

December 2007
Volume 9, Issue 12

PP14554/4/2008



Penang Economic Report 2007

In This Issue

A. Introduction	2
B. Malaysia	4
C. Performance of the National Economy	6
D. Performance of Major Economic Sectors	
i. Agriculture	12
ii. Manufacturing	19
iii. Finance	31

Year-End Review and Outlook for 2008 (Part 1)

Socio-economic & Environmental Research Institute

10 Brown Road,
10350 Penang, Malaysia
Phone: 604-2283306
Fax: 604-2267042
Email: seripg@tm.net.my
Website: <http://www.seril.com.my>

PENANG ECONOMIC REPORT 2007 – YEAR-END REVIEW AND OUTLOOK FOR 2008 (PART I)

A. INTRODUCTION

This year's economic report is perhaps the most difficult to write for two simple reasons: mixed signals and uncertainty. The down cycle in 2007 that had been anticipated several years ago was to have occurred. Yet oil prices touching US\$100 per barrel (which was not anticipated) could do less to bring down the economy than it once did in 1980. Oil consumption out of each dollar of the gross domestic product had fallen by 30% in 1980 compared to 1970 and the oil content in the GDP has since reduced by a further 30% between now and 1980.



But the last few months of 2007 would tell the grim truth that indeed all is not well and the world's economy could likely have been on the brink of disaster. Banks were caught without cash in their vaults paving the way for the classic "run on the banks" that once resulted in the Great Depression eighty years ago. This time around, an economic meltdown was averted with a better understanding of how fiscal and monetary policy works, and the necessary adjustments (such as government sponsored lending for the poor or loan modifications for more able borrowers) and disciplining, hopefully, paves the way for a slow but steady recovery in 2008.

The current economic scenario is as follows: a banking crisis, the falling U.S. dollar, oil prices about five times higher than a decade ago, on the down side. On the up side, China's economy continues to grow even after three decades, with its consumption levels of the world's goods, although small in net worth compared to the U.S., showing trends of phenomenal growth. This suggests that over time, China will catch up with and outpace the U.S., and possibly take over as the largest market for world exports. This then begs the question as to whether economies like Malaysia can or at least begin to decouple from what happens in the U.S. economy. By doing so, the chronic problems associated with its twin deficits become less of an issue that can potentially drag down the rest of the world.

The sub prime debacle

Half a year ago, many have not even heard of the word sub prime. In the past few months, many have come to learn of it as the villain that has brought about a banking crisis and with it, fears to ordinary folks who rely on banks to financially sustain their livelihoods. At the start, it is as simple as lending out money at higher rates over the long term and the lender financing this loan by borrowing at lower interest from the short term money market, basically profiting from the difference in rates between the long term and the short term. Home purchase is ideal for this kind of long term lending since people are not likely to liquidate their properties after moving. The property also becomes collateral to make the loan secure. There is an added bonus. For house buyers with low credit worthiness, the lending rate is about 2% higher and this is where the word sub prime gets its name – the sub of the prime rate as penalty for a low credit rating.

The debt is to be passed on through short term borrowing. To do this, the sub prime rates are packaged along with other financial assets (such as bonds) to form an integrated collateral backed obligation (CDO), a new financial instrument that can be sold to an investor. The sub prime on its own would have been less attractive but a CDO can earn as high as a triple "AAA" rating, suggesting that it is a safe (it is collateral-backed) investment while at the same time fetching returns higher than ordinary bonds. During recent years, between one half to one trillion dollars worth of CDOs were sold each year.

The question one then asks is, what happens if house prices collapse? The asset used as collateral is no longer as safe and reduced confidence makes CDOs less attractive. They lose their “AAA” rating. Not being able to sell CDOs means that short term financing to meet long term lending requirements cannot be sustained – basically a credit crunch. Forced selling of the long term asset takes place, further reducing house prices. Large amounts of CDOs are held by banks and in the case where regulatory controls do not allow them to hold less than “AAA” rated assets, there is more forced selling there as well.

Remember that sub primes do not form the bulk of the CDO. Sub primes comprise only about a quarter to a third of the entire CDO but since the whole instrument is integrated, it is hard to decouple the components. It is also not easy to make a new assessment on the quality of the CDO so that it can be confidently priced, which in turn allows it to be efficiently bought and sold.

Banks, its role to ordinary folks and its effect on the economy



When people put their money in the bank it is largely for safe keeping, since interest rates today don't count for much amidst inflation. This means that depositors would want their money if and whenever they need it. Banks pay zero to low interest rates on deposits for this liquidity but lend out the money for higher rates. Doing so exposes banks to daily cash flow requirements which are met, should there be shortfalls, through inter bank borrowings. Long term credit made easily available, either directly by the bank or through other financial intermediaries, to ordinary folks allows assets like houses to be bought. Prices of assets increase, which make the assets more valuable, while also making assets safer collateral. Banks and financial institutions, in turn, strengthen. This, at least, is the general plan for business by banks.

Still, bank regulations require much prudence by making banks hold some reserves but technically this would not be enough to avert a bank run should a total loss of confidence occur suddenly. Inter-bank lending provides another layer of protection but the circumstance during the past months have made this very difficult because even the largest banks have become caught in the credit crunch due to the extent of their CDO holdings. The link between short term creditability and long term asset position is of great importance. Falling asset prices like those for houses reduce collateral value and make it difficult for assets to attract short term money causing forced liquidation that further spirals off falling asset values. The general plan begins to fail.

Here is where we see textbook explanations put into practice. The Northern Rock Bank in Newcastle upon Tyne met with a bank run last September (the first in England for more than a century). The deposit insurance scheme in England protects only the first £2000 deposited and only a fraction of subsequent deposits. Amidst folks making long queues outside Northern Rock to withdraw their savings, Chancellor of the Exchequer Alistair Darling announced that the Bank of England would play its role as the lender (more than £10 billion or so worth of public money) of last resort, essentially putting a guarantee on the deposits. The bank is the fragile link between the operation of the financial markets and the livelihood of the man on the street, which if not for the regulatory role might have proven potentially disastrous.

The U.S. dollar link with the world

Countries like Malaysia and much of the rest of Asia, Japan being the exception, traditionally has had a U.S. dollar link either explicitly pegged (as in Hong Kong, China and Malaysia until a couple of years ago) or intervened – mainly to facilitate trade. In the process, because of trade surpluses, export oriented economies build up foreign exchange reserves rather than allow the exchange rate to fluctuate, thus turning the dollar into a reserve currency. For many economies across the world, the dollar makes up between 50% and 80% of the reserves, suggesting that further falls in the value of the dollar will have a proportional effect on 50% to 80% of such reserves. The dollar fell past the US\$1.40 to the euro mark last September, which was an all time low. In the past couple of months it had gotten as low as US\$1.47 to the euro. To America this reduces

its debt burden, but to creditor-nations, it means getting back much less than the amount lent out.

The popular question has been the possibility of decoupling the world from the U.S. economy. The E.U. and the euro has often been mentioned as the likely candidate: the GDP of the combined European economy is around the US\$10 trillion mark, the stock market capitalization around the US\$14 trillion mark and currency in circulation is about US\$850 billion, all these essentially about the same as the figures for the U.S. economy.

There is, however, an important difference between Europe and the U.S. The U.S. plays the role of being the buyer from the rest of the world in the export market. As much as a third of Malaysia's exports go to the U.S. In this connection the current twin fiscal account deficits would have fizzled out any other economy in the first instance. But there is something magical about the U.S. that allows it to continue to spend more than it earns by as much as 6% of its GDP (close to US\$700 billion – five years worth of Malaysia's GDP) year after year, made possible by lending by much of the rest of the world.

These days, however, Asia's share of the global economy has increased relative to the U.S.'s and although consumer spending by the larger ones, namely, China and India remains less than U.S. consumer spending of the world's exports, the rate of growth in consumer spending by China and India has surpassed that of the U.S. This means that a new centre is emerging out of Asia in the traditional centre-periphery model between the U.S. and much of the rest of the world that manufactures goods destined largely for the U.S. market. There is thus an indication that, over time, higher consumption rates from Asia will allow Asian economies to eventually take the lead in the world's export market and gain predominance in the world economy. This is the much needed respite that can help wean the world out of the twin deficit problem plaguing the U.S. economy when a truly intra-Asian trading economy can evolve along a path not very different from the preceding form to the present day E.U. This will not be without problems, however, because policy making (to address issues like employment, inflation, and exchange rates) within Asian economies will not likely be received with the same degree of confidence by market makers as was the case of the U.S. over the years. In other words, yes, there are signs of decoupling, as there is some urgency there because of problems with the U.S. economy. However, many institutional problems remain that will make the transition to Asian hegemony difficult and slow going.

Which will it be, Europe or China along with its Asian neighbours, to which present day exporting countries will redirect their market away from the U.S.? Europe is a much more comparable economy to the U.S. to play the alternative role, but China and the rest of Asia are more alike the U.S. in terms of consumption behaviour. We will just have to wait and see. **§ Dr. Chan Huan Chiang**

B. MALAYSIA

Malaysia's economy recovered steadily during the first five years in the new millennium and the gross domestic product (GDP) peaked at nearly 7% in 2004. In 2005, the GDP was 5.2% but expanded once again to nearly 6% in 2006. In the first two quarters of 2007, the GDP was 5.5%-5.7%. Projections for 2008 and 2009 expect the GDP to tread horizontally in this band taking into account the buoyant sentiments shown by private consumption which grew higher than 7% in 2006 and attained double digit growth rates in the second quarter of 2007. Domestic-led growth is thus moderating the effects of uncertainties in the global economy that would make the exports sector more vulnerable to downturns.

Thus far, Malaysia's economy has managed to weather the sub prime crisis in the U.S. The figures that have appeared so far show only relatively small exposure by Malaysia's banks and financial institutions to collateralised debt obligations (CDOs) which have been substantially downgraded in ratings as a result of their sub prime components. Malaysian banking has traditionally been very conservative by adopting loan policies that are well collateralized but concentrated largely on property assets. There have been only few

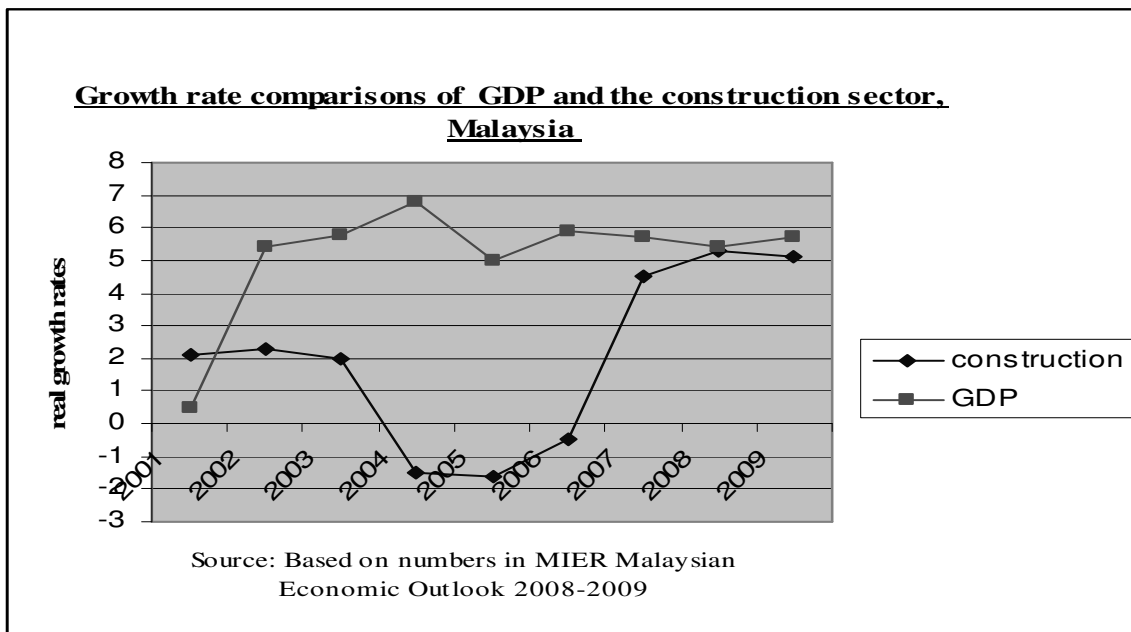
occurrences of over-capitalisation (loan exposure ending up higher than the asset value) unlike in the sub prime crisis where we see an across-the-board fall in property prices. There is also another important difference. Borrowers, because of the long-term commitment, normally continue to service their loans even when their property values have fallen. Even when the economy is bad and borrowers face temporary difficulties, an arrangement between the bank and the borrower to modify the terms of the loan is a cheaper alternative than to foreclose amidst property values that have fallen. In the case of the sub prime crisis, the original home loan was repackaged and sold as part of a larger CDO to a variety of investors. With renegotiation of the home loan no longer possible, properties are foreclosed and house buyers lose their homes.

In the U.S. the property overhang is eight months in terms of unsold properties from the time of building completion. While both sides of the Atlantic appear to suffer from the burst of the property bubble, property values continue to climb in South Africa, Singapore, China, Hong Kong, among the emerging economies and in Australia as well. Like in these countries, Malaysia remains little affected.



A decade ago, however, banks took heavy losses from highly leveraged business lending that led to large non-performing loans. The government stepped in by introducing *Danaharta* to facilitate asset-management of loan default companies while at the same time sponsored a bank merger that consolidated all the local banks into only about ten or so banks. Essentially this reduces competition among banks, because with only a small number of them, there is possibility of an oligopoly effect. On the contrary, there has been little sign of collusion. Observably, Malaysian banks tended to adhere closely to monetary policy announcements from *Bank Negara*, especially during the *3-month intervention rate* days when *base-lending rates* (BLR), which were supposed to be market influenced, were set by banks closely in tandem with policy prescriptions. In April 2004, Bank Negara switched its policy instrument by adopting the *overnight policy rate* (OPR), but even then most banks continue to keep their lending rates within very close limits with each other¹.

Furthermore, sentiments remain upbeat over the construction sector which had taken a toll by falling into negative growth during the past couple of years but is expected to rebound and keep pace with the overall economy (See chart below)².



¹To me, even though nobody has mentioned it anywhere, the OPR was an attempt to force banks to be more imaginative in setting the BLR because it will require banks to decide how much money they want to lend out (the BLR) given the money they need to meet daily cash flows (the OPR).

²Based on numbers reported in "Malaysian Economic Outlook: 2008-2009" Malaysian Institute of Economic Research National Outlook Conference, 27-28 November 2007, Kuala Lumpur.

Perhaps this optimism is fueled by the promotion of *real estate investment trust* (REIT). Since its introduction into the country two years ago, there are eleven of them today with a market capitalization totaling about RM4 billion and holding roughly RM5 billion worth of property assets. The industry in Malaysia continues to talk about rising property prices and thus rental incomes. Along with them will be rising values for REIT investments. Quill, for example, started out with 84 sen during its initial public offer two years ago, but has since actually been traded as high as RM2. Meanwhile, the physical development of regions in the news, such as the *Iskandar Development Region* (IDR), the *Northern Corridor Economic Region* (NCER), an *Eastern Corridor* and the *Penang Global City Centre* (PGCC), suggests that investors are being lined up by proponents of these projects with ready money for the property sector in Malaysia. **§ Dr. Chan Huan Chiang**



C. PERFORMANCE OF THE NATIONAL ECONOMY

Gross Domestic Products

The Malaysian macro economy is still sound, at least for the first nine months of 2007. Despite external uncertainties, the Malaysian economy registered a strong growth of 6.7 per cent in the third quarter of 2007 (Table 1), driven mainly by resilient domestic demand and higher investments by both public and private sectors. The growth for the first nine months, thus, averaging at 6 per cent, indicates that the country's economy is still on track to meet the estimated 6 per cent annual growth rate in 2007.

Table 1: Malaysia: Real Gross Domestic Product by Industrial Origin (% Growth)

	Growth (%)							
	2006	2006				2007		
		Q1	Q2	Q3	Q4	Q1	Q2	Q3
Agriculture, forestry and fishing	5.2	5.9	3.9	5.8	5.1	2.2	-	0.6
Mining and quarrying	-	-	-	-	-	-	-	-
	0.4	2.7	1.1	0.1	2.1	0.6	7.7	2.3
Manufacturing	7.1	8.8	8.4	7.2	4.0	2.0	1.5	3.4
Construction	-	-	-	-	-	-	-	-
	0.5	1.9	0.5	0.4	0.6	4.0	4.8	4.7
Services	7.2	6.6	7.0	7.2	8.0	9.7	9.4	10.5
GDP	5.9	6.0	6.1	6.0	5.7	5.5	5.8	6.7

Source: *Malaysian Economy, Third Quarter 2007, Ministry of Finance Malaysia*

The services sector³ which accounted for nearly 55 per cent share of GDP has continued its strong momentum in the third quarter. The sector inked a remarkable 10.5 per cent growth, contributed mainly by the strong performance in wholesale and retail trade, as well as the business services sub-sectors. The pay rise of civil servants, bullish stock market, increase in tourist arrivals and spending, and positive business sentiments, are among the major factors that have boosted the significant growth of the services sector.

³The services sector constitutes Wholesale and Retail Trade, Accommodation and Restaurants, Transport and Storage, Communication, Finance and Insurance, Real Estate and Business Services, Government Services and Other Services.

Inflation

Inflation, of great concern to the man-on-the-street, is measured by the annual change in the Consumer Price Index (CPI). The CPI has increased 2 per cent to 105.6 for the first eleven months of 2007, against the last corresponding period (CPI: 103.5)⁴. The index for November, in fact, increases at 2.3 per cent to 106.8 from 104.4 (November, 2006). The increase of the index was mainly attributed to higher prices of all major sectors, particularly in food and non-alcoholic beverages (2.9 per cent), transport (2.4 per cent), and housing, water, electricity, gas and other fuels (1.3 per cent). However, overall inflation was partly mitigated by the clothing and footwear and communication categories, which continued to exhibit declining prices by 1.4 per cent and 1.2 per cent respectively. Although the CPI for November rose higher, it was still within the forecast range of Bank Negara Malaysia.

Trade

Malaysia recorded a total trade volume of RM912.2 billion in the first ten months of 2007. (Table 2). Exports increased by 2.5 per cent to RM496.8 billion, but imports had climbed to a higher rate of 4.5 per cent. As a result, the trade surplus has narrowed to about RM81.4 billion, compared with RM87.3 billion in the same period last year.



Table 2: Malaysia – Total Trade, Jan-Oct 2006 and Jan-Oct 2007

	2006 (Jan-Oct)	2007 (Jan-Oct)	Change (%)
	Value (RM bil)	Value (RM bil)	
Total Trade	882.5	912.2	3.4
Exports	484.9	496.8	2.5
Imports	397.6	415.4	4.5
Trade Balance	87.3	81.4	-6.8

Source: Department of Statistics, Malaysia

Asean, US, EU, Japan and China continued to be the major trading partners for the first ten months of 2007. The export to Asean countries accounted for more than a quarter of Malaysia's total export, which marked an increase of 5.1 per cent from the previous month, mainly attributed to higher exports of crude petroleum and refined petroleum products to Singapore and Thailand. In terms of individual country, the US remained as Malaysia's largest single export destination with a share of nearly 16 per cent. However, exports to the US in October 2007 amounted to only RM7.98 billion, a decline of 8.3 per cent compared to September 2007. The drop was mainly due to lower exports of E&E products and refined petroleum products to the US. Meanwhile, imports from these major trading partners constituted more than 70 per cent of total import value.

Ringgit performance

The Ringgit marked a post-crisis high of RM3.31 per US Dollar on December 13, 2007, before depreciating mildly as market estimates of further US policy rate reductions receded. In fact, since the Ringgit was depegged about two and a half years ago, the currency had appreciated 13 per cent against the greenback. Some even projected that the Ringgit will be further strengthened against US dollar in the months ahead. Shall we conclude that the appreciation of the Ringgit against the US dollar is attributed to a significant improvement in Malaysia's economic fundamentals? What then can be said when the Ringgit weakens against other currencies such as the Euro, the Japanese Yen, Chinese Renminbi or even the Philippine Peso. In reality, the Ringgit has depreciated against these currencies.

⁴ Department of Statistics, Malaysia

The appreciation of the Ringgit, to a large extent, is actually about the weaker greenback, or in another words, the sign of a slow down of the US economy. Is a weaker US dollar a boon or bane for Malaysia? The decline of the US dollar is a boon for those who need to import capital goods. Moreover, the weaker greenback, to a certain extent, would cushion some inflationary pressure due to high crude oil prices. Nevertheless, a continuous decline of the US dollar is a bane for Malaysian exporters, given that US is one of our largest export markets.

Highlights for Selected Sectors

Agriculture Sector

The agriculture sector constituted about 7.5 per cent share of Malaysian GDP in 2007⁵. The increased output yield of palm oil and higher production of livestock, aquaculture, vegetables and fruits, were the key performers in the third quarter of 2007 that led the agriculture sector's rebound with marginal growth of 0.6 per cent from the preceding quarter (-0.9 per cent). Conversely, due to higher rainfall, particularly in the northern region, output of rubber registered a plunge of 10 per cent.

Manufacturing Sector

The manufacturing sector, accounting for nearly one-third share of GDP, registered a soft rebound from the subdued growth in the first half of 2007. The sector grew by 3.4 per cent in the third quarter of 2007. The better performance of the manufacturing sector in Q3 was mainly attributed to some recovery in the E&E sub-sector. The Industrial Production Index (IPI) for the manufacturing sector chalked up 4.2 per cent in Q3 of 2007 against the last preceding quarter, largely due to the expansion in the E&E and palm oil sub-sectors. In terms of employment, the manufacturing sector generated about 1.1 million job opportunities in the third quarter of 2007.

Manufactured products accounted for nearly three quarters of total Malaysian exports in the first ten months of 2007. Although electrical and electronics (E&E) products continued to be the top manufactured export earner for Malaysia, it has dropped 5.4 per cent to RM219.5 billion, against RM232.1 billion in the last corresponding period. Palm oil, the major export commodity, has registered an increase of nearly 42 per cent to RM29.5 billion, compared with the same period last year.

On the other hand, higher imports of intermediate and capital goods have contributed to the rise of total imports for the first ten months of 2007. Intermediate goods which accounted for 71 per cent of total import (or RM294 billion), registered an increase of 6 per cent from the same period last year. The import of capital goods, compared to the last corresponding months, recorded a surge of 7.2 per cent to RM57.5 billion. Among the major imports of manufactured products that have marked a notable increase were iron and steel products (escalated 24 per cent), metal manufactures (increased 16.8 per cent), machinery, appliances and parts (rose 14 per cent), and chemical and chemical products (climbed 11.1 per cent).

Automotive Sector

In the first eleven months of 2007, a total of 444,932 vehicles were sold, registering a mild drop of 2 per cent, as compared to 454,160 units sold in the last corresponding period⁶. However, vehicle sales in November 2007 surged 21.3 per cent y-o-y to 43,783 units, spurred by the launch of new models. The passenger car sales in November increased nearly 23 per cent to 40,053 units while commercial vehicles sales grew 6.8 per cent to 3,491 units, against a year earlier. Meanwhile, the total production of vehicles for January to November 2007 contracted 13.6 per cent to 409,113 units, against the last corresponding period.

⁵ Ministry of Finance, Malaysia

⁶ Press release of Malaysian Automotive Association (MAA), December 2007

The decision to call off the proposed Proton-Volkswagen AG⁷ deal in mid November 2007 has put more pressure on the national car maker to perform. The market reacted harshly when the news of the call-off broke. Proton's share price dipped 92 sen or 18.6 per cent to close at RM4.02 (Nov 16, 2007). Although the recently-launched Persona 1.6 litre sedan has pushed Proton's share of the local passenger car market to 38 per cent in September (from 24 per cent in May), the lack of economies of scale remains the biggest challenge for the national carmaker. Will the scheduled launch of "BLM" (to replace the Iswara/Saga) in early 2008 and the upcoming MPV model (most likely in 2009), as well as the new Perdana and Waja replacement models be able to recapture domestic market share? To address the issue of lack of economies of scale, the national carmaker needs to look abroad. Proton is currently fine-tuning its turnaround plan to venture into the Asean, China and India markets. In spite of all these plans, is the national car maker competitive enough to succeed in the local and global automobile market? The achievements and challenges that lie ahead remain to be seen.



Tourism Sector

2007 is an eventful year for Malaysia in celebrating 50 years of nationhood. The Visit Malaysia Year 2007 (VMY) is well on track to meet the total arrivals target of 20.1 million tourists with tourist receipts / revenue of RM44.5 billion. Tourist arrivals for the first nine months of 2007 reached 15.6 million or registered a 21.3 per cent growth against the last corresponding period⁸. The arrivals have surpassed the expectation of a 15 per cent increase. The tourist spending during this period was estimated to have reached RM36 billion, or an average expenditure of approximately RM2308 per tourist. Tourists from Asean and Asia Pacific continued to be the major market sources for the country during the initial nine months (Table 3). In addition, enticed by the beaches and shopping activities as well as to flee from the hot summer months in their home countries, the strong-spending power tourists from West Asia (majority were from Arab Saudi), have thronged to Malaysia from July to September. Various spectacular events and festivals celebrated throughout the country, greater connectivity by extra low-cost carriers and attractive promotional fares, as well as the commencement of new mega shopping malls in the Klang Valley have stimulated domestic retail spending and magnetized higher tourist arrivals. Furthermore, the allocation of RM858 million in Budget 2008 for the implementation of various programs, including the provision and upgrading of tourism facilities as well as diversification of tourism products, is deemed positive for the sector.

Table 3: Tourist Arrivals to Malaysia, Jan-Sep 2006 and Jan-Sep 2007

	2006 Jan-Sep	2007 Jan-Sep	Change (%)
Singapore	7,109,090	7,779,193	9.4
Indonesia	893,625	1,335,958	49.5
Thailand	1,411,253	1,162,699	(17.6)
Brunei	530,208	808,204	52.4
China	286,302	490,601	71.4
India	200,647	315,705	57.3
Japan	259,048	272,182	5.1
Australia	206,125	222,814	8.1
West Asia	162,546	210,568	29.5
United Kingdom	188,025	202,197	7.5
South Korea	138,267	166,995	20.8
USA	126,505	156,308	23.6
Taiwan	138,214	155,295	12.4
Hong Kong	70,657	74,440	5.4
Germany	50,091	57,490	14.8
<i>Others</i>	1,132,575	2,237,643	97.6
Grand Total	12,903,178	15,648,292	21.3

Source: Tourism Malaysia

⁷ German's Volkswagen AG is the world's fourth largest automaker.

⁸ Tourism Malaysia

Property Sector

During Q3 2007, residential properties accounted for more than 70 per cent of total transactions in most of the selected states, except Johor. (Table 4). The property market in the Klang Valley has been positive in the third quarter of 2007. The total number of property transactions in that period, particularly the residential segment of Selangor and Kuala Lumpur, registered a strong growth of 42.9 per cent and 29.1 per cent respectively, against the same corresponding quarter in 2006. On the other hand, the overall transaction of residential properties in Penang has registered a growth contraction of nearly 7 per cent in the third quarter of 2007, compared with the same period last year. Nonetheless, for residential properties priced at RM1 million and above in Penang, the growth rate was more than 150 per cent in the third quarter.

Table 4: Number of Transaction for the Principal Property Sub-sector by Selected States

State	Residential	Commercial	Industrial	Agricultural	Development Land	Others	Total
Selangor							
(Q3 2006)	14,136	1,526	622	938	498	22	17,742
(Q2 2007)	13,341	1,419	723	1,070	506	-	17,059
(Q3 2007)	20,201	1,661	892	1,093	577	-	24,424
Johor							
(Q3 2006)	7,096	881	197	3,329	394	12	11,909
(Q2 2007)	4,851	915	313	2,673	444	-	9,196
(Q3 2007)	6,650	1,023	281	3,008	479	-	11,441
Penang							
(Q3 2006)	3,991	556	127	302	517	14	5,507
(Q2 2007)	3,829	525	160	346	468	-	5,328
(Q3 2007)	3,717	574	133	310	473	-	5,207
Kuala Lumpur							
(Q3 2006)	3,599	667	61	-	90	-	4,417
(Q2 2007)	3,466	582	52	-	162	-	4,262
(Q3 2007)	4,646	830	86	-	178	-	5,740

Source: Website of Valuation & Property Services Department

On the other hand, the take up rate⁹ of shopping complexes sustained at 0.7 per cent for the first three quarters in 2007. (Table 5(a), whilst the absorption and take-up rates for purpose built office buildings moderated between Q1 2006 and Q3 2007 (Table 5(b)).

Table 5(a): Summary of Absorption and Take-up Rate of Existing Space in Shopping Complexes between Q1 2006 and Q3 2007

	Q1	Q2	Q3	Q4	Q1	Q2	Q3
	2006	2006	2006	2006	2007	2007	2007
Absorption Rate (%)	3.1	-0.5	1.0	20.1	3.6	3.7	3.7
Take-up Rate (%)	0.6	-0.1	0.2	4.1	0.7	0.7	0.7

Table 5(b): Summary of Absorption and Take-up Rate of Existing Space in the Purpose Build Office between Q1 2006 and Q3 2007

	Q1	Q2	Q3	Q4	Q1	Q2	Q3
	2006	2006	2006	2006	2007	2007	2007
Absorption Rate (%)	2.7	3.4	1.1	3.3	2.6	6.4	3.1
Take-up Rate (%)	0.4	0.5	0.2	0.5	0.4	0.9	0.4

Source: Property Stock Report, Third Quarter 2007, Valuation & Property Services Department

⁹ Take-up rate measures the change in occupied space in the review quarter compared to the previous quarter divided with the total space in the review quarter.

In the 2008 Budget, several measures announced are deemed positive for the property market. These include: (1) With effect from 2 Sep 2007 to 31 Dec 2010, the Government proposed a 50 per cent stamp duty exemption on documents of transfer for the purchase of one house of not more than RM250,000 per unit. This measure is expected to reduce the cost of purchasing a house by up to RM2,000. (2) EPF contributors will be allowed to make monthly withdrawals from the balance in Account 2, effective 1 Jan 2008 for the financing of one house. (3) There will be a 50 per cent stamp duty exemption on the transfer of property from husband to wife and vice versa; and (4) Foreign ownership on fund management companies and REITs management companies will be raised from 49 per cent to 70 per cent.

Economic Corridors

Three major economic development corridors, as stipulated in the Ninth Malaysia Plan (9MP), have been rolled out to-date. The Northern Corridor Economic Region (NCER) and the East Coast Economic Region (ECER) were launched in July and October 2007 respectively, whilst the Iskandar Development Region (IDR) was embarked on earlier in November 2006, with more development corridors planned for Sabah and Sarawak. These economic corridors may have varied concepts and targets, but all share a common aim – as the principal catalyst of growth, both at the national and regional levels, they are designated to spearhead rapid economic development and expansion. As all these economic corridors have a span of more than 10 years to materialise their long-term goals, it is believed that the earliest real benefit or impact of these growth initiatives would only be seen or realized at least over the next 3 – 5 years. The success of the economic corridors will very much depend on the private sector's acceptance of the blueprint and their commitment to participate in the long run, as well as the coordination between the federal government, the state and respective local authorities.



Key Challenges

External Risks

Subprime crisis

The market projects that the US subprime crisis will be getting worse. It could spread to other types of loans / credit markets in the US as well as to other continents. Given that the US is one of the largest export markets for many emerging economies, the worsening credit market conditions and uncertain prospects for domestic demand in the US have stoked fears of a deeper slowdown if not an outright recession in the American economy next year.

Rising oil prices

Crude oil prices could soar further in the near future following the falling US supplies, global political instability, as well as fast-growing demand for transport and industrial fuel in developing countries. The volatility of crude oil prices not only put fuel on the global inflation alarm index but may also impede global growth, as spending and expansion by both consumers and investors might be cautiously held back due to rising prices and the cost of doing business.

Internal challenges

Higher Inflationary Pressure

The inflationary pressure in Malaysia was mainly sparked off by cost-push inflation, given the soaring crude oil prices, higher palm oil prices, rising utilities and toll rates, as well as the possible cut in petroleum subsidies by the Government in 2008. With the rise in crude oil prices, the Government's burden on fuel subsidy is escalating. In the first eight months, the sum of RM16 billion has been spent as petrol subsidies to keep domestic petrol prices low. These petrol subsidies will likely exceed RM20 billion by the end of 2007 with the crude oil prices closer to or exceeding USD100 per barrel. The proposal to cut petroleum subsidy is expected to ease the burden on the Government's fiscal position and enable the re-channeling of these funds / resources for other usage. The last RM4 billion cut in petroleum subsidy in February 2006 had resulted in an average increase of 21 per cent in petrol prices. The market expects the next subsidy cut to be around RM2 billion to RM3 billion, which could render an average 10 per cent to 12 per cent increase in fuel prices.



Speed of Project Implementation

The 9MP projects and various economic growth corridors, to a large extent, have fueled excitement in the market, among local and foreign investors as well as the people in the respective regions. However, the implementation progress of these economic corridors, according to market opinion, is relatively slow. For instance, after five months of grand launching, the proposed Implementation Agency (NCIA) for NCER is still on the drawing board. It is actually a cause of concern for the market as so much expectation has been poured in, given the massive publicity and media coverage by the policymakers to convince the *rakyat* that these corridors would be the catalyst of growth and development. § **Lim Wei Seong**

D. PERFORMANCE OF PENANG'S MAJOR ECONOMIC SECTORS

i) AGRICULTURE SECTOR

Crop Production & Marketing

Contract Farming

Under the 9th Malaysia Plan, the agriculture sector has been given a new focus, specifically on activities that can promote the sector as the third new economic growth engine in the country. Emphasis has been given to areas that involve quality and high value-added agricultural production. The effort will be implemented through activities such as grading, packaging, labeling and branding with systematic marketing. This is in line with the Ministry of Agriculture and Agro-based Industries' plan for the balance of trade to offset the country's food import bill. This integrated approach will involve all departments and agencies under the Ministry such as FAMA, LPP, Department of Agriculture, LPNM and MARDI.

The objectives of the Contract Farming project are to:

- Ensure a market and thus, increase the income of producers
- Increase fruit and vegetable production through systematic production and market planning
- Ensure the production of high quality and sustainable agricultural products to fulfill market requirements through Good Agriculture Practice (GAP) standards
- Increase the transfer of technology in the supply chain

Sixteen (16) types of vegetables and thirteen (13) fruits have been identified under the Contract Farming project. Conditions for participating in the Contract Farming project are:

- All individual operators, group farming units and companies are allowed to participate under this scheme;
- They should also own or rent the land legally for the project
- They should be involved full time and directly in the project
- They should have the necessary experience in fruit production and enough working capital for the project.

The Taman Kekal Pengeluaran Makanan Project (TKPM) at Ara Kuda, SPU which was developed in 2006 is a good example of contract farming. This project is managed by the Penang Agriculture Department on land owned by PERDA. It was previously an old oil palm estate but has now been converted into a permanent cropping area for food production. Various types of vegetables are planted in this project. The cultivated area up till October 2007 is 30.78 ha and has to date, already successfully produced 196,465 kg of vegetables and fruits with a value of about RM180,000. Sixteen entrepreneurs of different backgrounds ranging from unemployed graduates to experienced farmers are involved in this project.



Table 6: Area, Amount and Sales of Crops Grown till October 2007

No	Crop	Area (Ha)	Amount (Kg)	Sales (RM)
1	Bayam	2.0	15,870	18,250.00
2	Kang kong	0.4	8,200	8,200
3	Kailan	0.4	750	2,100
4	Sawi	0.5	2000	2,400
5	Lady's Finger	2.2	550	1,650
6	Cucumber	2.2	53,347	30,508
7	Long beans	1.6	13,640	20,493.60
8	Chilies	2.2	16,631	33,481.30
9	Petola	0.8	5,135	5135
10	Maize	4.0	26,710	12,500
11	Watermelon	4.0	75,000	45,000
12	Banana	4.45	0	0
13	Pineapple	6.03	0	0
	Total	30.78	196,465.00	179,717.90

Source: Penang Agriculture Department, 2007

The TKPM at Ara Kuda aims to be the hub of supply to wholesalers and retailers in the future. It also envisages being the centre of crop production for animal feed, mushrooms and natural farming. Hands-on training is being planned for future operators. The Project could also be a future attraction for recreational activities.

The second area identified for the TKPM Project is on a 115 ha site which was previously proposed as the "Juru Agro-Technology Park". This area is swampy and the soil quality posed a challenge to cultivation because of acid sulphate conditions when drained or exposed to oxidation. The Department of Agriculture reported that land clearing has already started at Juru and they hope to be able to start cultivation in 2008.

Commencing from the year 2006, FAMA Penang introduced several new schemes to further upgrade and improve the marketing mechanism in Penang. Their efforts are aimed mainly at developing agro-based entrepreneurs for both fresh and processed agricultural products.

Fresh Agro-based Market

Product image and presentation are very important factors that make marketing successful besides price, promotion or even location. It makes agricultural products competitive, gives them a look of quality and safety and thus promotes brand loyalty among buyers. The majority of small-medium agro-based industry entrepreneurs are still unable to package and label their products according to the specifications of food regulations. FAMA is attempting to change this situation by providing aid not only in terms of product presentation but also upgrading food safety and marketing strategies.

The objective of this project is to improve product image in terms of appropriate packaging and labeling for the market, improve sales by preparing appropriate promotional materials and to promote compliance with the Food Act, 1983 and Food Regulations, 1985.

In order to achieve the above objectives, FAMA provides advisory services to the entrepreneurs to aid them in label design and product packaging as well as designing promotion and production verification and labeling compliance. FAMA has helped develop about 100 agro-based industry entrepreneurs so far.

One of the notable efforts that was introduced in 2006 to promote the fresh fruit market concept is the Fresh Fruit Stalls (Gerai Buah-Buahan Segar - GBBS) Project. There are more than 100 such projects all over Malaysia.

In Penang, there are a total of 18 GBBS projects. They are located in all districts with SPU having the most number of projects followed by SPT and BD on the island.

Table 7: Penang - Number of GBBS Projects by District, 2007

District	Number of projects
Northern District (SPU)	8
Central District (SPT)	4
Southern District (SPS)	1
Northeast District (TL)	1
Southwest District (BD)	4

Source: FAMA Penang, 2007

Identified project participants are provided with racks, buntings, banners, umbrellas, flaglines, signboards, stickers, etc.

The project has been successful and participants have been increasing yearly. Up to date (Nov 2007), the value of daily transaction averages RM22,150.00.

Both seasonal and non-seasonal local fruits are sourced from within Penang and also other states such as Perak, Kelantan, Johor and Selangor, etc. Penang is a net consumer state and in-state fruit production is relatively low (about 20%). The local non-seasonal fruits are pineapples and bananas and seasonal fruits are mostly durians and rambutans.

In Penang, contract farming projects are also a source of supply for the fresh produce market. FAMA has entered into various contract farming agreements in order to supply hypermarkets and wholesale markets. The many hypermarkets such as Giant, Carrefour, Sunshine and TESCO Extra are some of FAMA's buyers for the fresh fruit market.

They often demand a constant supply of fruits that meet a specified quality for their customers. FAMA is obliged to adhere to the terms of contract and in the case of failure to comply, FAMA has to pay a levy to the buyers as stipulated in the agreement.

Local fruit and vegetable growers are not always able to meet the supply or the quality of produce demanded by the buyers. There are a few factors that contribute to this situation, such as the lack of agricultural skills, unfavourable local conditions and most importantly, poor personal attitudes.

Due to such market inefficiencies, FAMA has little choice but to supplement the deficient quantities by sourcing them from out of state. However, because of its efficient networking with counterparts in other states, a constant supply is usually assured. FAMA's data indicates that demand for fresh produce continues to grow over the years.

Table 8: Pasar tani (Farmers' Market)

No.	Location	No of Participants
1	Balik Pulau	75
2	Pokok Sena	51
3	Guar Perahu	33
4	Tasik Gelugor	105
5	Taman Bertam Indah	18
	Total	282



Source: FAMA Penang, 2007

In addition to the above pasar tani, FAMA has started a mega pasar tani in Tasek Gelugor and another one in Balik Pulau. These are bigger versions of the normal pasar tani and require a larger area and involve more participants.

Further steps taken to ensure that Penang people continue to enjoy a supply of fresh agricultural produce include the setting up of collection centres for vegetables and fruits at Merbau Kudong and Kg Selamat and another one at Simpang Ampat, Tasek in November 2007.

Processed Agro-based Markets

FAMA also provides advisory services to entrepreneurs involved in small processed-food industries such as maruku, putu beras, putu kacang, kerepek, bahulu, roti, biscuits, cakes, sauces, frozen food, spices, cordials, pekasam, jelly, yoghurt etc.

FAMA has so far been able to raise the standards of local entrepreneurs and promote these local products successfully through a good and systematic marketing approach. One such outlet for processed products is the Dato' Kailan Complex, Kepala Batas which was set up in October 2006. In this complex, as many as 438 products involving 95 entrepreneurs have been gathered and displayed.

Livestock Rearing Sub-sector

The livestock industry forms an important component in the Penang state economy, contributing some RM 517.13 million, out of which the poultry and pig sectors combined contributed some RM 394.4 million. Thus, poultry and pig farming is a very important sub-component in the Penang state economy.

However, with urban sprawl encroaching into former rural animal husbandry areas, social and environmental issues are becoming increasing more pressing even as the general public becomes more environmentally concerned.

The Cabinet has also previously issued directives to all states in Malaysia to centralize pig farming in order to manage the farms in a more organized and well-controlled manner to overcome environmental and other related problems. However, there arose numerous technical and practical problems in relation to the relocation exercise and also the heavy financial burden on the farmers coupled with land constraints. This problem is more evident in land-scarce Penang and there was great difficulty in identifying a suitable

location for a centralized pig farming area. The Government eventually relented and decided that farmers could continue *in situ* if measures can be taken to curb odour, stop the discharge of effluents into rivers and water ways, and meet environmental standards stipulated by the Department of Environment. In the year 2001, the state Pig Farming Guidelines was formulated (Garis Panduan Penternakan Khinzir 2002) and was successfully implemented in the year 2002 to overcome the pollution problem caused by the pig farming industry. With the implementation of this requirement, many farmers folded up and switched to other industries due to a combination of factors such as the inability to install the expensive pollution control measures, the rising cost of animal feed and the shortage of labour. However, there remained groups of farmers who were willing to implement control measures and meet the stringent environmental requirements to continue production. These farmers are found mainly in Kg Selamat, SPU, Kg Valdor, SPS and other places.

In view of this situation, the Cabinet has recently reached a decision to encourage farmers to adopt the "Closed House" system for the rearing of chicken and pigs in Malaysia. In line with this view, the Penang State Government has proactively taken steps to promote this concept through the Penang Department of Veterinary Services (PDVS) beginning 2007. Although this has not been made into a ruling, the PDVS has already begun to encourage chicken and pig farmers to change from the open pen system to the closed-house system which is currently being implemented by most countries and is very effective in disease control. The Government will plan a strategy for its successful implementation without unduly burdening the industry.

Currently, about 20 chicken farms out of 400 farms in Penang have implemented this system but none out of the 226 pig farms have done so.

Under this enclosed system, housing for both chicken and pigs is equipped with cooling pads (similar to air-con cooling fins) on one end of the building with large extractor fans on the other side. Air is drawn through the cooling pads and circulated through the pens and expelled via the large extractor fans. This constant circulation of air throughout the pens keeps the livestock cool and ventilated thus preventing heat stress. It also maintains a constant temperature throughout the day. The air expelled from the extractor fans is almost odourless as compared to the open house system. To further reduce odour, plastic sheets or barriers made from other materials may be placed in front of the extractor fans to trap the exhaust air. Such methods are ingeniously used by farmers in Taiwan to prevent odour problems that may arise.

The animals are reared on raised floors with slated platforms whereby the droppings can easily be flushed and channeled into central drains which send the effluents into a treatment plant. After treatment, the water is circulated for reuse in the pens, such as to flush the floors and drains, etc. Rain water is collected from the gutter to prevent overloading the waste water treatment plant and can be utilized for farm use. The sludge and animal waste can also be sent to a centralized unit to be composted and turned into valuable fertilizers for potential export purposes.

Such a system also utilizes an automatic feeder system whereby animal feed is channeled to food hoppers via a piped system, thus greatly reducing the amount of labour. Since human activity is greatly reduced via the mechanized system, bio-security is ensured as there is less contamination and transmission of diseases.

The growth rate is also faster and pigs are ready for the market in a shorter period of time, thereby saving on expenditure for feed consumption.

The cost of implementing the Closed House system is estimated to be around RM200-300 per pig. Equipment per porker is estimated at RM150 and up to RM1,500 per sow.

In the case of chickens, the production cost is around RM20-30 per bird. Housing alone costs RM16-20 per bird, depending on the type of materials used for cooling pads, curtains, ceiling and insulation. Equipment costs for the waterer/feeder and ventilation alone amounts to RM5 per bird and up to RM35 per breeder.

Farmers continue to lament the rising cost of fuel and feed (e.g. raw material for chicken feed has risen from around RM500 per ton in 2006 to RM1,200 per ton this year and is still increasing). A labour shortage and environmental problems continue to plague this sector. However, some farmers realize that switching over to the Closed House system in the long term has many economic benefits that can offset the present financial costs. Some of the economic benefits are listed below.

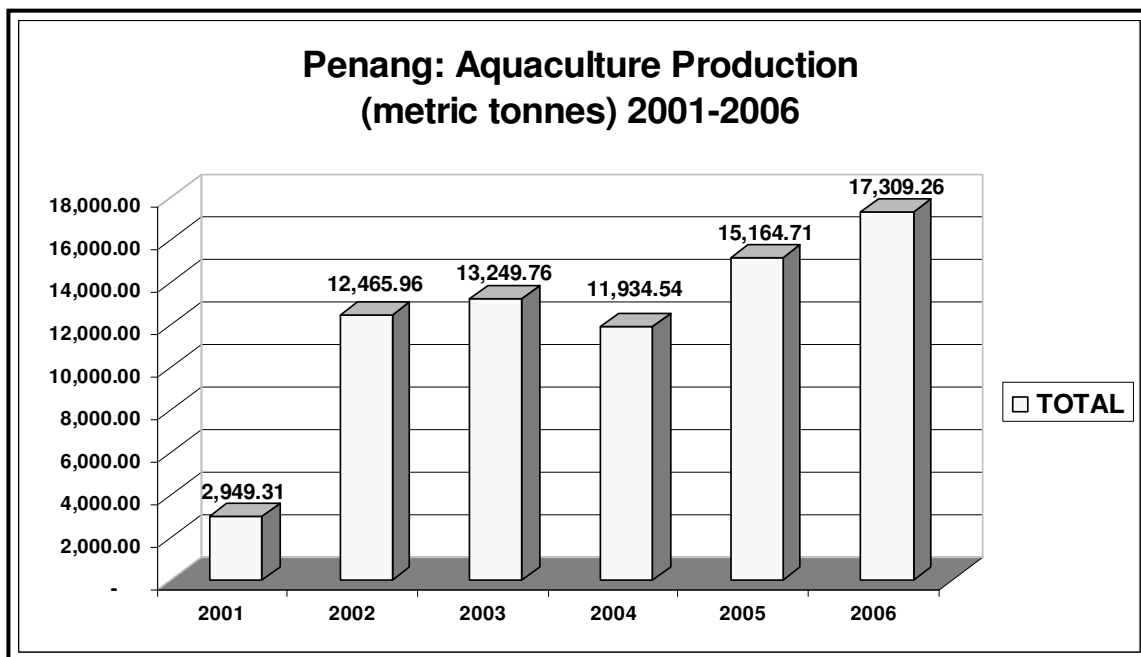
1. Reduced water usage
2. Possible income generation from composting of sludge and droppings
3. Reduced labour due to the automated hopper feeding system and reduced need to bathe the pigs
4. Higher stocking rate per unit area
5. Reduced mortality of animals due to better temperature control
6. Faster growth rate and shorter fattening period for livestock
7. More efficient bio-security resulting in better disease control programmes
8. Less odour problem
9. Less flies problem
10. Minimal discharge of effluents
11. Reduced social problems due to fewer complaints from nearby residential areas



From the above benefits cited, it would be prudent for farmers to adopt the Closed House system in order to be sustainable and have a greener and cleaner production scheme that complies with environmental requirements whilst making a sustainable competitive income.

Fisheries Sub-sector

For the year 2007, the Department of Fisheries (DOF) has started the preparation for a marine prawn rearing project and an ornamental fish and aquatics plants development project. Both projects are in Seberang Perai Tengah and are expected to start at the end of this year. The main objective for marine prawn rearing is to produce about 112.5 metric tonnes of marine prawns from Penang. This will give the community job opportunities, besides ensuring that fishery entrepreneurs will earn a net minimum income of RM3000 per month. The 'private sector driven' approach is used for project development. Candidates for the project must have the skills, commitment and experience in the aquaculture industry.



Source: Department of Fisheries, Penang 2007

The graph above shows **aquaculture production** for Penang from 2001 to 2006. Aquaculture production includes freshwater fish, marine prawns, bivalves and brackish water culture. It is clearly seen that production has increased from the year 2004 (11,934.54 metric tons) to 2006 (17,309.26 metric tons). It is evident that this is an expanding industry in Penang and the DOF has been actively seeking new ways to further promote and enhance this industry in the state.

In the present decade of modernisation, the DOF is attempting to develop more viable fisheries projects that can be sustainable on a long-term basis. Therefore, they have made future plans to develop the aquaculture industry such as establishing a green mussel culture farm and a green mussel processing farm. This project will provide an additional source of income to the local community, especially fishermen.

The **ornamental fish and aquatic plants** development project will utilise about 4.2 hectares in 'Taman Kekal Pengeluaran Makanan' (TKPM), Juru. Although there are many species of ornamental fish, they will focus on selected species such as the discus and guppy. This is because Penang is the main exporter of discus fish, especially to the European, USA, Taiwanese and Hong Kong markets. The present approach will no longer use ponds for rearing but will utilize aquaria and tanks.

Due to the rising demand for ornamental fish in the world market, the DOF would like to see an increase in production. They plan to use the "wild ranch system" (rearing fish in natural water bodies instead of tanks) for the ornamental fish and aquatic plant farms. They will be using an ex-mining pool for the "wild ranch" approach.

The ornamental fish and aquatic plants culture will also be implemented using canvas tanks. In order to make this project successful, the DOF will be using the consortium concept. For example, each selected company will develop one acre of an identified area. The selected company will then function as the breeding, collecting and distribution centre for ornamental fish and aquatic plants.

To produce good quality **marine fish**, the DOF will develop six marine fish nurseries in the Aquaculture Industrial Zone (AIZ). It will also provide work opportunities for the local community, especially fishermen.

Kepala Batas will be the **marketing centre** and hub **for fish-based products** in the northern region. There will be a building complete with freezing and chilling facilities such as cold room and blast freezer in the marketing centre. This marketing centre will create the supply chain between the producer, processor and the marketing agent/distributor/exporter.

MARDI, the DOF, the Department of Veterinary Service and PERDA have been given the task to formulate a diet for fish and other livestock. This is because they want to help farmers to reduce operational cost by providing a good formulated diet at a lower cost. They will make use of the abundant local raw material for feed formulation.

The DOF will cooperate with LKIM to create a centre for a fresh tuna and tuna-based product market at the Batu Maung wet market. This tuna wet market will introduce fresh tuna and tuna-based products to the local people instead of only targeting the export sector. A food court will also be incorporated in the wet market to promote food using tuna as the main ingredient.

2008 Prospects

For 2008, the Agriculture sub-sectors are poised to further intensify the cultivation of food crops and increase marine output and animal husbandry products in order to increase food production.

Programmes initiated by the Department of Agriculture like the TPKM has started bearing fruit since its inception in 2006. This approach of developing entrepreneurs instead of giving outright grants seems to be creating a new breed of producers who are very professional and commercial in their outlook. They are fully aware of their commitment to produce quality products to meet stringent market demands.

The new approaches taken by the Department of Veterinary Services to further modernize poultry and swine rearing are in line with green environmental guidelines. Penangites can be assured of a cleaner and healthier product through the enclosed farming systems that have been introduced. This approach allows for sustainable production with the correct environmental conditions for rearing livestock. The meat production process is guided by the application of disease prevention and pollution control measures.

The Penang Fisheries Department is also playing an active part to modernize this sector through the introduction of various projects and initiatives. Opportunities are also provided for entrepreneurs in the aquaculture industry to further expand their production capabilities, such as the setting up of nurseries and processing plants to value-add to their final product. Marketing hubs have also been created to help rearers and fisherfolk sell their products to consumers.



In order to capitalize on the ever expanding market for ornamental fish and aquatic plants, plans have been made on a more holistic basis that covers the product life cycle such as establishing breeding, collecting and distribution centres for the fish and plants.

FAMA's initiative to start new marketing strategies to further modernize and strengthen the marketing infrastructure and network augurs well for primary food producers. Efforts like the GBBS will give a new look to small time retailers and expansion of marketing channels like the pasar tanis and mega pasar tanis will further boost domestic agriculture. Farmers have the assurance of a market for their produce through entering into agreements to supply supermarkets and hypermarkets. FAMA has proactively planned ahead and will attempt to ensure a sure and steady supply of agriculture produce to the consumers not only in Penang but also in the region.

Agriculture which is identified as the third engine of growth in the 9MP will be transformed into a "business", and not merely be regarded as a "subsistence" or "self-sufficiency" activity. Penang, although constrained by the scarcity of land to expand into the area of primary food production, can build on the strength of its food processing experience and expertise. Penang state's GDP can also be enhanced with the further development of agro-based industries.

In general, officers from the various agencies / departments under the Ministry of Agriculture in Penang have a very positive outlook and maintain that the introduction of a number of agricultural projects has actually brightened the prospects of the sector in the state. ***§ Khor Hung Teik / Athirah Azhar***

ii) **MANUFACTURING**

Export Performance of the Manufacturing Industry

Malaysia's exports of manufactured goods registered a marginal increase of 0.7 per cent to RM374.4 billion in January to October of 2007 as compared to RM371 billion in the corresponding period in 2006. (Table 9). Manufactured goods constituted 75 per cent of total Malaysian exports in 2007 (January-October).

The Electrical and Electronics (E&E) sub-sector plays an anchor role in Penang's manufacturing industry. E&E remained the largest contributor, accounting for nearly 60 per cent of the country's total exports of manufactured goods in the first ten months of 2007. However, the export of E&E products dropped 5.4 per cent to RM219.5 billion in January-October, 2007 from RM232.1 billion in January-October, 2006.

Table 9: Malaysia's Export by Sector, January – October 2007

Export by Sectors	2006 (Jan-Oct)	2007 (Jan-Oct)	Change
	<i>RM billion</i>	<i>RM billion</i>	<i>%</i>
Manufactured Goods	371.7	374.4	0.7
Electrical & Electronic Products	232.1	219.5	-5.4
Chemicals & Chemical Products	23.3	27.5	18.0
Machinery, Appliances & Parts	16.4	18.7	14.0
Wood Products	13.5	13.7	1.5
Manufactures of Metal	11.4	13.6	19.3
Optical & Scientific Equipment	11.3	11.5	1.8
Iron & Steel Products	7.8	8.8	12.8
Rubber Products	7.7	8.6	11.7
Textiles & Clothing	8.8	8.6	-2.3
Transport Equipment	7.5	7.0	-6.7
Processed Food	6.0	7.0	16.7
Manufactures of Plastics	6.3	6.9	9.5
Jewellery	3.0	4.3	43.3
Non-metallic Mineral Products	2.8	3.2	14.3
Petroleum Products	2.0	2.4	20.0
Paper & Pulp Products	1.8	2.1	16.7
Beverages & Tobacco	1.6	1.8	12.5
Other Manufactures	8.4	9.2	9.5
Agricultural Goods	37.8	46.1	22.0
Mining Goods	65.9	68.1	3.3
Others	9.5	8.2	-13.7
Total Exports	484.9	496.8	2.5

Note: Interim Data for October 2007

Source: Department of Statistics, Malaysia; Compiled by MATRADE

The country's exports of machinery, appliances and parts increased by 14 per cent to RM18.7 billion in 2007 (January-October). This sector represented about 5 per cent of the total exports of manufactured goods. Over the years, the machinery and automation industry in Penang, which makes up a large group of local SMIs, has grown alongside the semiconductor industry in the state. Their core competencies are centered on process equipment and machinery, such as precision machining, test auto-handling, back-end automation, as well as contract manufacturing. A number of these local indigenous firms have grown big and are extending their reach abroad.

Exports of optical and scientific equipment recorded a rise of 1.8 per cent to RM11.5 billion in the first ten months of 2007. According to industry sources, Penang contributes two-thirds of the country's total medical instruments exports. The medical devices industry directly or indirectly supports significant job opportunities and pays above-average wages. It is an emerging new source of growth in Penang's manufacturing industry landscape.

The export of processed food registered a strong growth of 16.7 per cent to RM7 billion in 2007 (January-October). In Penang, a number of the food processors have expanded their focus into the global *halal* food market. Penang is one of the main exporters for

processed seafood products, inclusive of the relatively new surimi-based seafood products. All of these seafood processors have obtained *halal* certification and complied with stringent safety standards such as Hazard Analysis Critical Control Point (HACCP). The major export destinations for Penang's *halal* food products are Europe, Asean countries, USA, Middle East, as well as Australia and New Zealand.

The export of Malaysian made jewellery for the first ten months of 2007 soared 43.3 per cent compared to the same period in the last season. According to industry sources, approximately 65 - 70 per cent of Malaysian jewellery exports were from Penang. Of the jewellery fabricated out of Penang, about 60 per cent are headed for the Middle East market, with Hong Kong, Singapore and the European market making up the remaining 40 per cent. The gold and jewellery industry in Penang is more than a hundred years old and is the main contributor to the Malaysian gold and jewellery industry. Proper development and planning will ensure the survival of this unique trade into the future.

The export of textiles and clothing has contracted 2.3 per cent in the first ten months of 2007 against the last corresponding period. The textile and apparel industry was once the top three export earners of manufactured goods for Malaysia, and Penang was one of the prominent locations for textile and garment makers in the country. The industry is also one of the pioneering sectors in Penang that has driven and contributed to the economic growth and industrialization process of the state. After the removal of quotas on global textile and apparel trade in January 2005, there was immense competition from low production cost countries like China, India, Bangladesh, Cambodia, Indonesia, and Vietnam. Furthermore, the Malaysian exporters are expected to face more intense challenges once the United States begins to completely abolish the quotas on imports of China's textile and apparel products in early 2008.



Export of transport equipment from Malaysia dropped by 6.7 per cent to RM7 billion for the first ten months of 2007. Several leading global automotive component manufacturers have long established their presence in Penang. Among them are Bosch, GKN Driveline, TRW Steering and Suspension, Siemens VDO Instruments & Components, ZF Steerings, and Clarion. However, local-based automotive component manufacturers need to overcome the general perception of relatively poor product quality compared to foreign makes. The situation is further aggravated by stronger global competition and further liberalization.

Industrial Production Index

The Industrial Production Index (IPI)¹⁰ for the manufacturing sector in the country rose 1.4 per cent year-on-year for the first ten (10) months of 2007, from 138.5 (Jan-Oct 2006) to 140.4. The increase of IPI for the manufacturing sector was attributed to the expansion of production of 54 out of 86 industries covered by the survey¹¹. Among the sectors with substantial increases were 'manufacturer of brass, copper, pewter and aluminium products', 'manufacturer of other electronic components n.e.c.', 'manufacturer of industrial gases, whether compressed, liquefied or in solid state', 'manufacturer of refined petroleum products', and 'manufacturer of semi-conductor devices'.

¹⁰ The Industrial Production Index (IPI) measures the rate of change in the production of industrial commodities in real terms over time, or in other words, measures increases and decreases in production output. The IPI is 'procyclical' – a rise signals economic growth, while declining production is indicative of a contraction

¹¹ The IPI is compiled by the Department of Statistics, Malaysia at national level on monthly basis, covering the manufacturing, mining and electricity sectors. The base year that is currently in use is 2000

Research & Development

In terms of research and design (R&D), a number of leading MNCs have invested quite significantly in their design and development activities in Penang. Intel, AMD, Motorola, Agilent and Avago have substantial R&D centers in their Penang plants. The activities range from being part of a global design team to complete product development, including the definition of products and technology roadmaps. Products developed locally include IC design, software development, PC mother boards, PC peripherals, RF/MW products, semiconductor packaging, test equipment and test systems. Moreover, a significant amount of work is also being invested in development programs on continual process improvements, product re-engineering, etc¹².



In contrast, most of the local SMIs in Penang are behind in design and development (D&D) as well as R&D capabilities. They lack technical know-how, compounded by a shortage of skilled- or knowledge-based staff (as most technically-competent personnel have been engaged by the MNCs). They also have limited financial resources to engage in R&D activities.

As tabled in the Federal Budget 2008, the government will intensify efforts to further promote research, development and commercialization activities, particularly the commercialization of home-grown R&D. In 2008, a sum of RM230 million is allocated for the Science Fund, RM300 million for the Techno Fund and RM546 million for research institutions. The government will continue to support R&D and commercialization activities. Presently, the royalty distribution of commercialized R&D is 50 per cent to research institutions, with the balance being shared between the research institutions and the researchers. To promote commercialization, as well as provide further incentives to researchers, the rate for royalty payment to researchers will be increased to 80 per cent, with the balance paid to research institutions. Furthermore, Technology Licensing Offices (TLOs) have been established at institutions such as SIRIM and Universiti Sains Malaysia. These TLOs have been effective in coordinating R&D activities and patent applications.

Penang / Malaysia needs to enhance its productivity in order to stay competitive amid the intense global challenges. With higher productivity, both employees and firms will benefit from higher returns. It is highly recommended that firms address the relation between wages and productivity to ensure that wage increases commensurate with higher productivity. By linking wages to productivity, the firms will be able to improve cost came from domestic investment sources. On the other hand, more than 95 per cent of the total approved investments of basic metal products in Penang were from domestic investors.

¹² 'Technology Roadmap in the Electrical and Electronic Industry of Penang', Industrial Research Task Force of Penang, 2007

Productivity Performance

The overall productivity of the manufacturing industry, as measured by sales value per employee, rose by 6.6 per cent in the third quarter compared to the preceding quarter of 2007 (Table 10)¹³. The growth was mainly attributed to the higher productivity growth (11.5 per cent) in the E&E industry. The computers and computer peripherals sub-sector marked the highest growth within the E&E industry. In addition, the unit labour cost declined 1.9 per cent, an indication that the labour cost competitiveness in the manufacturing sector has improved.

Table 10: Malaysia - Productivity Indicators for Manufacturing Industry, 3rd Quarter 2007

Sector	3 rd Quarter 2006		
	Change (%) over the preceding quarter		
	Sales Value per Employee (%)	Labour Cost per Employee (%)	Unit Labour Cost (%)
<i>Overall Manufacturing</i>	6.6	4.7	-1.9
Electrical & Electronics	11.5	4.0	-6.8
Non-Metallic Mineral Products	7.4	-1.0	-7.7
Professional & Scientific Equipment	6.2	-1.6	-7.4
Chemicals	4.3	19.0	14.4
Iron and Steel	4.0	1.0	-3.3
Rubber Products	3.8	0.7	-2.9
Plastic Products	2.9	2.5	-0.5
Fabricated Metal Products	2.4	0.2	-2.2
Transport Equipment	2.3	4.9	2.6
Textile and Apparel	-0.5	-0.9	-0.5
Wood Products	-5.0	1.2	6.5
Machinery & Equipment	-7.5	-1.3	6.6
Paper Products	Neg.	-0.8	-0.6

Note: neg. - negligible

Source: Derived from the 'Industry, Investment, Trade and Productivity Performance, Third Quarter 2006' report, Ministry of International Trade and Industry, Malaysia.

Penang / Malaysia needs to enhance its productivity in order to stay competitive amid the intense global challenges. With higher productivity, both employees and firms will benefit from higher returns. It is highly recommended that firms address the relation between wages and productivity to ensure that wage increases commensurate with higher productivity. By linking wages to productivity, the firms will be able to improve cost competitiveness and withstand economic challenges.



¹³ 'Industry, Investment, Trade and Productivity Performance, Third Quarter 2007' report, Ministry of International Trade and Industry, Malaysia

Manufacturing Investment Projects in Penang

Overall, Penang ranked fifth or accounted for nearly 6.3 per cent (or RM2.5 billion) of the total approved manufacturing investment in the country during Jan-Sep 2007¹⁴, after Kedah (RM13.9 billion), Johor (RM7.2 billion), Selangor (RM6.1 billion) and Sabah (RM2.9 billion).

Investment in the E&E sector continued to be significant in Penang even though the proposed investment amount in the state only accounted for 8.6 per cent of the total proposed E&E investment of the country. (Table 11). Investments in E&E projects were dominated by foreign investors with the majority being expansion / diversification projects. In addition, about one fifth of the approved scientific and measuring equipment investments in the country were located in Penang; of these approved projects (RM63 million), 95 per cent were foreign capital investments.

Domestic investment initiatives showed an encouraging trend in Penang for the first nine months of 2007. As depicted by Table 3, domestic investment represented 55 per cent of the total approved investments in Penang. The approved investment (RM201 million) of machinery manufacturing projects in Penang constituted nearly a quarter of the total approved amount (RM815 million). 68 per cent of this approved amount (RM201 million) came from domestic investment sources. On the other hand, more than 95 per cent of the total approved investments of basic metal products in Penang were from domestic investors.

¹⁴ Data from MIDA, Penang

Table 11: Malaysia and Penang – Approved Manufacturing Projects, Jan – Sep 2007

Sector	Country / State	Approved Manufacturing Projects (Jan-Sep 2007)				
		No. of Projects	Potential Employment	Domestic Investment (RM mil)	Foreign Investment (RM mil)	Total Investment (RM mil)
Electrical & Electronic Products	Malaysia	116	-	1,262.35	10,237.11	11,499.46
	Penang	22	3,116	112.37	874.50	986.87
Plastic Products	Malaysia	63	-	368.24	452.87	821.11
	Penang	6	267	39.64	9.15	48.79
Fabricated Metal Products	Malaysia	69	-	186.59	49.74	236.33
	Penang	21	381	25.96	7.20	33.16
Chemicals & Chemical Products	Malaysia	60	-	1,929.41	1,926.08	3,855.49
	Penang	4	109	56.66	54.64	111.30
Machinery Manufacturing	Malaysia	72	-	425.27	390.03	815.30
	Penang	22	782	137.01	63.56	200.57
Basic Metal Products	Malaysia	33	-	2,851.77	995.05	3,846.82
	Penang	6	912	866.26	44.70	910.96
Paper, Printing & Publishing	Malaysia	25	-	847.11	1,799.31	2,646.42
	Penang	2	38	6.43	-	6.43
Transport Equipment	Malaysia	36	-	559.88	292.43	852.31
	Penang	3	486	6.12	1.89	8.01
Food Manufacturing	Malaysia	60	-	795.80	319.60	1,115.40
	Penang	4	178	18.02	0.77	18.79
Furniture & Fixtures	Malaysia	38	-	172.51	24.36	196.87
	Penang	4	214	8.09	-	8.09
Scientific & Measuring Equipment	Malaysia	13	-	157.51	140.11	297.62
	Penang	3	114	3.08	60.00	63.08
Non-Metallic Mineral Products	Malaysia	15	-	293.43	995.55	1,288.98
	Penang	-	-	-	-	-
Textiles & Textile Products	Malaysia	17	-	101.27	50.32	151.59
	Penang	1	94	4.65	0.05	4.70
Petroleum Products (inc. Petrochemicals)	Malaysia	8	-	7,040.91	3,161.00	10,201.91
	Penang	-	-	-	-	-
Beverages & Tobacco	Malaysia	6	-	37.86	0.20	38.06
	Penang	-	-	-	-	-
Rubber Products	Malaysia	22	-	210.07	498.92	708.99
	Penang	1	60	4.50	-	4.50
Leather & Leather Products	Malaysia	1	-	0	4.59	4.59
	Penang	-	-	-	-	-
Wood & Wood Products	Malaysia	27	-	212.25	285.38	497.63
	Penang	3	138	17.21	3.73	20.94
Miscellaneous	Malaysia	21	-	309.61	133.18	442.79
	Penang	3	366	59.59	-	59.59
TOTAL	Malaysia	702	-	17,761.84	21,755.83	39,517.67
	Penang	105	7,255	1,365.59	1,120.19	2,485.78



Source: Malaysian Industrial Development Authority (MIDA)

During the first nine months of 2007, a total of 105 projects amounting to nearly RM2.5 billion in investments were approved for Penang, compared with 109 approved projects with investments totaling RM3.8 billion in the corresponding period in 2006 (Table 12). The approved investments are expected to create approximately 7,255 new job opportunities, with most of the proposed projects leaning towards the capital rather than labour-intensive sectors. The top five sub-sectors in terms of capital investments during the first nine months of 2007 were E&E, basic metal products, machinery manufacturing, chemicals and chemical products, and scientific & measuring equipment.

Table 12: Penang-Approved Manufacturing Projects, Jan – Sep 2006 and Jan – Sep 2007

Sector	Period	Approved Manufacturing Projects In Penang				
		No. of Projects	Potential Employment	Domestic Investment (RM mil)	Foreign Investment (RM mil)	Total Investment (RM mil)
Electrical & Electronic Products	Jan-Sep 06	34	4,500	48.90	2,157.45	2,206.35
	Jan-Sep 07	22	3,116	112.37	874.50	986.87
Plastic Products	Jan-Sep 06	5	288	39.55	660.80	700.35
	Jan-Sep 07	6	267	39.64	9.15	48.79
Fabricated Metal Products	Jan-Sep 06	28	1,355	73.70	204.02	277.72
	Jan-Sep 07	21	381	25.96	7.20	33.16
Chemicals & Chemical Products	Jan-Sep 06	1	39	169.11	1.74	170.85
	Jan-Sep 07	4	109	56.66	54.64	111.30
Machinery Manufacturing	Jan-Sep 06	13	394	121.88	26.89	148.77
	Jan-Sep 07	22	782	137.01	63.56	200.57
Basic Metal Products	Jan-Sep 06	6	185	100.77	4.93	105.70
	Jan-Sep 07	6	912	866.26	44.70	910.96
Paper, Printing & Publishing	Jan-Sep 06	2	119	68.00	-	68.00
	Jan-Sep 07	2	38	6.43	-	6.43
Transport Equipment	Jan-Sep 06	3	51	38.86	6.17	45.03
	Jan-Sep 07	3	486	6.12	1.89	8.01
Food Manufacturing	Jan-Sep 06	6	198	22.80	0.83	23.63
	Jan-Sep 07	4	178	18.02	0.77	18.79
Furniture & Fixtures	Jan-Sep 06	3	200	11.57	0.98	12.55
	Jan-Sep 07	4	214	8.09	-	8.09
Scientific & Measuring Equipment	Jan-Sep 06	2	7	1.85	5.00	6.85
	Jan-Sep 07	3	114	3.08	60.00	63.08
Non-Metallic Mineral Products	Jan-Sep 06	1	22	0.25	4.41	4.66
	Jan-Sep 07	-	-	-	-	-
Textiles & Textile Products	Jan-Sep 06	1	84	-	2.93	2.93
	Jan-Sep 07	1	94	4.65	0.05	4.70
Petroleum Products (inc. Petrochemicals)	Jan-Sep 06	1	12	1.46	0.62	2.08
	Jan-Sep 07	-	-	-	-	-
Beverages & Tobacco	Jan-Sep 06	1	37	0.78	-	0.78
	Jan-Sep 07	-	-	-	-	-
Rubber Products	Jan-Sep 06	1	21	0.28	0.02	0.30
	Jan-Sep 07	1	60	4.50	-	4.50
Wood & Wood Products	Jan-Sep 06	-	-	-	-	-
	Jan-Sep 07	3	138	17.21	3.73	20.94
Miscellaneous	Jan-Sep 06	1	24	-	12.00	12.00
	Jan-Sep 07	3	366	59.59	-	59.59
TOTAL	Jan-Sep 06	109	7,536	699.76	3,088.79	3,788.55
	Jan-Sep 07	105	7,255	1,365.59	1,120.19	2,485.78

Source: Malaysian Industrial Development Authority (MIDA)

The United States continued to be the major FDI in the manufacturing industry of Penang, with a total approved investment amount of RM824 million, representing nearly three quarters of the total approved FDIs in the state for the first nine months of 2007. (Table 13). Out of these five approved USA-owned projects, one is new and the remaining are expansion / diversification projects. Other substantial approved foreign investments are from Germany, France, Singapore and Japan.

Table 13: Penang – Approved Foreign Manufacturing Investment by Country, Jan-Sep

Country	No. of Approved Projects	Potential Employment	Foreign Investment (RM mil)	Share (%)
USA	5	703	823.79	73.5
Germany	4	119	97.65	8.7
France	1	74	51.12	4.6
Singapore	6	283	41.78	3.7
Japan	5	706	11.85	1.1
India	1	47	6.00	0.5
Taiwan	4	64	5.40	0.5
China	1	62	3.73	0.3
Switzerland	1	6	1.78	0.2
Hong Kong	1	166	0.31	0.0
Others	9	1,929	76.78	6.9
TOTAL	38	4,159	1,120.19	100.0

Source: Malaysian Industrial Development Authority (MIDA)



Prai Industrial Park and Bayan Lepas are the two main locations for the approved projects, with a total investment of RM964 million (or 39 per cent) and RM769 million (or 31 per cent of the total investment) respectively (Table 14), during the first nine months of 2007. 'New' projects approved over this period are mostly located at Prai Industrial Estate, Bayan Lepas FIZ Phase IV, Bayan Lepas area, Bayan Lepas FIZ Phase I, Seberang Perai, and Bayan Lepas I Industrial Estate.

Table 14: Penang – Approved Manufacturing Investment by Location, Jan-Sep 2007

Location	No. of Approved Projects	Potential Employment	Total Investment (RM million)
Bayan Lepas	8	607	769.10
Bayan Lepas FIZ Phase I	5	223	91.27
Bayan Lepas FIZ Phase III	1	8	2.29
Bayan Lepas FIZ Phase IV	9	519	185.33
Bayan Lepas I Industrial Estate	3	286	46.40
Bukit Mertajam	7	403	26.25
Bukit Minyak	8	496	51.03
Butterworth	8	424	33.07
Jelutong	3	65	14.53
Mak Mandin Industrial Estate	2	42	4.28
Nibong Tebal	2	73	2.31
Permatang Tinggi	2	97	2.53
Prai FIZ	3	32	6.08
Prai Industrial Estate	16	2,738	963.69
Prai IV	4	92	4.93
Prai IV Industrial Estate	1	98	13.76
Seberang Jaya	2	49	0.15
Seberang Prai	6	243	50.37
Teluk Kumbar	1	13	3.82
Other Areas	14	747	214.59
TOTAL	105	7,255	2,485.78

Source: Malaysian Industrial Development Authority (MIDA)

Opportunities and Challenges

One of the objectives of the Northern Corridor Economic Region (NCER) is to establish Penang and Kedah (Kulim) as the high-tech electronics hub of the region, expanding from the currently predominant assembly and test activities to higher value-added activities including wafer fabrication, chip design, automation design and materials or packaging R&D. To achieve these aims, the Collaborative Microelectronic Design Excellence Centre (CEDEC) is expected to play a significant role in human resource development – to train sufficient manpower in the field of microelectronics¹⁵, for both MNCs and local SMIs. To minimize the gap of mismatch in supply and demand of manpower, the industry and universities are advised to work together closely to identify the kind of microelectronic engineers that are needed. On the other hand, sufficiently qualified lecturers / trainers in microelectronics is another issue that needs to be addressed promptly.

The availability and capability of professional and skilled human capital are among the critical success factors in attracting greater investment flows. Apart from increasing local human capital, the Government will encourage and facilitate the entry of knowledge workers to further value-add to the nation's economy. With effect from 1 January 2008, the Immigration Department will shorten the processing period for the issuance of work permits to 7 days for skilled workers, compared with 14 days previously¹⁶.

Moreover, to further encourage MNCs to set up their regional offices in Malaysia, it is important to facilitate and streamline the entry application process for foreign skilled personnel who travel frequently to the country. Starting from 1 January 2008, the process for obtaining professional visit passes for knowledge workers will be simplified by enabling applications to be made in Malaysian embassies and consulates overseas. Furthermore, effective 1 January 2008, the application for multiple entry visas (MEVs) for Indian and Chinese nationals to enter Malaysia can be lodged in the country where they are residing or working. Prior to the new regulation, such visas could only be issued in the applicant's country of origin.

As an initiative to promote and support the private-sector driven biotechnology industry, the Government will persist in providing infrastructure and technological facilities. In the 2008 Budget, a total of RM236 million is allocated for projects related to technology acquisition, development of biodiversity research facilities and biotechnology commercialization centers as well as anti-cancer activities. The Bionexus status companies will be allowed to use and optimize the capacity of the laboratories and research facilities of local universities.

Although there is a substantial number of local SMIs in the metal fabrication and automated equipment manufacturing business in the state, most of them have limited capabilities to produce high-end products. According to industry sources, Penang / Malaysia lacks high-end plating processes for complex automated equipment and metal fabrication parts. In order to assist local SMIs to move up the value chain and enhance their technological capabilities, concerted efforts are needed to attract high-end technology companies to Penang.



¹⁵ Microelectronics, in brief, is the field of designing and fabricating very small-sized integrated circuits (ICs)

¹⁶ Malaysian Budget 2008

Another challenge faced by Penang in developing the manufacturing sector is the shortage of industrial land and MSC office space, particularly on the island. Proximity to the port and airport, a well-connected road transportation network, and properly maintained infrastructure and facilities of the industrial parks are among the key criteria for the investors to decide on their factories' location. The occupancy rates of the industrial lands around Bayan Lepas, Batu Maung and Prai areas have reached an almost optimal level.

Besides the stiff regional competition from China, Vietnam, India and Singapore, Penang has to mitigate the increasing intra-states (local) competition, particularly from other economic development corridors within the country. For instance, the Iskandar Development Region (IDR) has offered attractive incentive packages such as exemption of corporate tax for 10 years, exemption from the Foreign Investment Committee (FIC) ruling, permission to source capital funds globally and the green light to employ foreign workers and talents without restrictions, to entice qualified foreign investors.

Other challenges that were repeatedly highlighted in the past few years would foreseeably still remain as the key constraints that impede the growth of Penang's manufacturing industry in the near future, particularly the SMIs. Among these challenges are the lack of research and development activities, weaknesses in the supply chain, the over-dependence of local SMIs on MNCs in Penang / Malaysia, the lack of resources to penetrate global markets, poor knowledge and awareness of international industrial compliance standards to meet global export needs, logistics and infrastructure bottlenecks, as well as the sluggish pace of efforts to streamline, hasten and further enhance the efficiency, coordination and collaboration among government agencies and the private sector.

Last but not least, the technology roadmap for the Electrical and Electronics Industry of Penang has proposed six clusters to be formed, namely, semiconductor assembly and test equipment, sensor and sensing devices, software development for both ICT and embedded systems, wireless devices for peripherals and consumer applications, general industrial, mechanical and electronic design services with rapid prototyping capabilities, and general industrial, mechanical and electronic design services with rapid prototyping capabilities. The action plan for the technology roadmap has also been drawn up. The main challenge that lies ahead for the policy makers is to execute and implement the roadmap effectively.

2008 Outlook

As E&E exports represent more than 50 per cent of the total manufacturing exports, and the E&E sector is the backbone of Penang's manufacturing industry, the global market performance of E&E products would therefore have a significant impact on the manufacturing sector of the state. The Semiconductor Industry Association (SIA, San Jose) projected that the semiconductor market would experience solid growth for 2007 – 2010, with a compounded annual growth rate (CAGR) of approximately 7.7 per cent, and sales projected to reach USD321 billion by 2010¹⁷. The overall forecast growth for 2007 is projected at 3.8 per cent to reach USD257 billion. In 2008, global semiconductor sales is expected to reach USD277 billion with a CAGR of 7.7 per cent. The SIA predicted solid growth across the board for the entire range of semiconductor products, with flash being the exception, growing at a CAGR of 20 per cent. The demand for flash is mainly driven by MP3 players and cell phones. The personal computer (PC) shipments are projected to register 11 - 12 per cent growth in 2008. The cell phone shipments, though, may slow down to 8 per cent, and is anticipated to reach RM1.2 billion in 2008.

¹⁷ Semiconductor International, 11/14/2007

Although the prospect of the international semiconductor market seems stable and positive, the recent sub-prime crisis in the global credit market has misted up the global outlook for 2008. As consumers nowadays account for more than half of semiconductor product consumption, fears of a contraction in consumer spending have influenced economists / analysts to return a verdict of cautious optimism in the outlook for 2008. Such fears of falling consumer spending are not totally unfounded, as rising fuel prices and a contagious mortgage crisis affecting other credit sectors and other regions could spark off a possible global recession. Will Penang / Malaysia be able to weather a possible slowdown in the US economy, given that the United States is the main source of FDIs, as well as the major export destination for Penang's manufacturing products? Since Penang / Malaysia practises trade openness, a global economic slowdown will have a substantial impact on its manufacturing industry.

Despite the external challenges, Penang's manufacturing sector should continuously capitalize on its existing strengths and advantages. It has to dynamically promote new sources of growth, foster value innovation, move ahead towards a knowledge-based industry, and develop, integrate and enhance the value chain and cluster requirements of the key local SMIs. On top of that, the state's policy makers have to overcome the challenges of a shortage of skilled human capital as well as the lack of industrial land.

§ Lim Wei Seong



iii) FINANCE

As disclosed by Bank Negara Malaysia, the average fixed Deposit (FD) rates for commercial banks in Malaysia remained unchanged in November and December, 2007. As at 15 December 2007, the average quoted FD rates for tenures between one (1) and twelve (12) months were within the range of 3.08 per cent and 3.70 per cent¹⁸.

In the duration of 1 November – 27 December 2007, the Ringgit, in the early period, depreciated against the US Dollar as global investors were alert over the extent of sub-prime related losses in major international banks. Nevertheless, the Ringgit appreciated in late November following the announcement of strong growth performance of the Malaysian economy in the third quarter. The Ringgit climbed to a post-crisis high of RM3.31 per USD on Dec 13, before depreciating slightly. The Ringgit marked a mixed performance against other major regional currencies. The Ringgit appreciated against the British pound (4.3 per cent), Singapore Dollar (0.3 per cent), Korean Won (4.1 per cent), and Indonesian Rupiah (3.5 per cent), but depreciated against the Euro (-0.2 per cent), Japanese Yen (-0.4 per cent), Chinese Renminbi (-1.9 per cent), Philippine Peso (-5.2 per cent) and Thai Baht (-0.5 per cent).

Loan Development

In September 2007, loan applications, approvals and disbursements by the Malaysian Banking system¹⁹ continued to record a positive annual growth rate, with 58.3 per cent, 45.2 per cent and 18.0 per cent respectively. The total loans in the Malaysian banking system stood at RM 644 952 million at the end of the third quarter of 2007, with asset quality improved where the non-performing loans (NPLs) ratio eased to 3.5 per cent of net loans²⁰.

¹⁸ Monetary and Financial Development, September 2007, Bank Negara Malaysia

¹⁹ Loans from the Malaysian banking system include loans from commercial banks and investment / merchant banks

²⁰ This positive development was driven mainly by the reclassification of NPLs to performing status and continuing loan write-offs by banking institutions

The loan amount (RM44,884 million) in Penang accounted for about 7.0 percent of total loans in Malaysia for the period ending September 2007. This loan amount registered an increase of 6.8 per cent against the same period last year. (Table 15). According to industry sources, optimistic business sentiments and positive consumer confidence in the first nine months have stimulated strong economic expansion and higher consumption, which in turn have boosted higher borrowings in Penang.

Table 15: Penang - Growth Rate for Loans from the Banking System by Quarter

Q1, 2006 vs Q1, 2007	Q2, 2006 vs Q2, 2007	Q3, 2006 vs Q3, 2007
5.0	8.2	6.8

Source: Derived from data provided by Bank Negara Malaysia

Loans by Purpose

As at the end of the third quarter of 2007, loans for the purchase of landed property accounted for nearly 40 per cent of the total loans in Penang. These landed property loans, as indicated by Table 16, have surged by 10.3 per cent, as compared to the same period (third quarter) last year. The sturdy economic growth, new development corridor and competitive interest rates have heightened the borrowings for property investment.

Table 16: Loans by Purpose in Penang

Purpose of Loan	As At	Q3, 2006 vs
	30 Sep 2007	Q3, 2007
	Share (%)	Growth (%)
Purchase of Landed Property	39.67	10.3
Working Capital	30.80	6.4
Purchase of Transport Vehicles	16.31	3.4
Personal Use	3.80	6.9
Credit Card	3.03	11.9
Purchase of Securities	1.69	-1.5
Construction	1.42	-25.0
Purchase of Fixed Assets Other than Land and Building	0.69	13.5
Purchase of Consumer Durables	0.01	-12.1
Other Purpose	2.58	6.0
Total	100.00	6.8

Source: Derived from the data provided by Bank Negara Malaysia

The working capital loans were the second largest loan amount (almost 31 per cent) in the third quarter of 2007, registering a growth of 6.4 per cent, compared to the corresponding period last year. These loans are mainly used for business start-up and expansion as well as to finance the rising cost of doing business.

Loans for the purchase of transport vehicles accounted for about 16 per cent of the total loans in Penang, and continued to expand with a modest growth of 3.4 per cent in the third quarter of 2007 against the last corresponding period. In fact, during the first and second quarters of 2007, the new motor vehicle registration in Penang contracted 0.9 per cent and 8.2 per cent respectively, as compared to the same period last year. Nevertheless, the number of new registered motor vehicles started to pick up in the third quarter, which inked an increase of 3.7 per cent against the last corresponding period.

Industry observers noted that the slow motor vehicle sales in the first half of the year were mainly due to the difficulty in getting approvals on hire purchase loans and shorter repayment periods, weak used car trade-in price, and a relatively buoyant stock market. However, the market of the third quarter has shown some signs of recovery with the launch of several new passenger car models as well as the higher disposable income (pay hike of 7.5 per cent to 35 percent) of civil servants.

As the nature of the reported loan figures are on a cumulative basis, the high rate of growth for loans registered by the state could mean either a slow repayment rate of existing loans or a high disbursement rate of the loans. In Penang, the loans for purchase of fixed assets other than land and building grew the most with 13.5 percent y-o-y, followed by the credit card sector at 11.9 percent y-o-y and thirdly, purchase of landed property at 10.3 percent y-o-y. On the other hand, loans for construction purposes recorded the biggest contraction of 25 percent for the third quarter of 2007.



Loans by Sector

As at the third quarter of 2007, most of the banks' clientele, apart from the household sector, are involved in the manufacturing, wholesale & retail trade, restaurants & hotels, finance, insurance, real estate & business activities, as well as construction (Table 17). The loans in the manufacturing sector (including agro-based), accounted for about 19 per cent of the total loans, and registered a positive growth of 9.3 per cent y-o-y. The growth was mainly contributed by the increased number of new and expansion projects in the manufacturing sectors amid a positive investment climate and improved business confidence during the period. Other sectors that have shown strong y-o-y growth in loans were electricity, gas & water supply, education, health & others, and transport, storage & communication.

Table 17: Loans by Sector in Penang

Sector	As At 30 Sep 2007 Share (%)	Q3, 2006 vs Q3, 2007 Growth (%)
Household	58.09	7.0
Manufacturing (including Agro-Based)	19.29	9.3
Wholesale & Retail Trade and Restaurants & Hotels	9.98	1.6
Finance, Insurance, Real Estate & Business Activities	3.98	4.0
Construction	3.01	1.5
Transport, Storage & Communication	1.33	17.7
Primary Agriculture	1.05	4.9
Education, Health and Others	0.97	51.4
Mining and Quarrying	0.04	-1.5
Electricity, Gas & Water Supply	0.04	56.0
Sector n.e.c.	2.23	-0.4
Total	100.00	6.8

Source: Derived from data provided by Bank Negara Malaysia

Measures To Promote Islamic Banking

In tandem with the aims to position the country as an international Islamic financing centre, several measures have been introduced in the 2008 Malaysian Budget: (1) Islamic fund management companies will be allowed to be wholly owned by foreigners. (2) A sum of RM7 billion will be channeled by EPF to be managed by Islamic fund management companies. (3) Islamic fund management companies will be allowed to invest all their assets abroad. (4) Fund management companies will be given income tax exemption on all fees received in respect of Islamic fund management activities, until the year of assessment 2016.

These measures are expected to further promote the development of Islamic banking in Penang / Malaysia. The first measure is projected to be able to attract foreign companies, particularly those from the Middle East, which could accelerate the inflow of foreign funds as well as the transfer of technical know-how. The move to channel funds by EPF, according to industry analysts, would increase income from Islamic fund management units. The third measure to allow investment abroad would offer more flexibility and efficiency in asset allocation by the Islamic fund management companies. The impact of the income tax exemption on all fees for Islamic fund management under the fourth measure, although minimal, is deemed positive for the banking and financial industry.

Issues and Challenges

The external risks will still persevere along with rising fuel prices and global financial volatility following the sub-prime mortgage crisis in the US market. Some industry observers indicated that the sub-prime crisis could spread to other credit markets, such as credit cards, consumer credit, car financing, or commercial credit, which could further lead to a deeper economic slowdown in the US and globally. Furthermore, with the highly liberal foreign exchange control policies, Malaysia is exposed to large and volatile capital flows, and thus the country is not insulated from external developments and contagion.

In addition, although the inflation rate for the first eleven months of 2007 remained low at 2.0 per cent, the man in the street have grumbled at the increased burden due to the escalating cost of living and cost of doing business. In fact, the index for November climbed rapidly at 2.3 per cent to reach 106.8 from 104.4 in the same month of 2006. If the inflationary pressure persists without proper control, it could result in greater uncertainties in the credit markets and weaker demand conditions, and hence slowing down the loan application rate, as well as possibly increasing the number of non-performing loans, etc. As a result, the financial sector and overall economic growth could be adversely affected.

With the increasing and progressive liberalization of the financial services sector, the local banks and financial institutions have to brave themselves to face intense challenges from their foreign counterparts in a competitive environment. Moreover, the increased sophistication of clients who demand for a wider range of custom-made financial products and services requires the banks and financial institutions to be more dynamic, versatile and innovative. On the other hand, industry observers noted some trends in disintermediation of banks as the main source of funding / working capital, since some large corporate clients prefer to raise capital via the capital markets instead of borrowing from banks.

2008 Outlook

As the country continues to be a highly open economy, the development of the global economy and the international financial system would have considerable impact on the domestic financial markets and economy. However, with the more diversified and improved economic fundamentals and structure, as well as the consolidated financial system and markets, the country's ability to cushion against external volatility has been strengthened considerably. Industry observers are positive about the country's banking / financial sector based on the strong loan growth as a result of the 9MP and the economic corridors financing schemes, improved NPL ratio, as well as steady growth in non-interest income from increased cross-selling of financial products and trade finance.

For Penang, the financial sector would most likely remain cautiously optimistic in 2008 amid the external challenges. The outlook for Penang's banking / financial sector is likely to rely on the performance of the state's two key economic drivers, namely the manufacturing and services sectors. Despite some watchful prospect of the manufacturing exports in 2008 due to global uncertainties, the positive momentum of domestic economic growth, coupled with the emphasis on 9MP, extension of the Visit Malaysia Year to 2008, and NCER's mega logistics infrastructure development, are anticipated to boost the growth of the tourism, construction and property sectors, as well as the financial industry of the state. **§ Lim Wei Seong**



SERI would like to thank the following resource persons and institutions for their insights and invaluable contributions to this Part I article:

YBhg Dato' Md Aris Ariffin, CEO, Invest-in-Penang Bhd
Dr Wan Mohd Kamil bin Wan Nik, Pengarah, Jabatan Veterinar Pulau Pinang
Ms. Lim Hsin Ying, Corporate Communications Department, Bank Negara Malaysia
En. Raman Krishnan, BNM Cawangan Pulau Pinang
Pn. Rosnani Muhamad Zain, BNM Cawangan Pulau Pinang
Mr. Lee Heng Guie, Head of Economics, CIMB Investment Bank Berhad
Ms. Lim Lay Peng, Head of Dealing, Vice President – Private Client Services, CIMB
En Zamri Ahmad, Pengurus TKPM Ara Kuda, Jabatan Pertanian Pulau Pinang
En Anuar Mohamed, Timbalan Pengarah, FAMA Perai
Pn Habibah Sulaiman, Penolong Pegawai Bahagian Ekonomi, FAMA Perai
Mr Hoe Chee Siang, Penolong Pegawai Veterinar, Jabatan Veterinar Pulau Pinang
Pn Saadiah Mohamad, Pegawai Perikanan, Jabatan Perikanan Pulau Pinang
Pn Zubaidah Ahmad, Penolong Pegawai Perikanan, Jabatan Perikanan Pulau Pinang
Investment Bank Berhad
Cik Wan Hashimah Wan Salleh, Director, Malaysian Industrial Development Authority, Penang Branch
Pn. Yusmarizana Mohd Yusof, Malaysian Industrial Development Authority, Penang Branch
En. Mazlan Harun, Director, Malaysian External Trade Development Authority (MATRADE), Penang Branch
En. Mohd. Izham Abdullah, Director, Northern Regional Office, Small and Medium Industries Development Corporation (SMIDEC)
Department of Statistics, Malaysia, Penang Branch

Note: The Part II of the 'Penang Economic Report 2007 – Year-End Review and Outlook for 2008' will be published soon in the Penang Economic Monthly, January 2008 Issue.

SERI RESEARCH TEAM

YBhg Dato' Dr. Leong Yueh Kwong	Executive Director
Dr. Chan Huan Chiang	Economic Advisory Panel
Dr. Goh Ban Lee	Economic Advisory Panel
Professor Muhamad Jantan	Economic Advisory Panel
Professor Cheah Kooi Guan	Economic Advisory Panel
Professor Suresh Narayanan	Economic Advisory Panel
Professor Lai Yew Wah	Economic Advisory Panel
Mr. Khor Hung Teik	Acting Head, Environmental Section
Mr. Lim Wei Seong	Head, Economic Section
Cik Fatimah Hassan	Senior Programme Coordinator
En. Baharulnizam bin Baharum	Senior Programme Coordinator
Mr. Richard Ho Weng Keong	Research Analyst
Ms. Ng Ju Ai	Research Analyst
Mr. Ooi Ying Chieh	Research Officer
Mr. Ng Kar Boon	Research Officer
Ms. Parimala Devi	Research Officer
Cik Athirah Azhar	Research Officer



**Printed, Published
and Distributed by
Socio-Economic &
Environmental
Research Institute
(SERI), No: 10,
Brown Road,
10350 Penang.**

*SERI Wishes All
Readers a Happy and
Prosperous Chinese New
Year.*

