Performance of the Penang Industrial Sector 2005

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This article draws from the findings of the Penang Industrial Survey 2005, which was a survey commissioned by invest-Penang to SERI. The Penang Industrial Survey 2005 closely mirrors the industrial make-up of Penang State in that its respondents comprises 48 percent of small-medium industries/enterprises, 43 percent of multi-national companies and 9 percent of large listed local companies. For purposes of this survey, analysis was carried out along two main lines, by company status and by business sector. The business sectors in this survey are agro-based production/manufacturing, automation & precision tooling, electrical & electronics, biotechnology/pharmaceutical, textile & apparel, food processing, gold & jewellery, furniture, pulp & paper, plastics, basic metals, fabricated metals, chemicals, transport equipment, non-metallic mineral, building materials and finally a "catch-all" sector of others.

For the year 2005 Penang managed to attract investments totalling RM 4.8 billion as compared with RM 2.0 billion recorded for the year 2004. This is an important achievement given that Penang today continues to compete for business opportunities within a complex global framework of cost competitiveness, operational efficiency and business decisions.

Core activity of firms:

Manufacturing remains as the core activity of most firms in Penang. Nevertheless, there is indicative evidence of higher value-added activities such as Research & Development (R&D), Design & Development (D&D) and shared services outsourcing (SSO) within a number of respondents in the survey. The sectors with the highest proportion of higher value-added activities are the electrical and electronics (E&E), and automation & precision tooling sectors.

Higher value-added activities in Penang:

The shortage of appropriately skilled workers is a significant inhibiting factor for firms which intend to pursue R&D and D&D activities more aggressively. Lack of funds and knowledge was another restraining factor in the take-up rate of higher value added activities. Interestingly, respondents who cited lack of funds and lack of knowledge were all SMEs. On the other hand, there was a remarkable increase in R&D type activities seen within the MNCs during the duration of the survey. MNCs possess two key advantages in this sense in that they naturally attract the available talent pool with their more generous compensation and remuneration packages and secondly, they benefit directly from technology transfer from the Headquarter level.

R&D and D&D activities remain low within many SMEs in Penang predominantly because most SMEs choose to remain as suppliers of OEM goods. Although this restricts them to an environment of intense competition and narrows profit margins, it is considered a safer and more viable business strategy rather than investing in high risk business ventures. Original design manufacturing is regarded as a high risk strategy which entails large sums of long term financial commitment. Thus, SMEs need to be enticed by the relevant parties to switch from being supply chain manufacturers to original design manufacturers. Most SMEs are reluctant to make this switch on their own because:

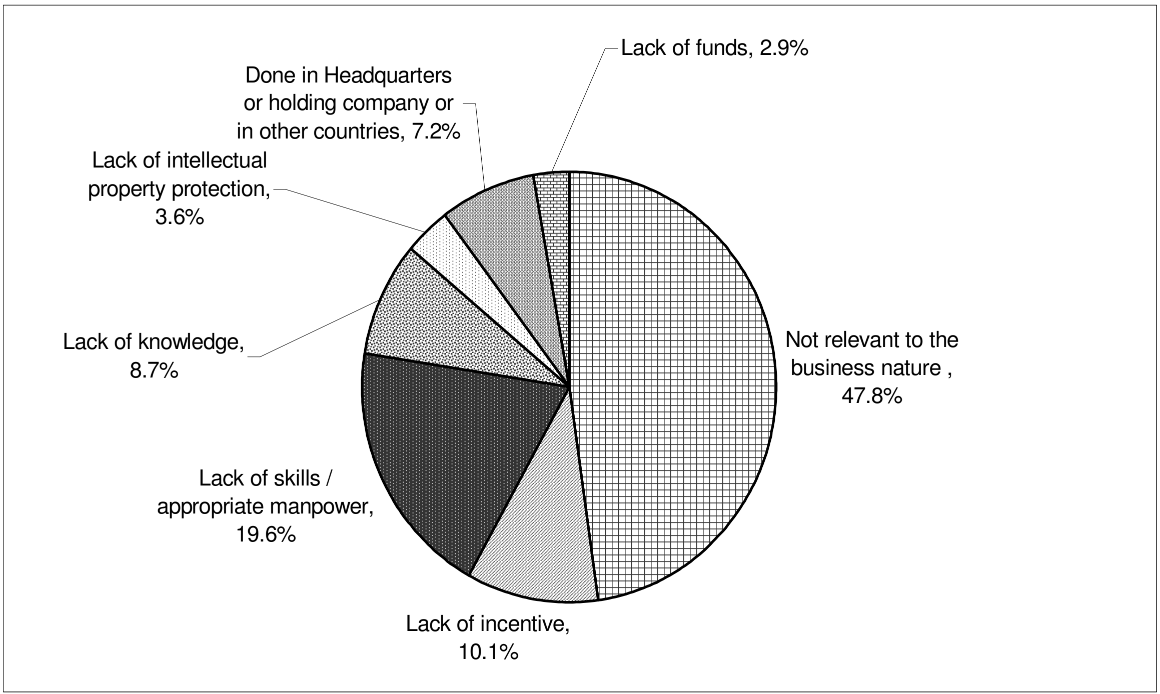
1. SMEs lack access to long term funds for investment purposes.

Currently many SMEs generate enough funds only for operational purposes. Investments into technology and R&D are considerably heavier and laden with risks. Moreover, these investments do not generate immediate cash flow and financial returns. In this context, SMEs are unwilling to venture into new fields without any form of handholding from the government or relevant authorities. The recent establishment of SME Bank, a development finance institution, in October 2005, should be able to help identify and assist deserving SMEs in this area.

2. ***Inability to attract skilled professionals.***

Financially, many SMEs cannot afford to hire or entice skilled professionals to join their business ventures. Generally, many SMEs have no proven track record of performance and are not able to showcase past significant projects to attract skilled professionals to join them. SMEs are usually able to attract fresh graduates and provide them with relevant training. Even then, many leave after having been offered more attractive jobs and salary packages by MNCs. This leaves the SMEs with a larger pool of operational and technical workers versus k-workers who are able to undertake more R&D and D&D work.

Chart 1: Reasons for Non-Expansion in R&D and D&D Activities



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In order to estimate the rate of penetration of higher value added activities within Penang-based businesses, this survey utilised two indicators;- the first being R&D expenditure incurred in Penang as a percentage of total group R&D expenditure and the second being R&D expenditure incurred in Penang as a percentage of total revenue.

The R&D expenditure incurred in Penang as a percentage of total group R&D expenditure highlights the degree to which R&D activities are carried out here in relation to the other states or countries in which the survey respondents have a presence. A total 15 percent of respondents carry out research and development activities in Penang. R&D expenditure incurred in Penang as a percentage of total revenue is also relatively low. With the exception of two MNCs which purely engage in R&D activites in Penang, all respondents incurred less than 30 percent expenditure for R&D activities as a percentage of total revenue. Majority of respondents (62.1 percent) incurred less than 4 percent of total revenue as R&D expenditure. These figures also highlight that unlike the case of many MNCs in Penang, local companies are slower to adapt to the R&D and D&D culture. Whilst some SMEs have embraced this culture and are actively pursuing related activities, their numbers and contribution remain small.

Multimedia Super Corridor (MSC) Status:

Penang was bestowed Cybercity status on 29 January 2005. Accordingly, this survey took into consideration the impact of the Cybercity status on respondent firms and the intentions to apply for MSC status. 8 percent of survey respondents indicated interest to apply for MSC status within the next two years; of which half of them were SMEs. Across sectors, companies within the E&E sector display the most inclination to apply for the MSC status. The 8 percent take up rate of companies who intend to apply for MSC status is expected to improve over the next few years as market awareness of the MSC is increased, and as companies seek to conform to the stringent limitations on the MSC qualifying status.

Production levels of firms:

56 percent of respondents indicated an increase in production volume for the period July 2004 to June 2005 as opposed to the previous year. The increase in production volume was most apparent in the E&E, Fabricated Metals and Chemicals Sectors. A further 58 percent expect an increase in production volume for the following year.

Employment trends:

The industrial sector of Penang employed approximately 210,907 people for the year 2005, reflecting an increase of 36,472 jobs from 2004. The Bayan Lepas FIZ employs the most people at 28.7 percent of total industrial workers within Penang.

Table I: Employment by Location, 2005

Location	Number of Companies	Total Employment*	% Contribution
Bayan Lepas FIZ	70	60,447	28.7
Prai Industrial Park	277	42,826	20.3
Bayan Lepas Industrial Park	133	27,755	13.2
Prai FIZ	31	20,664	9.8
Bukit Tengah	60	19,352	9.2
Seberang Jaya Industrial Park	31	6,607	3.1
Bayan Lepas Technoplex	11	6,000	2.8
Bkt Minyak	80	5,612	2.7
Mak Mandin	72	5,538	2.6
Juru	107	2,897	1.4
Sungai Pinang	17	2,691	1.3
Sungai Bakap	19	2,487	1.2
Nagasari	47	1,572	0.7
Diamond Valley Industrial Park	61	1,282	0.6
Georgetown	29	780	0.4
Butterworth	16	774	0.4
Bayan Lepas	18	683	0.3
Bukit Mertajam	14	428	0.2
Sagajaya Industrial Park	9	100	0.0
Others	69	2,412	1.1
Total	**1,171**	**210,907**	**100.0**

**based on 1,127 companies or 96.2% of total companies*

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The E&E, Chemical, Fabricated Metals and Automation & Precision Tooling sectors were the main sectors which recorded the largest increase in employment numbers in the 2004-2005 period. The E&E sector remains the biggest employment generator in the state. Based on this study, it was found that this sector contributed to 53.6 percent of employment in the Penang manufacturing industry.

Bumiputera workers account for 50 percent or more of the respondent workforce for the fields of Agro-based Production / Manufacturing, E&E, Biotech / Pharmaceutical, Food Processing, Transport Equipments, and Building Materials. Meanwhile, expatriates were found in all sectors except Furniture, Building Materials and Pulp and Paper. Again, the highest concentration of expatriates was found within the E&E sector. Foreign workers were also found to be an important component of the Penang workforce. The presence of these workers are especially prevalent (by ranking order) in the chemicals, electronics and textile and apparel sectors.

Within the respondent pool, there is great demand for both skilled and unskilled production workers as well as technical staff, engineers and knowledge-workers (k-workers). These categories account for approximately 68.7 percent of total new hire for the coming year. This survey also points to visible restructuring within the industry wherein the larger players (mainly MNCs) within the key sectors of electronics, automation and multimedia/ICT are demanding greater numbers of skilled and technical workers.

Table II: Employment by Sectors

Sectors	Total Companies	Total Employment*	% Contribution to Total
E&E	188	113,090	53.6
Fabricated Metals	244	16,375	7.8
Textile & Apparel	38	11,608	5.5
Plastics	105	10,734	5.1
Pulp & Paper (Including Printing & Packaging)	100	7,306	3.5
Biotech / Medical Equipment / Pharmaceutical	18	6,847	3.2
Agro-based Production / Manufacturing	42	7,008	3.3
Others	68	5,658	2.7
Chemical	74	9,076	4.3
Food Processing	53	3,001	1.4
Automation & Precision Tooling	95	5,859	2.8
Transport Equipments	16	2,769	1.3
Basic Metals	34	4,378	2.1
Furniture (Including Wood-based Industries)	28	2,251	1.1
Logistics	37	2,356	1.1
Gold & Jewellery	12	1,182	0.6
Non-Metallic Mineral	17	894	0.4
ICT	2	515	0.2
Total	**1171**	**210,907**	**100.0**

**based on 1,127 companies or 96.2% of total companies*

...there are no grounds for the complete elimination of production and line workers should more of the Penang based industries progress towards these higher-value added activities.

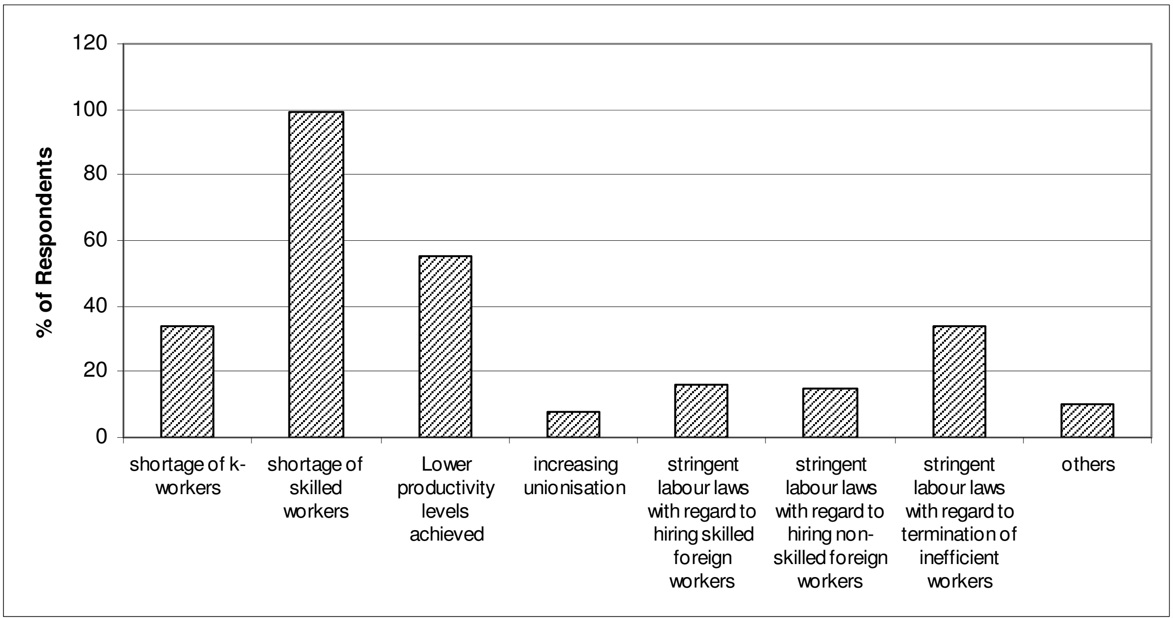
Owing to the nature of higher value-added activities being an extended arm of current manufacturing operations, there are no grounds for the complete elimination of production and line workers should more of the Penang based industries progress towards these higher-value added activities. It is thus surmised that the Penang industry job market is able to absorb the retrenched workers from the past year. Part-time and flexi-time working arrangements are uncommon in Penang and Malaysia as supported by the findings in this survey. Encouraging part-time and flexi-time employment is expected to increase the labour participation rate by drawing out fully qualified professionals, especially women, who have chosen to sacrifice their careers over family commitments.

The survey also indicates typical **starting pay** structure is as follows for:

- Engineers with a Bachelors Degree (BSc): between RM2,000 to RM2,500;
- Engineers with a Masters Degree (MSc): between RM 2,500 to RM 3,000;
- Engineers with Doctorates (PhD): > RM4,500;
- Technicians (polytech graduates or <2 years work experience): between RM1,000 – RM1,200;
- Skilled production workers: approximately RM 30 per day or greater;
- Unskilled production workers: approximately RM 15 per day or greater

Skilled worker shortage, lower labour productivity levels and the stringent labour laws in place pertaining to the termination of workers were indicated as the three key areas of labour concern for employers. Other labour concerns faced by employers are depicted in Chart 2 below.

Chart 2 : Main Labour Concerns



Some challenges

Several problems highlighted in this survey were the difficulties and barriers faced by SMIs in assessing the available incentives. In many cases, applications were rejected without proper explanation. SMIs are expected to benefit from increased transparency in application approval procedures.

Many SMIs perceive that incentives in Malaysia are less attractive as compared to those provided by other ASEAN countries. Unfortunately, we believe this perception is inaccurate because apart from Singapore, the incentives afforded by Malaysia outrank those provided by competitor countries such as Thailand and Vietnam. This inaccurate perception may be driven by the fact that these countries benefit from faster decision making and better execution processes.

Another recurring problem is the response rate of relevant authorities in responding to queries and processing applications. This often results in frustration and disappointment amongst many companies. Depending on the context in which applications are put forth, the authorities involved are largely government affiliated bodies involved in trade and investment facilitation. However, the recent emphasis by the Malaysian government in improving the delivery system has brought about significant change in this otherwise drawn-out process and is expected to further improve in future. Key recommendations proposed to overcome the issues highlighted above include identifying local industries and companies which have the capacity and ability to develop. It was further recommended that these identified companies be given adequate assistance by way of easier access to financing and by way of business strategy development.

Penang is also encouraged to capitalise on its MSC status to foster awareness and R&D culture amongst these local companies. It should seek to increase emphasis on marketing and awareness programmes regarding the MSC status, its eligibility criteria and the potential benefits.

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The investment climate in Penang

Altogether, Penang remains a favourable investment destination centre with the majority of respondents satisfied with level of investment related services and infrastructure in place. Employment figures in Penang are also trending towards the need for skilled workers. This is reflective of the structural change within some companies as they begin to shift the scope of company activities towards higher value-add activities.

In relation to assessing the overall attractiveness of Penang as an investment centre, major issues highlighted include public sector delivery, the difficulties faced by SMIs in accessing the available incentives and the lack of available land for further expansion.

The ability of the state to overcome these constraints will pave the way for more progress into higher value-added activities and prevent investment outflows. Currently India, China and Vietnam are the favoured locations for E&E and automation firms seeking international expansion because of the vast pool of labour available and enormous sales market potential. Nevertheless, companies which chose to completely relocate Penang-based operations to these countries are few and far between. This is because by comparison, these countries present many hidden costs to investors whilst Penang is an established business centre and has the necessary infrastructure to facilitate international and domestic trade. Apart from its skilled labour, these are Penang's core competencies.

Penang realises that it needs to sustain and further enhance these competencies in order to remain attractive. The Penang Industrial Survey 2005 reconfirms what many already know to be the problems and challenges faced by the industrial sector of the state. The current situation is a challenging one with many SMEs engaged in stiff competition, MNCs looking at neighbouring countries for bigger markets and cheaper labour and LLCs considering expansion outside of Penang.

Penang must therefore show determination and resolve in addressing the areas of persisting weaknesses, to identify new sources of growth, and to pursue areas in which technology can complement and improve the overall productivity of its labour force.

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Table III: Employment by Sectors in 2005 as compared to June 2004

Sectors	Number of Factories		Total Employment			
	2004	2005 (revised)	2004	2005*	Change (+/-)	% contribution, 2005
E&E	162	188	104,265	113,090	8,825	53.6
Fabricated Metals	147	244	12,550	16,375	3,825	7.8
Textile & Apparel	17	38	10,688	11,608	920	5.5
Plastics	78	105	9,169	10,734	1,565	5.1
Pulp & Paper (Including Printing & Packaging)	65	100	5,730	7,306	1,576	3.5
Biotech / Medical Equipment/ Pharmaceutical	5	18	4,721	6,847	2,126	3.2
Agro-based Production / Manufacturing	37	42	5,007	7,008	2,001	3.3
Others	23	68	4,691	5,658	967	2.7
Chemical	51	74	4,898	9,076	4,178	4.3
Food Processing	30	53	2,618	3,001	383	1.4
Automation & Precision Tooling	39	95	2,857	5,859	3,002	2.8
Transport Equipments	16	16	3,031	2,769	-262	1.3
Basic Metals	21	34	2,823	4,378	1,555	2.1
Furniture (Including Wood-based Industries)	8	28	429	2,251	1,822	1.1
Logistics	0	37	0	2,356	2,356	1.1
Gold & Jewellery	0	12	0	1,182	1,182	0.6
Non-Metallic Mineral	10	17	958	894	-64	0.4
ICT	0	2	0	515	515	0.2
Total	**709**	**1171**	**174,435**	**210,907**	**36,472**	**100.0**

**based on 1,127 companies or 96.2% of total companies*
Notes:
Automation & Precision Tooling comprises of Machinery and Scientific & Measurement Equipment.
Agro-based Production / Manufacturing comprises of Animal Feeds, Processing Agricultural Products and Rubber-based Industries

Penang Quarterly GRP Report

Table 1: Penang - Economic Indicators

	2003	2004	2005	2005(Q1)	2006 (Q1)
GRP (RM million)	18,788	20,032	21,128	5,237	5,533
GRP (percentage y-o-y)	4.2	6.6	5.5	5.9	5.7
Agriculture	3.4	4.5	2.7	3.8	6.4
Mining & Quarrying	-4.6	-7.4	-3.0	-5.6	0.7
Manufacturing	4.1	9.6	5.9	6.2	5.7
Construction	3.3	-11.1	-1.3	-8.5	0.7
Services	4.5	5.4	5.6	6.5	5.9
Total Capital Investment (RM million)	1,923	2,030	4,808	360.7	382.5
Domestic Investment (RM million)	467	1,014	717	208.2	67.7
Foreign Investment (RM million)	1,456	1,016	4,090	152.5	314.8
Average Hotel Occupancy Rate	49.8%	60.2%	60.2%	51.1%	62.9%*

Source: SERI, MIDA
** Preliminary Figures*

Table 2: Malaysia - Economic Indicators

	2001	2002	2003	2004	2005	2006 (Q1)
GDP (percentage y-o-y)	0.3	4.4	5.5	7.2	5.2	5.3
CPI (percentage y-o-y)	1.4	1.8	1.2	1.5	3.0	4.8
IPI (index)[b]	96.7	101.2	110.5	122.5	127.5	131.0

Source: Bank Negara Malaysia (BNM)
Note:
[a] CPI for 2001 – 2003 is based on 2000=100 while CPI for 2004 onwards is 2005=100. CPI for Q1 2006 is based on CPI in March 2006
[b] Beginning January 2006, the Industrial Production Index has been re-based to 2000=100 (previously: 1993=100).

For Quarter 1 2006:

- Penang's GDP expanded by 5.7 percent y-o-y.
- Penang's growth in the first quarter of the year was propelled by the growth in manufacturing and services sector whereby both sectors expanded by 5.7 percent y-o-y and 5.9 percent y-o-y respectively.
- The agriculture sector recorded an encouraging 6.4 percent increase from Quarter 1 of 2005 following an improvement in the fisheries sector after a low base from tsunami aftermath.
- Total approved manufacturing investments hit RM382 million in the first quarter of 2006, recording a 6.0 percent rise from the same period in 2005. The expansion in the investments was led by foreign investors whereby FDI made up 82 percent of the total investments.
- More than 80 percent of the total investments in Q106 were into the electrical and electronics (E&E). Other sectors include fabricated metal products, food manufacturing and machinery manufacturing.
- Investments from both US and Japan made up the majority (91 percent) of the total foreign direct investments, with investments from US alone making up 86 percent of the total FDI.
- In terms of trade, total trade for Penang has expanded by 15.4 percent from the same quarter last year. Both exports and imports rose by double digits to reach RM39.3 billion and RM30.7 billion respectively, albeit at a slower pace from the preceding fourth quarter of 2005.
- Similar to the agriculture sector, the tourism industry has also show signs of rebound after reeling from the effects of the Tsunami last year as preliminary figures show that the average hotel occupancy rate has increased from 51.1% in Q105 to 62.9% in Q106.

In a nutshell, Penang's economic growth is still relatively growing in tandem with the nation's economic growth. Growth in Quarter 2, 2006 may not be as rosy as the impact of the oil price increase and utilities cost are expected to set in.***§ Poh Heem Heem & Tan Yin Hooi***

How Inflation Responds to Policy?

Who knows what will happen next?

Meeting an economist for the first time, you might want to ask whether he or she is an academic or the professional kind. It is useful to make the distinction, because either will likely see the economy working in completely different ways, but we will not really know who has the correct view. The academic is fond of mulling over both traditional and newly conceived theories and will offer you a convincing explanation as to what and why things are happening the way they are. The academic, of course, is often completely wrong since the data he or she looks at are likely over many months, sometimes years. The professional economist, on the other hand, often sits behind multiple displays that can flash out the economy's every little hiccup within minutes, sometimes, seconds, as they occur whether locally or at some remote corners of the globe. After months or years of doing this, the professional economist develops an incredible intuitive sense and often accurately predicts what will happen next when a certain hiccup has taken place. As to the question why, gasp, the explanation offered is often either simplistic, that comes out of the textbook or outright wrong from the stand point of economic theory. Which among the two would you consider the hero and which the fool? It depends, actually, on what you wish to know. If you want an explanation of past economic episodes, the academic will do very well indeed. But if it is your wish to gaze at the future, your best bet is with the professional economist.

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While economics has claimed its niche in academia, equipped with grand theories and elegant mathematics and an academic tradition that goes back a couple of centuries, applying too rigidly how one understands economics will only lead to confusion. Corresponding economic events currently experienced, when viewed with theory in mind, often appear at odds with one another. The reason is, the world today is constantly evolving, rather than repeating episodes in the same way they had occurred in the past. For example, oil prices today way up there in the clouds would usually put upward pressures on wages, leading to reduced employment and then send the economy into a recession even when price rises. That is the story we know from previous oil shocks, but if we had predicted that the same thing will happen with last year's hike in oil prices we would have been wrong. While inflation has been rising in response to the high price of oil, its negative effects on the economy, so far, have not been as painfully felt as during previous oil shocks.

The uncertainty that clouds our ability to predict what will next happen to the economy keeps everyone guessing from consumers, to the business community and to policy makers. Only thing is the important issue is not really what will happen in the economy, because unlike the weather, which is beyond our control, economic performance is the result of the actions of consumers, business and policy. Predicting the economy is actually predicting what such actions will be. The unfortunate thing is there is little consensus and therefore actions become diverse and predictions become near impossible.

Enter the policy maker. One of the most important things that the central banks do is that they send out signals hoping to align actions by consumers and business so that everyone acts in accordance with one another. Usually, central banks are effective because realizing the influence that policy has on the market, few people will act against the signals that policy sends out. The problem is when the central bank misinterprets what is really going on and then sends out the wrong signals. This then leads to lots of confusion as to whether one should act according to what they see is really going on or to follow signals they believe to be wrong.

For this reason, central banks today tend to take a looser hold of the economy with minimum interventions to allow the market to run as freely as possible. The current fashion is instead for policy to concentrate on strengthening institutions such as promoting competition policy and corporate governance so that market information becomes more transparent and available. In turn, pricing and its signals become more efficient. Consumers and business make better decisions and take more appropriate actions and less policy interventions become necessary.

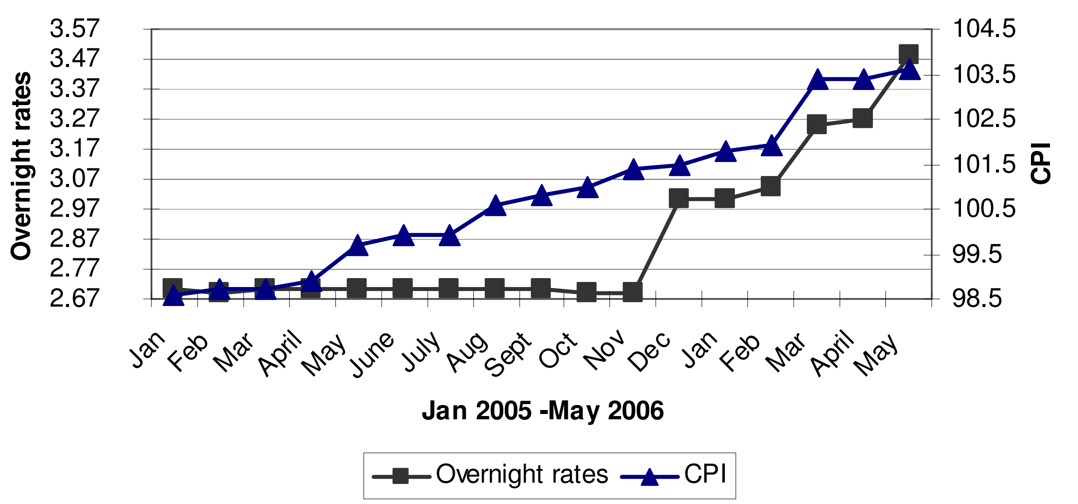
Inflation numbers

How real are the inflationary numbers we are currently reading? Should the central bank do more or less by way of policy? Financial news everywhere tells of rising interest rates, the latest being another 25 basis points (0.25%) upwards that puts the U.S. Federal-funds rate now standing at 5.25%.[1] That makes 17 upward revisions that began in early 2004. Back then, the Fed-rate was 1% compared to Malaysia's market overnight rate of 2.7%. In April 2004, Bank Negara introduced the overnight policy rate or OPR as its monetary policy instrument in preference of the 3 month intervention rate but maintained the OPR at 2.7%. Within a year, the Fed-funds had overtaken Malaysia's OPR such that by the time Bank Negara began revising upwards the OPR to 3% at the end of November 2005 and since then up to the present level of 3.5%. Malaysia's interest rates have trailed behind the Fed-rate by well above 100 basis points (currently 175 basis points). Elsewhere, rates are also rising. Taiwan's central bank raised its discount rate to 2.5% that had also been steadily nudged upwards from 1.5% at the beginning 0f 2004.

In Malaysia, interest rate is the main monetary policy tool disclosed by Bank Negara. However, in the interview by *The Edge*,[2] Governor Zeti's warns that interest rates alone will not be sufficient, to tackle inflation. Instead, more comprehensive policies will be needed so that structural adjustments and reforms can be brought about to keep monetary conditions and economic conditions aligned: the amount of money available kept just right for buying and selling goods and services. Failing to do so, there will be no choice but to depend on rising interest rates to keep prices stable. But we might end up strangling growth when this happens.

By plotting the policy effects of the OPR on overnight rates alongside the CPI numbers, as shown in Figure 1 we can see the drama unfolding between inflation and policy in Malaysia. Up until November 2005, OPR had remained unchanged at 2.7% from the time it was introduced about one and half years before. We can see overnight rates treading closely to the OPR. So far, this year, there had been two upward policy revisions to the OPR, on February 22 (to 3.25%) and again on April 26 (to 3.5%). Accordingly as Figure 1 shows, overnight market rates adjusted upwards in response to policy.

Figure 1: Overnight rates and Inflation



When Bank Negara raised the OPR to 3% in November 2005 the country's consumer price index (CPI) had risen past the 3% mark. The August 2005 rise in CPI was 3.7% which was a three year high, even though the rate moderated to 3.3% in October. By March 2006, the number had gone up to 4.8%, which was a seven year high, but fortunately, the rise in CPI had moderated to 4.6% in April and further down to 3.9% in May. It may because the rise in CPI has slowed down that in Bank Negara's monetary policy statement on May 22, the OPR was left unchanged at 3.5% for the time being.[3]

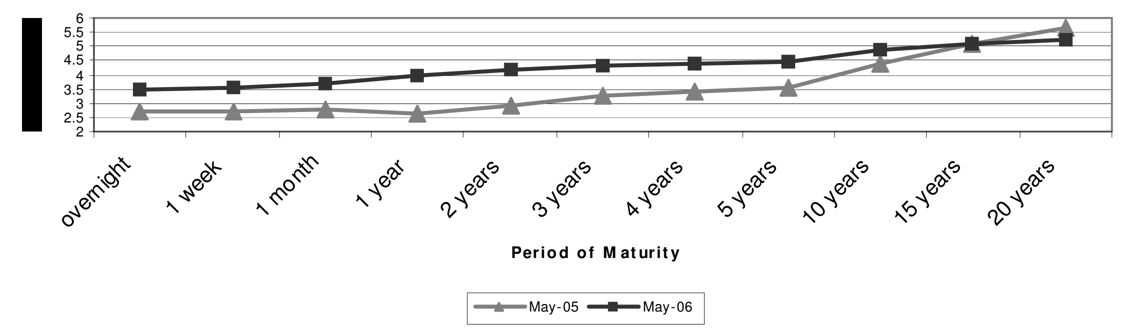
[1] The last time Fed-funds came up to this point was in March 2001.
[2] See June 19 2006 issue.
[3] See *Monetary and Financial Developments May 2006* dated 28 June 2006 at <www.bnm.gov.my>.

Interest rate numbers

Despite these movements in interest rates, fixed deposit rates offered by commercial banks in June were only between 3.32% and 3.45% for six and nine month maturities. Given that even deposit rates are not keeping up with the rising rates in the CPI, depositors are receiving only negative returns on their deposits. The relation between interest rates, inflation and returns to investments is generally understood on the basis of the age-old *Fisher Effect*[4] in which market interest rate is the sum of the real interest rate (the compensation expected by the lender for his money) and the perceived rate of inflation (to adjust for purchasing power loss). One can see that interest rates will also depend on over what time period lending and borrowing occurs: how long the lender has to forgo his money and what is the inflation rate perceived over this time period. All these relationship is shown on the yield curve which plots the interest rates against the period of lending.[5]

The change to the yield curve in Malaysia for Malaysian Government Securities is shown in Figure 2. The first thing to note is the difference between the loan that matures in 20 years and the loan maturing in only 2 years has fallen from 2.74% to 1.03%. In other words while both the May 2005 and May 2006 yield curves are upward sloping as they should be (giving higher compensations as lending is made over longer terms), the May 2006 yield curve has flattened considerably. What does this mean?

Figure 2: Yield Curve of Government Securities
May 2005 and May 2006



Bank Negara's monetary policy is directed only at overnight rates through the OPR. There is thus a marked difference in the overnight rates between May 2006 and a year ago following recent upward revisions of the OPR by Bank Negara. The issue is how will this change in overnight rates affect the behaviour between lenders and borrowers as the period of loans increases in response to what the overnight rate signals tell them? One can quickly examine whether overnight rates pushed up by policy has also led to correspondingly higher interest rates in the short, medium and long term. If people's perception (based on the *Fisher effect*) is that the rise in overnight rates is a policy response to persistent inflation, then they would want higher compensations as the length of their term of lending increases into the short, medium and long term. When this happens, the slope of the yield curve should not change very much. Instead what we would observe is the entire yield curve would migrate upwards to the level of the new rates but keeping much the same shape and slope.

On the other hand, if the public perception is that the economy today is merely the normal cyclical changes that could be expected, without affecting too much the long-term structural characteristics in the economy, then the long term rates towards the right of the yield curve will remain generally unchanged. When this happens, the rise of short term rates on the left without a corresponding rise in long term rates towards the right side will lead to a flattening of the yield curve. With this in mind, we can see on Figure 2 that the upward rising overnight rates between May 2005 and May 2006 has led to similar rises in both short and medium term rates (compensating for inflation from the *Fisher effect*). The yield curve has migrated upwards for this segment. However, both the long term rates for May 2005 and May 2006 have remained structurally unchanged. This suggests that the perception of borrowers and lenders about Malaysia's economy in the long term have remained unaltered during this past year. In fact, the 15 year term rates are the same while the 20 term rates are have fallen somewhat in May 2006 compared to the year before.

[4] Irving Fisher (1896), "Appreciation and Interest." *Journal of the American Economics Association.*
[5] See "Interest Rate Pressures:Hype or cause for Concern" Penang Economic Monthly, July 2005.

Different interpretations have been attempted about the yield curve becoming flattened, chief of which is whether continued flattening will lead to the yield curve inverting, i.e. short term rates overshooting the longer term rates. It is safe to presume that this is what Dr Zeti meant in her interview with The Edge when she said that "interest rates may need to be raised too high, then indeed we will have a slowdown." Inverted yield curves are associated with an economy crisis: runaway inflation that could only be tamed by tight monetary policies, lack of cash flow liquidity leading to competition for short term funds, or an impending economic slowdown due to high cost of funds that strangles business borrowing.

Conclusions

From official statements in the U.S., Taiwan and in Malaysia, the current intervention rates are considered to be lower than the neutral rate. By this is meant that if the aim of monetary policy is stabilization, then prescribing the neutral rate will prevent the economy from being inflationary nor deflationary, i.e., neutral. It is apparent that rising policy rates in Malaysia and in Taiwan are attempts to keep the spread between domestic rates and the Fed-rate as small as it can be but allowing a fairly loose-money regime to continue to help boost the economy. While Bank Negara does not disclose what the neutral rate is, rightfully saying that it changes quickly over time, the nominal rate of growth (growth in the gross domestic product without adjusting for inflation) in the economy as a rough measure of the neutral rate. For example, if returns to business investment are say 7%, and if this rate is also the cost of financing, then lenders get their returns while business chugs along smoothly meeting its labour, equipment and material costs. Doing this business adds 7% growth to the economy, hence the nominal rate of growth. Financing costs that go beyond the rate of return (interest rates set too high) becomes too expensive for doing business and will stifle the economy. On the other hand, when financing costs is too low (interest rates set too low), there will be too much business being done, overheating the economy in the process. Furthermore, higher returns relative to financing costs also tend to boost incomes and fuel inflation.

Globalisation has been used to explain many things that have changed our lives – from the language we speak, the kinds of jobs we do to and the ideology based on which we govern ourselves. In some respects the relation between inflation and policy prescriptions are also affected by globalization. First, cross-border production allows for labour to be substituted from one location to another keeping wage rates down. Second, cross-border competition also keep prices low and competitive and third, production spread across the globe results in an increase of supply thus moderate demand pressures. All three effects are able to bind inflation and keep growth momentum going albeit modestly. Meanwhile globalization also makes it difficult for the domestic economy to be shielded from what goes on in the rest of the world in order for policies to work. Instead, more and more the different economies have to align themselves structurally more closely with one another. When economies go in sync, goods, services and money flow smoothly from one border to the next. The stabilizing properties of the market takes effect, consumers and business alike decide and act, growth is achieved. ***§***
Dr. Chan Huan Chiang

International Headlines

Thailand's Economic Growth Slows
06 June 2006, The Asian Wall Street Journal

Looming concerns over the political crisis in Thailand has taken its toll on the country's economy as the country's GDP only managed to expand by 0.7% in Quarter 1, 2006 from the preceding fourth quarter in 2005. The growth was the lowest since the GDP last contracted in Q105 due to the December 2004 tsunami. The National Economic and Social Development Board, which is the state economic-planning agency, has also cut its previous full-year GDP growth forecast from a range of 4.5% - 5.5% to 4.2% - 4.9%, a move prompted by slow investment growth and lower confidence due to oil prices, inflation and higher interest rates. However, in terms of y-o-y growth, the Thai economy had expanded by 6% due to strong exports and it was also boosted by favourable comparisons to the first quarter of last year when it had been badly hit by the tsunami.

China Export Boom Fuels Record May Trade Surplus
13 June 2006, The Asian Wall Street Journal

China appear unfazed by the a prospective slowdown in the global economy as continue to exhibit a strong run in its trading activities as the nation's trade surplus surged to $13 billion for the month of May, a 44% growth from the same period last year. Exports rose further by 25.1% y-o-y to $73.11 billion after recording a 23.9% y-o-y increase in April, while imports only rose by 21.7%. China's trade surplus so far in 2006 stands at $46.79 billion, which is a whopping 56% y-o-y growth. China's strong trade performance is very much supported by its booming electronics sector and heavy manufacturing sector as exports of mobile phones, television sets, integrated circuits, automotive parts and ships were all up by more than 40% for the year to April.

Japan Boosts GDP Figure as Firms' Spending Rises
13 June 2006, The Asian Wall Street Journal

Japan's economy have seen a healthy expansion as the East Asian economic giant grew at an annualised rate of 3.1% in the first quarter of the year, driven by a larger-than-estimated level of investment by companies and continued strong domestic demand. The economy also increased by 0.8% in real terms from the preceding fourth quarter of 2005. The GDP growth exceeded the Government's earlier estimate of a 1.9% annualised growth and this suggests that the economy may be stronger that the recent market slump might indicate. The main reason for the stronger GDP growth was due to a revised estimate for capital expenditure whereby it had risen by 12.9% y-o-y as companies boosted their investment in anticipation of strong demand. According to a survey by a business daily, capital spending has increased in non-manufacturing industries such as retail, transportation and real estate, signalling that domestic demand continues to be an engine of growth in the nation and relying less on exports.

Profits of China's Iron, Steel Industry Down 37.4% in Jan - May
22 June 2006, Xinhua News

China's iron and steel industry saw a tumbling in its profits as it dropped by 37.4% y-o-y in the first five months of 2006 while the oil processing and coking industry reported a 21.9 billion yuan (USD2.7 billion) loss in the same period. On the contrary, the oil and natural gas exploration sector, electric power sector and the coal sector had reported positive gains as profits in these sectors grew by 52.3%, 43.0% and 9.3% y-o-y while the non-ferrous metal smelting and processing sector had recorded a whopping 106.9% profit growth y-o-y. Other sectors that recorded an upward trend in profits also include transportation device manufacturing (up 75.7%), electronics and telecommunication industry (up 32.5%) and chemical industry (up 5.2 percent).

Fed Raises Rates, Suggests It Might Cease Tightening
30 June 2006, The Asian Wall Street Journal

The U.S. Federal Reserves have raised official rates by a quarter point to 5.25%. The move brings the Fed-funds rate to its highest level since March 2001. However, the Fed stepped back from its pre-commitment to further rate increases, suggesting that it may pause the tightening campaign if inflation and economic growth readings subside. An increase from 6.0% to 6.25% in the discount rate had also been approved.

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