	4.2	3.8	9.1	4.4



Source: Malaysian Automotive Association, www.maa.org.my

Despite the economic downturn in 1998, the sales of motor vehicles have enjoyed steady growth over the past decade. The CAGR of total vehicles sales in Malaysia (2001-2005) nearly reached 7 percent since the recovery from the regional economic crisis. (Table 4). The sales of passenger cars segment achieved more than 70 percent of the total vehicles market in Malaysia for the past 10 years.

Table 4: Sales of Passenger Cars, Commercial Vehicles and Four-Wheel Drives in Malaysia (in unit), 1996 - 2005

Year	Passenger Cars	Commercial Vehicles	Four-Wheel Drives	Total Vehicles
1996	275,615	69,444	19,729	364,788
1997	307,907	70,334	26,596	404,837
1998	137,691	17,641	8,519	163,851
1999	239,647	26,171	22,729	288,547
2000	282,103	33,732	27,338	343,173
2001	327,447	37,623	31,311	396,381
2002	359,934	42,727	32,293	434,954
2003	320,524	50,882	34,339	405,745
2004	380,568	70,948	36,089	487,605
2005	416,692	97,820	37,804	552,316
Compound Annual Growth Rate (CAGR) (%)				
1996-2000	0.5	-13.5	6.7	-1.2
2001-2005	4.9	21.1	3.8	6.9
1996-2005	4.2	3.5	6.7	4.2

Source: Malaysian Automotive Association, www.maa.org.my, 31 Aug 2006

Prior to the Asian economic crisis in 1997, Thailand was the largest automotive market in ASEAN, followed by Indonesia, Malaysia and Philippines. During the crisis period (1997 and 1998), Malaysia emerged as the largest car market in the region, followed by Thailand, Philippines and Indonesia. As noted in Table 5, in 2005, Malaysia remained as the largest passenger car market in ASEAN, accounting for nearly 51 percent of the total market in the region.

Table 5: Sales of Passenger Cars in Selected ASEAN Countries, 2005

ASEAN Countries	Sales of Passenger Cars (in unit)
Malaysia	400,835
Thailand	188,211
Singapore	108,741
Indonesia	35,529
Philippines	35,361
Vietnam	11,619
Brunei	9,854

Source: (i) Malaysian Automotive Association
(ii) Malaysian Industrial Development Authority (MIDA)

Meanwhile, the production of motorcycles and scooters has increased from 251,296 units (2003) to 406,150 units in 2005 (Table 6). The sales of motorcycles and scooters also recorded an impressive growth of 7.5 percent and 10.3 percent in 2004 and 2005 respectively.

Table 6: Production and Sales of Motorcycles and Scooters in Malaysia, 2003-2005

	Production		Sales	
	Unit	% Growth	Unit	% Growth
2003	251,296	-	371,085	-
2004	368,490	46.6	398,800	7.5
2005	406,150	10.2	440,000	10.3

Source: Malaysian Industrial Development Authority (MIDA)

Since late 1960s to present, the automotive components and parts sub-sector has developed positively with the capability of manufacturing a wide range of products, ranging from engines and precision parts to electronics and plastic components. Currently, there are more than 590 automotive components and parts manufacturers in Malaysia. Most of them are clustered in Shah Alam and Tanjong Malim. More than 70 percent of these components and parts manufacturers are Malaysian-owned while a number of renowned multinational automotive components and parts manufacturers have also set their foothold in Malaysia.

The export of motor vehicles, automotive parts and components amounted to RM2,168 million in 2005, which marks an increase of 38 percent from 2004 (RM1,568 million) (Table 7). Nevertheless, for the first five months of 2006, these exports totaled to about RM850 million, which is equivalent to a drop of 5.4 percent compared to the same period of 2005. On the other hand, although the export of automotive parts and components grew, the imports grew even higher. As indicated in Table 7, the export of automotive parts and components in 2005 registered a 35 percent growth compared to the previous year, but imports grew 76 percent, from RM2,240 million in 2004 to RM3,942 million in 2005.

Table 7: Imports and Exports of Motor Vehicles and Automotive Parts and Components, 2003 – 2006 (Jan-May), Malaysia

		Total Trade	Motor Vehicles*	Automotive parts / Components
		(RM million)	(RM million)	(RM million)
2003	Import	316,537.85	5,387.00	1,510.90
	Export	397,884.39	284.86	828.34
Balance of Trade		81,346.54	- 5,102.14	- 682.56
2004	Import	400,076.84	6,689.18	2,240.37
	Export	480,740.33	500.55	1,067.05
Balance of Trade		80,663.49	- 6,188.63	- 1,173.32
2005	Import	434,009.91	7,005.17	3,942.29
	Export	533,787.81	727.24	1,440.50
Balance of Trade		99,777.90	- 6,277.93	- 2,501.79
2005 (Jan-May)	Import	168,647.95	2,952.24	1,555.84
	Export	208,780.18	339.81	558.87
Balance of Trade		40,132.23	- 2,612.43	- 996.97
2006 (Jan-May)	Import	190,240.18	3,119.49	1,798.36
	Export	230,699.78	264.05	585.92
Balance of Trade		40,459.60	- 2,855.44	- 1,212.44

* - Note: The import & export figures for Motor Vehicles include Motor Cars and Other Motor Vehicles for the Transport of Persons, Motor Vehicles for the Transport of Goods and Special Purpose Motor Vehicles, and Road Motor Vehicles.

Source: Department of Statistics, Malaysia

Opportunities & Challenges Ahead

Under increasing globalization trend and trade liberalization, the local automotive manufacturers and parts and components suppliers have to brave themselves to face the stiff competition to remain competitive. Asean Free Trade Area (AFTA) could be a double-edged sword. The promising sides are: a larger Asean market of 515 million population, mobility of capital, technology and skilled labour force, larger sources of raw material, and potentially exhibiting economies of scale, the threats, on the flip side, expose the local industry to an intense competition from the low cost Asean producers. Through the realization of AFTA, the Asean leaders envisioned that the establishment of the ASEAN Economic Community (AEC) by 2020 where a single market and production base with free flow of goods & services, skilled manpower, and capital and investment, would likely to have an impact on the Malaysian manufacturers. However, Malaysia's automotive industry stands to benefit from being one of the eleven priority sectors targeted for deeper economic integration under the AFTA.

Growth continued for seven consecutive years after the 1997/98 financial crisis. This, to certain extent, has made the local automotive manufacturers become dependent on the domestic market. However, the performance of the domestic automotive industry in the first half of 2006 was not encouraging, despite the steady economic growth all along. The lower prices of new cars and the unveiling of the National Automotive Policy (NAP) early this year has been negated by some negative concerns such as the rise in interest rates, stringent approvals on hire purchase loans and shorter repayment periods, the drop in used car prices and the escalating cost of living due to the rise in oil prices and electricity rates, according to the industry source.

Another challenge for the local-based automotive manufacturers is the general perception that local made automotive is of relatively poor quality compared to foreign ones. The situation is expected to worsen with the global competition and further trade liberalization under the Free Trade Agreement.



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Lack of economies of scale is another concern for the local automotive players, particularly for those who concentrate only on the domestic market. Even though these local vendors are able to produce parts and components that are at par in terms of quality with their counterparts in Japan, they hardly enjoy the economies of scale and cost efficiency due to low volumes in the limited domestic market.

In terms of human resource development, though not prevalent at this point in time, industry sources have indicated that in the long run, the automotive sector in the country will face a shortage in skilled workforce, especially in the areas of designing and styling, computer-aided manufacturing engineering, production and software engineering, if preemptive moves and actions are not taken to address the issue now.

Other challenges that hampered the industry include the lack of research and development, testing capabilities and facilities, and compliance to international standards to meet the export needs.

Bertam

Bertam, once an area in the rural outskirts, has undergone rapid transformation in its landscape in the last couple of years. This small town, strategically located in the fast growing area of Seberang Perai Utara, has been chosen as the 'pilot area' of the development of Kepala Batas. Various government departments and agencies, formerly located in Butterworth, have shifted in stages to Bertam in the past few years. The North-South Highway, various mega housing and development projects, institutes of higher learning, a tourism shopping paradise project, a golf resort and the planned 2nd phase roll-out of the Penang CyberCity in 2008, have and will all cut into the paddy fields of this pastoral 'kampung' life style of Malaysia.

The population in Bertam, which covers Mukim 6 and parts of Mukim 5 and Mukim 8 of Seberang Perai Utara, has an estimated of 47,600 in 2005 and it is projected to reach 52,900 in 2010 (Table 8). Agriculture activities such as paddy cultivation, oil palm planting and small scale livestock rearing are still the current mainstay of the economy of Bertam.

	2005	2006	2010 (Projected)
Penang	1,468,800	1,492,400	1,609,900
S.Perai Utara	288,000	292,800	312,900
Bertam: Mukim 6	20,700	21,000	22,500
Mukim 5	9,600	9,800	10,400
Mukim 8	17,300	17,800	20,000

Table 8: Estimated Population in Bertam, 2005, 2006 and 2010 (Projected)

Source: Department of Statistics, Malaysia, Penang Branch.

NAZA Project in Bertam

The RM1.3 billion project by the Naza Group in Bertam, that doubled their investment at Gurun plant three years ago, is divided into two (2) phases, with RM570 million and RM450 million of capital investment in the first and second phase respectively. Out of the total project areas of 832 acres, 255 acres will be used for the proposed manufacturing plant, 250 acres is allocated for the vendors to set up their plants, while the balance will be used for other related development. Currently, works such as ground breaking, site clearance, submission of plans and appointment of consultants and contractors have been carried out. The plant aims to commence its first phase of production by end of 2007 and to run in full in 2008 with annual production capacity of 100,000 units, almost two fold of the capacity of the existing plant in Gurun, Kedah.

The Bertam's plant will employ state-of-the-art assembly facilities, incorporate areas designated for engine shop, body welding, fully automated painting process, assembly and pre-delivery inspection of the units and accessories. The plant will also set up a testing facilities and simulation track which include equipments used to assess the performance, endurance, and quality of each of units being rolled out.

There would be no Research & Development (R&D) facilities at the new Bertam plant. The R&D centre is housed currently at the Gurun plant for activities such as create styling and modeling design capability, initiate basic engineering design capability to support styling change and facelift activities, and component development and testing capability. A total of RM15 million to RM20 million a year is allocated for R&D spending over the next five years, with the aim to achieve the quality of Japanese cars, production cost of Korean cars and image of European cars.

Potential Employment Generation

The investment in Bertam would potentially generate more than 2,000 jobs and is expected to bring in substantial number of vendors that would create further employment opportunities and enhance the skills and technological capability of the workforce. The new plant is likely to source labour from Bertam and its vicinity. Training will be provided to bring the new recruits up to par with the industry's needs. In terms of employment structure, at least 20 percent of the workforce will be knowledge or skilled workers including engineers (5.8 percent), other managerial and professional (1.7 percent), and technical and supervisory (17.2 percent) categories. (Table 9).



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Table 9: Proposed Employment

Proposed Total Employment	2,122
Employment Category	%
Engineers	5.8
Other Managerial & Professional	1.7
Technical & Supervisory	17.2
Production workers	71.1
Others	4.2
TOTAL	100.0

Source: Naza Automotive Manufacturing Sdn Bhd

Why Naza Chose Penang?

One of the main reasons for Naza to choose Bertam is because this town is one of the designated areas for automotive manufacturing in the National Automotive Policy Framework. Other designated areas are Gurun (Kedah), Pekan (Pahang), Tanjung Malim (Perak) and Shah Alam and Rawang (Selangor).

Another pull factor is the proximity of the site to Penang Port. The site is about 15km from the Penang Bridge and 12km from the Prai Industrial areas and the North Butterworth Container Terminal. The port is set to be used as an export gateway to tap the ASEAN market. Currently, the Penang Port consists of four terminals, namely Swettenham Pier (on the island), and North Butterworth Container Terminal, Butterworth Deep Water Wharves, and Prai Bulk Cargo Terminal on the mainland. The Penang Port plays a prominent role in the shipping industry, linking the State to more than 200 ports worldwide.

Vendor Development Program

Currently Naza has appointed 85 vendors out of 350 registered firms and they are working together with all their vendors to be ISO certified. These vendors had brought in or developed their own technological know-how throughout the years. The Naza group expects their vendors to invest about RM180 million in the first phase and to later increase the investment by another RM100 million in the second phase to set up their factories near to the new Bertam plant. A total of 250 acres project areas are allocated for the vendors.

In terms of local content, Naza currently managed to achieve 45 – 75 percent of local content in the vehicles made and aims to realise 70 -100 percent of local content in their future production.

Potential of Penang as the Regional Automotive Manufacturing Hub

Although the automotive industry and the components and parts sub-sector are not new in Penang, there is still potential for this industry for vertical and horizontal integration. Currently, there are two motorcycle assemblers in Penang for the assembly of Honda and Suzuki motorcycles. There are approximately more than 20 automotive components and parts manufacturers in the State.¹ The current employment at the automotive industry (including components and parts manufacturers) in Penang is estimated to be around 4,600 persons, accounting for merely 2 - 3 percent of the total employment of the manufacturing industry in Penang.²

Table 10 exhibits the total approved manufacturing projects for both Penang and Malaysia. Out of the total number of approved manufacturing projects in Penang in 2005, four of them were for transport equipment, with a total capital investment amounting to RM41.2 million and creating potential employment opportunities of 74 persons. The proposed projects include the manufacturing of spark plugs, steering column, motorcycle aluminium alloy rim, and car audio control panel and parts.

Table 10: Approved Manufacturing Projects for Penang and Malaysia, 2004 and 2005

	No. of Projects		Potential Employment		Capital Investment (RM million)	
	2004	2005	2004	2005	2004	2005
Transport Equipment						
Penang	5	4	81	74	2.36	41.20
Malaysia	108	62	6,669	5,623	1,324.00	1,416.00
Overall Manufacturing						
Penang	144	148	9,235	21,904	2,030.30	4,808.18
Malaysia	1,101	1,026	88,634	114,956	28,773.00	31,057.00

Source: Malaysian Industrial Development Authority (MIDA)

The industry sources believe that the volume to be generated through Naza's Bertam and Gurun plants will encourage vendors to set their foothold in Penang and make Penang the hub for automotive supply chain. Furthermore, a few prominent global automotive component manufacturers have long established their presence in Penang and these include Bosch, GKN Driveline, TRW Steering and Suspension, Siemens VDO Instruments and Components, and ZF Steerings. Such matured companies will enhance the growth of the automotive sector.

In fact, Penang has an added advantage of more than 30 years of industrial development experience. It has a strong base of prominent MNCs and local small to large establishments in electrical and electronic (E&E) clusters, a highly-educated and multi-lingual skilled workforce and a relatively low-cost business environment which favour strong economic growth. The automotive industry should tap into the advantages and further strengthen industry linkages, particularly with the electronics, audio products, plastics, metals and rubber-based industries.

In order to address the shortage of skilled workers in the auto-sector, the existing institutes of higher learning and skills training centres in the State should look into the needs of the industry and put in more concerted effort and collaborate with industry to match the supply and demand of the skilled manpower.

As highlighted in the Third Industrial Master Plan (IMP3), one potential growth areas for the automotive industry is the designing and manufacturing of critical components such as engines, transmission systems and auto electronic parts. The increased importance of auto electronic parts in modern vehicles, for example, has revealed the necessity for software. It is pertinent

¹ The number of automotive components and parts manufacturers was based on the transport equipment sector listing of MIDA, Matrade, and Penang Industrial Survey 2005. In fact, some of them that categorized under electronics and electrical sub-sector, fabricated metal products, precision tooling, plastic & plastic products and rubber-based products have also produced components and parts for the automotive industry.

² The employment figure of automotive industry in Penang was obtained via quick phone call survey by SERI. The total employment of manufacturing sector in Penang was approximately at 210 907, derived from the Penang Industrial Survey 2005

that the software vendors in Penang explore into areas such as global positioning tracking, navigation and safety systems and telematics, traction, transmission, steering and braking, seat positioning, voice control ignition, lighting and security systems to meet the demand.

With further trade liberalization and open access to markets, local auto manufacturers and parts and components suppliers can no longer rely on the relatively small domestic market. They have to position themselves to compete on a level playing field and to grow to become global players. In order to strengthen the competitiveness of the local vendors, avenues should be found to match them with reputable foreign partners. Consolidation of small vendors with technical and financial assistance from the government, are imperative for the long term viability of the sector.

For manufacturers to export the products overseas, compliance to International Standard is essential. Product safety and green production are the two critical requirements for auto products, especially in the developed markets. The European market, for instance, requires the auto parts and components to be recyclable, to comply with environment requirement.

Besides the needs to acquire new skills to become technically more competent, concerted effort has to be made to improve the management capability and efficiency of the small and medium size local vendors. The industry has to be competitive to survive in business.



The automotive manufacturers / assemblers and parts and components suppliers operate in an interdependent manner. All parties have to work hand-in-hand to address issues and challenges faced, reduce cost, enhance quality and increase efficiency.

Conclusion

The Government has shown that they have continued to support the local automotive industry as well as the auto parts and components sector. The National Automotive Policy (NAP) that includes policy thrusts and specific policy instruments charts the direction of growth for the national automotive industry. The recently unveiled IMP3, 2006 - 2020, contains nine strategic thrusts in tandem with the objectives of the NAP for the further development of the automotive sector.

The strong government support, well-developed infrastructure, conducive business environment, coupled with close cooperation and collaboration between public and private sectors, will enable Penang to emerge as a rising regional automotive manufacturing hub and centre for supply and sourcing of automotive parts and components.

Similar to other countries, the automotive industry is known to encounter stiff competition. The emerging trade liberalisation is expected to pose a challenge to the success of the Penang automotive hub ambition. The State must capitalize on its existing strengths and build additional advantages to counter the challenges. Penang should move towards making this sector a premier value-added automotive hub and it must also attract new ventures and maintain the existing ones. Assistance has to be given to nurture and cultivate globally competitive local SMEs in the automotive sector to make them more resilient and can sustain a higher growth both in quality and quantity. **§ Lim Wei Seong**

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Economic Indicators of Selected Asian Countries

GDP (percentage y-o-y)

	2003	2004	2005	Q1'05	Q2'05	Q3'05	Q4'05	Q1'06	Q2'06
China	10.0	10.1	10.2	9.9	10.1	9.8	9.9	10.2	10.9
Japan	2.3	1.7	3.2	1.4	2.6	2.8	3.7	3.6	2.0
Malaysia	5.5	7.2	5.2	6.1	4.1	5.3	5.2	5.5	5.9
Singapore	2.9	8.7	6.4	3.4	5.7	7.6	8.7	10.8	8.1
Taiwan	3.4	6.1	4.0	2.5	2.9	4.2	6.4	4.9	4.6
Thailand	7.0	6.2	4.5	3.2	4.6	5.4	4.7	6.1	4.9

CPI (percentage y-o-y)

	2003	2004	2005	Q1'05	Q2'05	Q3'05	Q4'05	Q1'06	Q2'06
China	1.2	3.9	1.8	2.8	1.7	1.3	1.4	1.2	1.4
Japan	-0.3	0.0	-0.3	-0.2	-0.1	-0.3	-0.5	0.4	0.7
Malaysia	1.2	1.4	3.0	2.4	3.0	3.4	3.5	3.7	4.1
Singapore	0.5	1.7	0.5	0.3	0.1	0.5	1.1	1.4	1.2
Taiwan	-0.3	1.6	2.3	1.6	2.1	3.0	2.6	1.4	1.6
Thailand	1.8	2.7	4.5	2.8	3.7	5.6	6.0	5.7	6.0

IPI (percentage y-o-y)

	2003	2004	2005	Q1'05	Q2'05	Q3'05	Q4'05	Q1'06	Q2'06
China	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a
Japan	3.3	5.5	1.1	1.2	0.3	-0.2	3.0	3.2	4.1
Malaysia	9.2	10.9	4.1	3.9	2.5	4.8	5.5	5.8	6.1
Singapore	3.0	13.9	9.5	3.2	5.8	13.5	14.4	20.7	12.5
Taiwan	7.1	9.8	4.2	n.a	n.a	4.8	9.1	8.2	6.9
Thailand	13.9	11.7	9.1	6.4	11.4	11.5	7.2	9.7	6.5

Unemployment Rate (percentage)

	2003	2004	2005	Q1'05	Q2'05	Q3'05	Q4'05	Q1'06	Q2'06
China	4.3	4.2	4.2	n.a	n.a	n.a	n.a	n.a	n.a
Japan	5.3	4.7	4.4	4.5	4.3	4.3	4.5	4.2	4.1
Malaysia	3.6	3.5	3.5	3.5	3.1	3.8	3.8	3.8	n.a
Singapore	4.0	3.4	3.1	3.3	3.4	3.2	2.6	2.6	2.9
Taiwan	5.0	4.4	4.1	n.a	n.a	4.3	4.0	3.9	3.9
Thailand	2.2	2.1	1.8	2.5	2.0	1.3	1.5	1.9	1.7

Export (percentage y-o-y)

	2003	2004	2005	Q1'05	Q2'05	Q3'05	Q4'05	Q1'06	Q2'06
China	34.7	35.4	28.4	34.8	30.9	29.1	21.7	26.6	24.1
Japan	4.7	12.1	7.3	3.8	4.3	7.4	13.4	17.6	14.7
Malaysia	11.3	20.8	11.0	13.7	10.8	7.5	12.6	11.5	9.8
Singapore	n.a	20.5	14.0	11.5	10.8	12.4	20.7	22.4	17.3
Taiwan	10.8	17.9	4.5	n.a	n.a	1.2	15.3	14.5	16.6
Thailand	13.7	16.5	14.5	11.0	11.7	23.0	11.8	20.8	13.3

Import (percentage y-o-y)

	2003	2004	2005	Q1'05	Q2'05	Q3'05	Q4'05	Q1'06	Q2'06
China	39.8	36.0	17.6	12.2	15.5	19.6	22.1	24.8	18.4
Japan	5.1	10.9	15.7	10.2	14.3	17.0	20.6	27.4	18.8
Malaysia	4.4	26.4	8.5	10.1	8.0	8.6	7.5	13.7	11.5
Singapore	n.a	23.6	13.6	11.9	10.2	12.1	19.7	19.1	18.4
Taiwan	12.5	28.3	3.9	n.a	n.a	3.8	2.0	11.8	12.4
Thailand	13.1	21.1	25.1	26.4	32.4	21.8	20.5	9.9	0.6

Source: DOS, Singapore; BNM; Statistics Bureau, Ministry of Internal Affairs and Communications, Japan; National Statistics, Republic of China (Taiwan); Bank of Thailand; Bank of Japan; World Bank; IMF; CIMB; ADB; Ministry of Commerce, China; The Economist

International Headlines

Second Quarter 2006 Sales Up 9.4% Over 2005

03 August 2006, Semiconductor Industry Association

Worldwide sales of semiconductors reached \$19.6 billion in June, recording a 9% increase from June 2005. Sales in the second quarter of 2006 totalled to \$58.9 billion, which is a 9.4% y-o-y increase but was at the same time, a 0.3% contraction from the first quarter of this year. Total sales recorded for the first half of the year was \$118 billion, up 8.3% over the first half of 2005. Unit demand was said to have remained strong in the second quarter and was up about 5% across the industry while strong competitive pressures have reduced prices in some major product sectors and are impacting revenues. Unit sales of PCs rose approximately 10% in the second quarter y-o-y but competitive pricing has affected average sales prices in this sector of the market. Unit demand for cell phones meanwhile, reached 235 million units in the 2nd quarter and is expected to grow over 4% in the 3rd quarter and at least 10% in the fourth quarter.



GDP Growth Slows in Singapore

10 August 2006, International Herald Tribune

Singapore's economy expanded at a slow rate of 3.0% in the second quarter of 2006 from the preceding quarter. The 3.0% growth was much lower than the 7.6% quarter-to-quarter expansion recorded in the first 3 months of the year and this was Singapore's weakest performance since the economy shrank by 2.1% in first quarter of 2005. In year-on-year terms, the GDP showed an 8.1% expansion from a year earlier, with the manufacturing sector expanding by 12.5% y-o-y, which is faster than the government's initial estimate of 10.2 percent. The Singapore economy is expected to expand between 6.5 percent and 7.5 percent in 2006.

Japan Shrugs Off Slowdown in Economic Growth

11 August 2006, International Herald Tribune

Japan's economy grew less than expected in the 2nd quarter of 2006 with a 0.8% y-o-y expansion of the GDP. Private consumption was up by 0.5% from the first quarter, boosted by demand related to the World Cup soccer tournament and an increase in overseas travel during the Golden Week holiday in May. While growth was recorded in terms of capital spending and consumption, there was a drop in investment in housing and public works. Exports also slowed in this quarter. It was however, the sixth straight quarter of expansion for the economy, albeit at a slower pace of annualized growth in comparison with the 2.7% expansion in the first quarter of 2006 and economists believe that the economy still remained on track for moderate growth.

Hong Kong's Growth Stagnates

23 August 2006, The Wall Street Journal - Asia

Hong Kong's economic growth came to a near standstill in the second quarter with its GDP practically unchanged in the second quarter as measured by a seasonally adjusted comparison with the previous quarter. This was Hong Kong's weakest performance since emerging out of recession in the second half of 2003. The economy expanded by 5.2% y-o-y, a much slower rate than the 8.0% y-o-y growth recorded in the first quarter. Although consumer spending remains strong and unemployment rate was low, weakening exports and accelerating inflation are casting a shadow over the outlook for the rest of the year. Exports recorded a sharply lower 6.4% increase in the second quarter compared to a 14.4% growth in the first quarter, with demands from the U.S. slowing down.

U.S. economy grows at a 2.9 percent pace in spring

29 August 2006, International Herald Tribune

The U.S. economy expanded by 2.9% in Spring 2006, a slight improvement from the first estimated 2.5% growth, reflecting an improvement in the country's trade picture and stronger inventory building by businesses. Nevertheless, the upward revision did not change the big picture of the economy as the economy slowed sharply from the first quarter's 5.6 percent pace, with consumers and businesses tightening their belts. Inflation on the other hand rose higher with core prices, which excludes food and energy prices, advancing at a rate of 2.8% in the second quarter, up from a 2.1 percent pace in the first quarter. Consumer spending increased at a rate of 2.6 percent but was still a sharp drop from the first quarter's 4.8% pace. The 2.9% growth rate recorded in the second quarter was the slowest since the last quarter of 2005, when the economy grew by only 1.8% due to the knock-on effect of the Gulf Coast hurricanes.



China Raises '05 Growth to 10.2%, a 10-Year High

31 August 2003, The Wall Street Journal - Asia

China's GDP growth for 2005 was revised to 10.2% y-o-y, higher than the earlier estimated growth rate of 9.9%, while the value of the GDP was revised from 18.2321 trillion yuan to 18.3085 trillion yuan (\$2.3 trillion). The revision of last year's GDP makes it the fastest annual gain recorded in 10 years since the 10.9% expansion recorded in 1995. The upward revision of the value of output and economic growth added weight to the country's concern about economic imbalance. China continues to face persistent imbalances in its economy such as excessive fixed asset investment, runaway credit, a ballooning trade surplus and overcapacity problems in certain sectors.