IMPACT OF THE TSUNAMI ON PENANG'S ECONOMY

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In This Issue

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The tsunami on 26 December 2004 that devastated the lives and properties of so many around the Indian Ocean rim has rightly focused international concern on immediate humanitarian aid that need to be provided to the victims. But in the long haul, economic and physical reconstruction would remain challenges for years to come. Malaysians, particularly residents of Penang, were shocked and the victims traumatized by this totally unexpected event as the country has always been regarded as outside the earthquake zone. Nonetheless, we have been very fortunate to have been shielded by Sumatera which took the brunt of the tsunami, and thus the impact we have suffered pale in comparison.

From the economic point of view, the two sectors that have been most affected are fisheries and tourism. Drawing from official statistics and personal interviews, this article attempts to assess the impact of the tsunami on these two sectors and the measures that need to be taken to revive them.

IMPACT ON THE FISHERIES SECTOR

In Penang, the communities worst affected by the tsunami were fishing villages, squatter settlements, and shops close to the coastal road that rings the island, especially those on the western side of the Island. The tsunami disaster has affected both the capture fisheries, especially inshore fishing, and the aquaculture sub-sectors and the impact is of economic significance.

Table 1 shows an initial total of 2,733 fisherfolk reporting losses up to RM8.81 million. They comprise both licensed and unlicensed operators as well as their crew. However, these figures have not been verified by the authorities.

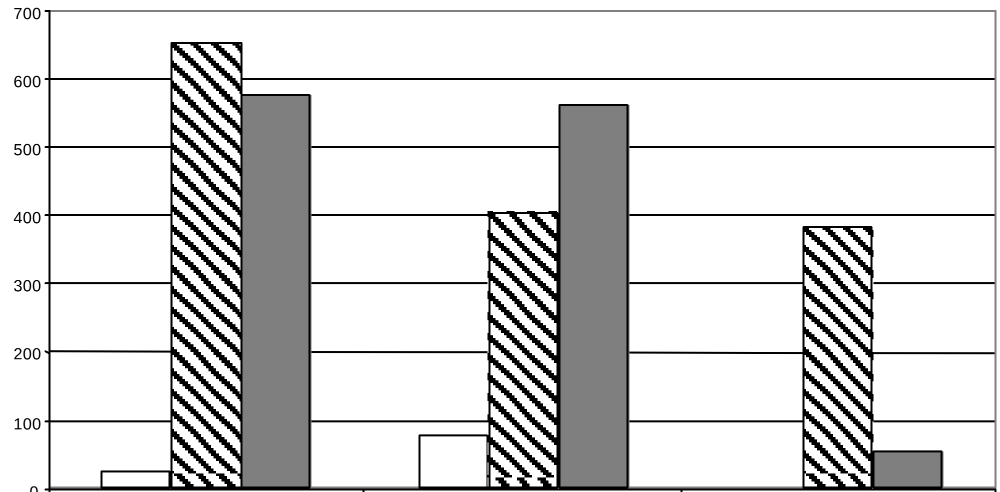
Table 1: Number and type of Fisherfolk Involved and Estimated Losses

Status	Number of Fisherfolk Involved	Estimated Losses (RM)
Licensed	934	8,881,516
Unlicensed	610	
Crew	1189	
Total	**2733**	

Source: Fisheries Development Authority Board (LKIM) Penang as at 13 Jan 2005

Chart 1 shows the type and numbers of equipment and crew by Fishermen's Associations (PNKs or Persatuan Nelayan Kawasan) claiming damage resulting from the tsunami tragedy. LKIM Penang has verified the claims of a total of 2,486 fishermen out of the 2,733 who reported losses. PNK Pulau Pinang Selatan reported the highest number of victims followed by PNK Seberang Perai.

Chart 1 : Numbers of Damaged Equipment & Fisherfolk Invovled By Fishermen's Associations (PNK)



	Pulau Pinang Selatan	Seberang Perai	Teluk Bahang
Inboard engines	24	78	0
Outboard Engines	653	406	383
Crew	575	560	54

Source: Fisheries Development Authority Board (LKIM) Penang as at 13 Jan 2005

Financial Aid

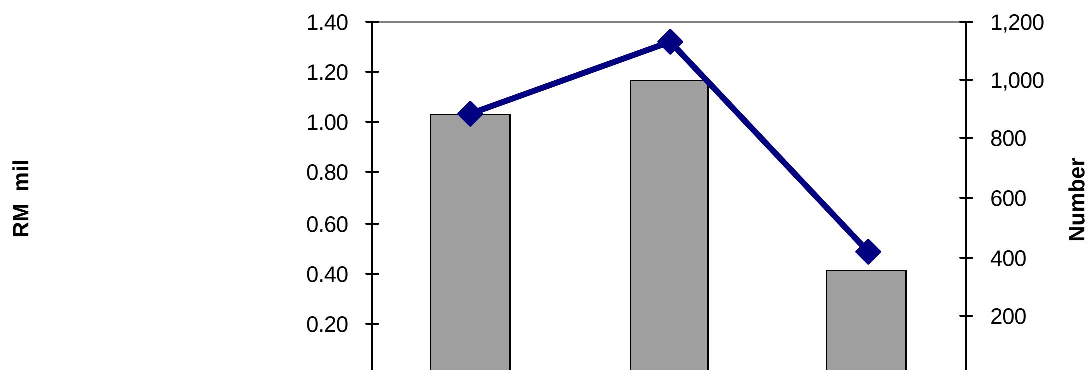
Financial aid is disbursed to individual fisherfolk according to the 3 PNKs affected by the tsunami. They are:

1. PNK Teluk Bahang covering Teluk Bahang, Pantai Acheh, Batu Ferringhi, Tanjung Bungah, Tanjung Tokong, Gurney Drive and Weld Quay;

2. PNK Pulau Pinang Selatan covering Permatang Damar Laut, Permatang Tepi Laut, Sungai Batu, Teluk Kumbar, Gertak Sanggul, Pulau Betong, Sg Burong/ Jalan Baru, Kuala Sg Pinang and Jelutong,

3. PNK Seberang Perai encompassing Kuala Muda, Penanga/Sg Tembus, Bakau Tua, Pulau Mertajam, Telok Air Tawar, Butterworth/Bagan Ajam, Kuala Juru/ Sg Semilang, Sg Belanak, Bukit Tambun, Sg Udang, Pulau Aman and Sg Chenaam.

Chart 2: Financial Aid Paid Out & No. of Recipients By Fishermen's Areas



	Seberang Perai	Pulau Pinang Selatan	Teluk Bahang
Financial Aid Paid Out (RM mil)	1.03	1.17	0.41
No. of Recipients	885	1,130	418

Source: Fisheries Development Authority Board (LKIM) Penang as at 26 Jan 2005

The Government has paid out financial aid to those affected as follows:

Small vessels	- RM1,000
Outboard/Inboard Engines	- RM 3,000
Crew	- RM1,000

So far a total of RM2.614 million has been disbursed to affected fishermen. PNK Pulau Pinang Selatan received the highest sum of financial aid, amounting to RM1.168 million. The amount paid out does not tally with the estimated damage of RM8.81 million due to what are regarded as unsubstantiated claims by some fishermen and also unreported claims or non-claim by others. The aid is also not deemed full compensation for damages suffered by the claimants.

...a total of RM2.614 million has been disbursed to affected fishermen.

The Agriculture and Agro-based Industries Minister Tan Sri Muhyiddin Yassin announced that inshore fishermen are entitled to a maximum interest free loan of RM25,000 to repair and replace their damaged boats and fishing equipment. However, the Ministry has made a proposal to increase the maximum loan to RM50,000. This loan will be provided by the Fishermen's Fund through LKIM Penang.

Other aid directed to the fishermen involved came from various NGOs, volunteer organizations and corporate bodies, such as 170 new fishing nets bought with money donated by employees of Digi Telecommunications Sdn Bhd. Supermarket cash vouchers worth RM200 each were also distributed to affected families at Kampung Pantai Acheh. Compensation from zakat payments (RM200) of the Islamic Council and Welfare Department (RM500) were also paid out to those affected in Seberang Perai.

Five workshops were also set up under the Balik Pulau district Tsunami Relief Fund to help repair damaged boat engines and equipment. The workshops are located at Sungai Batu, Sungai Burung, Pulau Betong, Kuala Sungai Pinang and Teluk Bahang. The Fisheries Department also sent out its mobile unit for technical assistance and repairs to all affected villages to aid in repair work.

Table 2: No. of Jetties damaged and Value By PNK

	PNK	No. Of Jetties Damaged	Value (RM)
1	**Pulau Pinang Selatan**	2	150,000
2	**Seberang Perai**	37	1,260,000
3	**Teluk Bahang**	2	150,000
	Total	**41**	**1,560,000**

Source: Fisheries Development Authority Board (LKIM) Penang

The number of jetties reported damaged by the tidal waves was 41, amounting to a value of RM 1.56 million. Jetties at PNK Seberang Perai suffered the most severe damage compared to those on the Island. This is possibly due to the presence of mangroves on the Island, which acted as buffers against the onslaught of the tsunami.

The Penang Fisheries Department estimated that overall, 80% of the affected fishermen were back at sea and only 20% with severely damaged boats and equipment were unable to do so. However, an interview with one of the head fisherman of Balik Pulau indicated that only 7 of the 42 fishermen (17%) in his area returned to sea because their boats were severely damaged. He said that they were awaiting spare parts for their damaged engines from Japan. They are also waiting to replace their damaged 3 layer nets from suppliers in Songkhla, Thailand. The suppliers were unable to meet demand as the Thai fishermen are also affected. They are not sure when the spare parts or the nets will arrive. There were also 9 boats totally wrecked in his area.

The damage to the local aquaculture industry ... is estimated at RM13.8 million.

Impact on Aquaculture

The damage to the local aquaculture industry is very significant and is estimated at RM13.8 million. About 79 fish breeders involved in various types of aquaculture such as fish cage culture, cockle culture and oyster culture are affected. These are located in the Pulau Betong, Teluk Bahang, Sg Udang and Bukit Tambun areas. Worst hit are the Sg Udang and Telok Bahang areas followed by those at Pulau Betong. Fish bred include ikan merah, siakap, kerapu, kerapu harimau and jenahak. The table below shows the number of entrepreneurs involved and the estimated losses by area.

Number of Entrepreneurs						
Location	**Marine Cage Culture**	**Brackishwater Culture**	**Freshwater Culture**	**Cockles/ Oysters**	**Total**	**Losses (RM millions)**
Pulau Betong	3	4	1	1	9	3.06
Telok Bahang	10	-	-	1	11	4.48
Sg Udang	54	-	-	-	54	5.85
Bukit Tambun	0	-	-	5	5	0.41
Total	**67**	**4**	**1**	**7**	**79**	**13.80**

Table 3: Estimated Losses to the Aquaculture Industry By Area

Source: Department of Fisheries Penang as at 2 Jan 2005

Those affected reported severe and irreparable damage to their raft platforms, equipment and cages that have been swept away by the strong waves. Others suffered minimal physical damage to their infrastructure but their fish stocks died as a result of changes in water conditions that depleted the oxygen content. These rearers have been cultivating high value fish, such as groupers, longtan (a higher priced variety of grouper), siakap etc., for the coming festive season. They were targeting their products for the coming Lunar New Year and some have been reported to have even made arrangements to supply to overseas markets.

Penang's only table oyster culture at Pulau Betong was also wiped out. A recent interview with the owner, revealed that he suffered losses amounting to RM300,000 and the fresh oysters were also targeted for the Chinese New year period. His raft of 220 holes was completely damaged. He said that he has taken 10 years to build the market for his product and has attained high quality table oysters consumed raw at seafood restaurants and outlets in Penang. Local Penang cultivated oysters are said to be tastier and of a higher quality when compared to those imported from Australia and New Zealand. It would take another 6 months for him to produce another batch and he has to start small all over again. He hopes that in the meantime, he will not lose his market share to foreign imports from other countries. His neighbour, who is involved in fish cage culture, suffered losses up to RM1 million.

The aquaculture industry is estimated to be contributing an estimated RM67.7 million in revenue to the State annually. Aquaculturists are members of the local Fishermen's Association, however they are not considered as fishermen but entrepreneurs and, therefore, not qualified for compensation and aid extended to inshore fishermen.

Fish rearers have appealed for financial aid from the Penang State Government to quickly revive this industry. They are also hoping for interest free or soft loans so that they can rebuild their rafts and buy new equipment. They fear that their existing markets in Australia, Taiwan, China, Hong Kong and Singapore may be taken over by their competitors from neighbouring countries such as Thailand and Indonesia.

The Sg Udang Cage Fish Breeders Association reported that since 20 January 2005 fishes reared in 10,000 cages about 3km offshore started dying due to the after-effects of the tsunami. Initial reports indicated that the cause of death may be the huge algae bloom that depletes the dissolved oxygen and suffocates the fish. Losses are estimated at RM30 million with 3,000 tons of fish killed.

Presently, the National Disaster Relief Committee has agreed to offer aid of RM200 for each damaged cage with the maximum of 12 cages (RM2,400) for each breeder. The Chief Minister of Penang has announced that they will also receive RM500 from the Federal Government and RM500 from the State Government. (The Star, 27 Jan 2005)

Impact on Fish Wholesalers and Seafood Restaurants

A quick survey of some seafood restaurants and outlets indicated that were also greatly affected by the recent disaster. Rumours of polluted and waters and marine life feeding on rotting corpses of tsunami victims have proliferated and these have affected consumer sentiments. Some popular seafood restaurants and outlets (at Tanjong Tokong and Batu Maung) have reported up to 70% drop in customers. They hope that the customers will return during the Chinese New Year period. Prices of seafood in restaurants, however, have not been reduced although the retail prices of fish in the markets have dropped.

Personal interviews with consumers revealed that they feel it is best to avoid seafood for the moment, as they still feel squeamish about eating "contaminated" seafood. A respondent said that every time she sees clips of the Tsunami on TV, she gets reminded of the incident and is put off consuming seafood once again. The fear of water borne diseases infecting marine life has also added to the reluctance to purchase and consume seafood.

The prevailing sentiment is so strong that it has affected outstation markets as far as Kuala Lumpur. A fish wholesaler from Batu Maung received a phone call from KL during our personal interview with him, requesting a reduction in orders for fish from Penang due to poor demand. Whilst shunning seafood from the West Coast, consumers show a preference for catches from the East Coast such as Terengganu and Kelantan. All these have greatly affected the sales from wholesalers as well as fish sellers in wet markets.

Our interviews with representatives of the fish wholesalers revealed that prices of some smaller fishes such as ikan kembong have halved after the tsunami. Prices for more expensive fish such as pomfrets, groupers and prawns have dropped even in the run up to the Chinese New year period.

Wholesalers estimated a 50% drop in demand...

Wholesalers purchase their fish from trawlers and larger fishing vessels. There has been no significant reduction in catches after the tsunami, however, the demand for seafood has dropped sharply. Wholesalers estimated a 50% drop in demand and the excess fish is being frozen, salted and lower quality fish sold off as fish meal. Better quality fish and prawns are being frozen in anticipation of the coming Chinese New Year season especially during reunion dinners where prawns, pomfrets and other better quality fish are popularly consumed.

This drastic drop in the demand for seafood prompted the Penang Fish Wholesaler Market Association to host a free seafood luncheon at the fish wholesale market at Cecil Street on 12 Jan 2005 to boost public confidence in consuming seafood after the tsunami tragedy. About 500 kg of fish and prawns were cooked to provide food for 1,500 people including State Executive Councilors and assemblymen. A similar luncheon was held at Batu Maung on 18 January 2005.

Nonetheless, the demand for seafood is not expected to rise significantly till after Chinese New Year and also until people begin to forget about the tsunami and lose their squeamish feelings about fish.

However, the demand for freshwater fish has risen. Freshwater fish breeders reported that orders have begun pouring in for the Chinese New Year festive season. The types of freshwater fish in demand are red tilapia, catfish, and Chinese carps. The price of freshwater fish such as tilapia has jumped from RM8 to RM9 per kilo and catfish from RM3 to RM4-5 per kilo. (The Star, 23 January 2005)

Impact on Ecosystems

The impact of the recent tsunami on the local ecosystems of Malaysia has yet to be ascertained. The Fisheries Research Institute is presently carrying out a study (begun since 5 Jan 2005) on the impact of the tsunami on marine ecosystems.

There may be likely damage to the structure and function of the coastal ecosystems (coral reefs, mangroves, sea grasses, estuarine mudflats) such as[1]:

- Damage to the physical structure by the force of the wave itself, physical removal of flora and fauna and increased sediment load which will have killed sediment sensitive corals and sea grasses by smothering. The extent of this damage is not known and will likely vary considerably depending on the local topography and hydrology.
- Chemical changes including saltwater intrusion, eutrophication (enrichment) of the water resulting from increased runoff, raw sewage and decomposition of flora and fauna including unrecovered bodies. There will be the slower decomposition of timber from mangroves, fishing boats and buildings.

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[1] *Indian Ocean Tsunami Impact on Fisheries and Aquaculture: 4/01/2005 (DOCUMENT)*
Author FAO, January 2005

- Build up of non-biodegradable waste such as plastics which contributed to marine debris.
- Escape of exotic (introduced) species used for aquaculture.

Although the actual damage to Malaysia's coastal region have yet to be ascertained, we are indeed fortunate not to have suffered the scale of destruction experienced by Indonesia. According to a UNEP report on "Tsunami's Big Environmental Cost", dated January 23 2005, a preliminary damage and loss assessment of the disaster carried out by the Government of Indonesia and the international donor community on the economic cost to the environment has estimated the damage at approximately USD675 million.

Among critical coastal habitats in Aceh and North Sumatra, 25,000 hectares (ha) of mangroves, 30% of 97,250 ha of previously existing coral reefs, and 20% of 600 ha of seagrass beds have been damaged, according to the report. The economic loss is valued at USD118.2 million, USD332.4 million, and USD2.3 million respectively.

As a result of infiltration of saline water, sediment and sludge, it is estimated that 7.5 kilometres of river mouth is in need of rehabilitation, and hundreds of wells in the rural areas need to be cleaned up. Along the coastal strip, it is estimated that 48,925 ha of forest area was affected, with the assumption that 30% of this area has been lost. In addition, approximately 300 kilometres of coastal land area have been degraded or lost.

Three major industrial sites are confirmed to be damaged: Pertamina (oil depot in Krueng/Banda Aceh), Pertamina (oil depot in Meulaboh), and Semen Andalas Indonesia (cement factory in Banda Aceh). Possible contamination, including negative effects to human health and the environment, caused by damage to these and other industrial installations are a matter of serious concern.

In addition to this, the damage to urban infrastructure such as solid waste facilities, water and sanitation are also huge. If not properly managed, wastes may pose a risk to human health as well as the environment.

The recent tsunami tragedy also brought about renewed interest and awareness of the importance of mangroves in Malaysia. The declining mangroves along the coastal areas of Malaysia which has been largely removed due to housing, industrial development and prawn culture; has once again attracted the attention of both NGOs and the authorities.

An oyster breeder informed us that at Pulau Betong, for example, many fishermen survived because of mangroves. The presence of mangroves at Pulau Betong acted as barriers in reducing the strength of the tidal waves and thus reduced the destruction at Pulau Betong compared to other places like Kuala Muda. Mangroves also reduce coastal erosion and are breeding grounds for many types of marine life. NGOs like the Penang Inshore Fishermen Welfare Association (PIFWA) are offering to plant mangrove trees along vulnerable coastlines in the state. Many NGOS have also called for the conservation of mangroves along Malaysia's coastlines.

AT A GLANCE

Number of Fisherfolk Affected:	2,486 (verified figure)
Estimated Losses:	RM 8.88 million
Compensation paid out:	RM2.614 million
Total no. of jetties damaged:	41 valued at RM1.56 million
Estimated Losses to Aquaculture:	RM30 million (reported), RM 13.80 millions (verified)
No. of Entrepreneurs affected:	79 (as at 2. Jan 2005)
Damage to marine ecosystems:	Unknown

The Hard Road Ahead

In conclusion, it can be said that the aquaculture entrepreneurs suffered the heaviest losses as a result of the tsunami and it would take time for them to obtain financial aid and repair their damaged floating cages and equipment. It would also take another good 6 months to a year to replenish their fish stocks as well as cultivate them to marketable size. There is also the fear of losing out their existing markets to competitors from other countries. It is hoped that the authorities would move swiftly to address the plight of the aquaculturists to help them recover soonest possible as this sub-sector contributes significantly to the earnings of the fisheries sector.

The livelihood of inshore fishermen and families has been affected by this tragedy. It would take some time for those who have severely damaged boats and equipment to recover from their financial losses. This is especially true for fishermen who are sole providers for their families. Equally affected are crews who serve on larger vessels. They would have to depend on compensations and aid for the time being to tide over their loss of earnings in the next few months.

It would also be prudent for the State Government to look into the replanting and conservation of mangroves along Penang's coastal areas to ensure that the breeding grounds of fish and other marine life will continue as well as to ponder upon the importance of mangroves as buffers for future protection from coastal erosion and tsunamis.

IMPACT ON THE TOURISM INDUSTRY

The tsunami tragedy has put the world travel industry to a test, and Penang is no exception although the impact may be less severe than that suffered by Phuket, Thailand, where the loss in 2005 has been estimated at US$10 billion. In terms of actual damage, Penang has got off quite lightly: no foreign tourists casualties were reported and the State's tourism infrastructure remains intact, with only minimal damage such as the intrusion of seawater and mud into the swimming pool of several beachfront hotels. Along the tsunami-hit tourist belt of Teluk Bahang, Batu Ferringhi, Tanjung Tokong and Gurney Drive, the debris and the roads were cleared and cleaned up quickly. There was no disruption to utilities supply, telecommunication, roads, railways, waterways, airports and flights services in the State after the tragedy.

Table 4 depicts the average occupancy rate of hotels in Penang, from 26 Dec 2004 to 19 January 2005. On the day the tsunami hit, both the beach and city hotels were still enjoying high occupancy rates of 63.3% and 70.2% respectively. The average occupancy rate for hotels dropped markedly a day after the catastrophe. For the first week subsequent to that, beach hotels suffered a drop of more than 25% in occupancy rate, while in the city hotels the occupancy rate plunged by 36%.

The average occupancy rate for hotels dropped markedly a day after the catastrophe.

Date	Average Occupancy Rate* (%)	
	Beach Hotels	City Hotels
26 Dec 04	63.3	70.2
27 Dec 04	50.8	59.5
28 Dec 04	43.3	64.5
29 Dec 04	47.4	60.6
30 Dec 04	44.2	51.2
31 Dec 04	42.5	51.1
1 Jan 05	42.6	44.2
2 Jan 05	37.1	34.2
3 Jan 05	32.7	37.6
4 Jan 05	30.8	41.2
5 Jan 05	29.7	45.8
6 Jan 05	30.6	47.5
7 Jan 05	28.0	46.9
8 Jan 05	34.9	39.8
9 Jan 05	26.1	44.0
10 Jan 05	29.5	54.3
11 Jan 05	34.7	60.3
12 Jan 05	35.1	66.7
13 Jan 05	35.1	65.7
14 Jan 05	43.2	59.0
15 Jan 05	44.9	53.5
16 Jan 05	37.6	51.0
17 Jan 05	38.8	64.9
18 Jan 05	35.9	71.5
19 Jan 05	40.7	64.1

Table 4: Average Occupancy Rate of Hotels in Penang, 26 Dec 2004 -19 Jan 2005

Source: Penang Tourism Action Council / Malaysian Association of Hotels, Penang Chapter.

*Note: * The average occupancy rate was based on 13 beach hotels & 12 city hotels.*

During the second week after the tsunami, both the beach and city hotels were still badly affected.

The beach hotels hit the lowest occupancy rate of 26% on 9 Jan 2005, while the occupancy rate of city hotels was fluctuating below 50%. In the third and fourth weeks the situation improved for city hotels, with average occupancy rate reaching a peak of 72% on 18 Jan 2005. It is believed that most of the business travelers had returned to the city hotels by then. However, the beach hotels continued to suffer low occupancy rates in the third and fourth week after the tragedy. Most of the holiday makers who frequent beach hotels remained cautious and stayed away from this region. The loss of business by the beach hotels is clearly seen when comparisons are made with the findings of the Monthly Hotel Survey 2004 (conducted by DCT Consultancy Services Sdn Bhd), which registered average occupancy rates for January 2004 at about 59% and 52% respectively for beach and city hotels.

Hence, although they did not suffer much in terms of physical damage, the beach and city hotels incurred quite substantial losses (estimated at nearly RM6.7 million) due to room cancellations after the tsunami incident. As at 13 January 2005, the beach hotels reported cancellations of more than 19,000 rooms-nights, resulting in estimated losses of RM5.76 million (Table 5). City hotels, though faring better, also underwent losses amounting to RM0.911 million (as at 20 January 2005). There are positive signs of a turn around for the city hotels. Seven out of nine responding city hotels indicated that no additional room cancellations were received after 17 Jan.

Type of Hotel	Total Rooms Nights Cancelled	Estimated Losses (RM)
City Hotels[1]	5,770	911,304
Beach Hotels[2]	19,187	5,756,785
TOTAL	**24,957**	**6,668,089**

Table 5: No. of Hotel Rooms Nights Cancellation In Penang After Tsunami Incident
Source: Penang Tourism Action Council / Malaysian Association of Hotels, Penang Chapter.
Note: 1. The data is based on 9 city hotels that responded to the survey of the Penang Tourism Action Council as at 19 January 2005
2. The data is based on 12 beach hotels that responded to the survey of the Penang Tourism Action Council as at 13 January 2005

Arrivals at the Penang International Airport, particularly international passengers, decreased after the tsunami (Chart 3). Before the tsunami, the airport received on average more than 4,000 passengers a day in December. After the calamity, however, the arrivals, especially among international visitors, plunged – reaching a trough of only 984 international arrivals on 8 Jan 2005. Nevertheless, signs of recovery, though mild, were observed in the third week after the tsunami.

...quite a number of inbound trip cancellations to Penang...

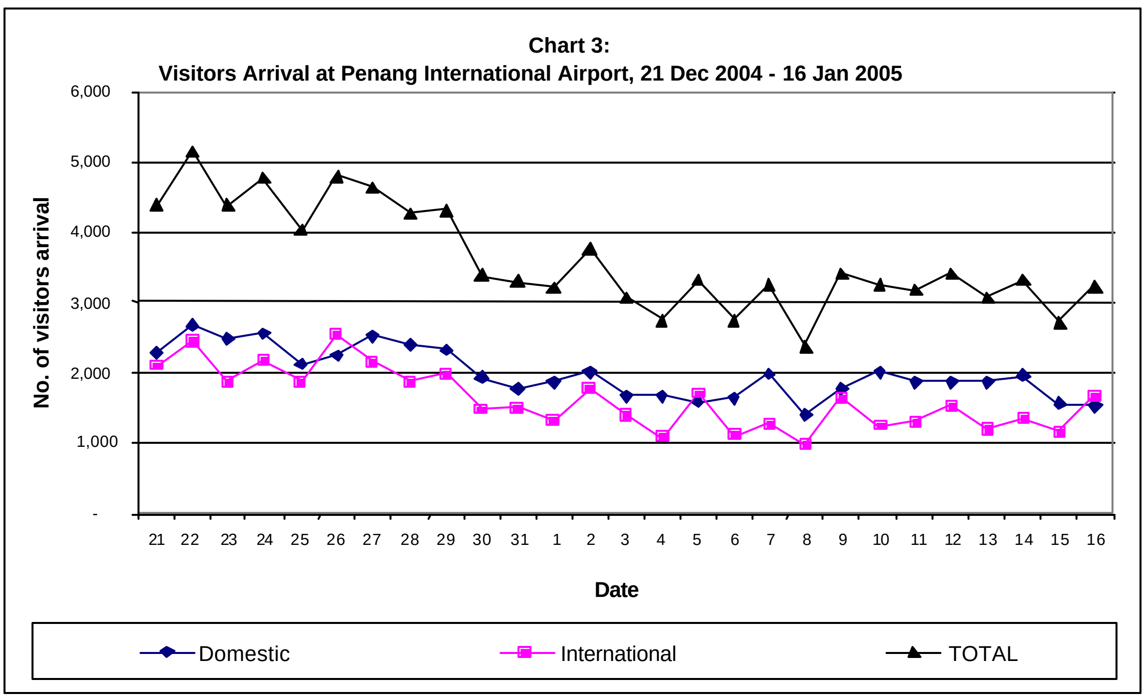

Chart 3:
Visitors Arrival at Penang International Airport, 21 Dec 2004 - 16 Jan 2005

Source: Malaysia Airport Berhad

There were quite a number of inbound trip cancellations to Penang immediately after the disaster, from 27 December 2004 to 5 January 2005 (Table 6). The situation improved from the third week on, with less cancellations being reported. According to the Penang Chapter of MATTA, the losses due to the cancellations were estimated at nearly RM3 million.

Date	No. of Tour Agencies reported	FIT[1]	Pax	GROUP	Pax
27 Dec 04 – 5 Jan 05	9	203	445	16	750
6 Jan – 14 Jan 05	3	15	70	18	464

Table 6: Cancellation of Inbound Trips to Penang Due to Tsunami
Source: Malaysian Association of Tour and Travel Agents, Penang Chapter (MATTA)
[1] FIT: For Individual Tour

Despite the drop in international passengers to Penang, most of the airlines maintained the same number of direct flights to Penang, except for KoreanAir which reduced the frequency of its direct flights from three to two per week after the tsunami.

For tour guides, the lack of international tourists to Penang was strongly felt after tsunami. Most of them suffered a drop of 10%-15% in income. Some of the tour guides had to move temporarily to Kuala Lumpur or other States to tide over the bad times.

Almost a month after the disaster, most of the businesses along the tourist belt of Batu Ferringhi were still facing a slow down. The businesses at Batu Ferringhi, from guest house operators, seafood restaurants, hawkers, souvenir stalls, floats traders, to watch traders, reported that their takings had dropped by between 50% - 90%.

Although none of the industry players were able to give a definite answer as to when the situation will return to normal, most of them shared the opinion that the impact is likely to be short-term. The following reasons were cited to support their viewpoint:

1. The prompt action of the State Government in terms of crisis management was well received by the industry. Both public and private sectors have worked closely to deal with the challenges. The damages caused by the tidal waves had been repaired and the mud & debris left by the seawater were removed from roads, beaches and tourist attractions within a few days. Action was taken to mitigate the misperception caused by the inaccurate reports of some foreign media. Selected international media and travel writers are invited to visit Penang to assess the actual situation themselves.

2. Even though Penang was not spared and it was unfortunate that Penangites have to face this disaster, it suffered the least as compared to its neighbours. Penang is relatively fortunate in the sense that, unlike our neighbouring countries, the beach resorts and tourist infrastructure remain very much intact and no foreign tourists in Penang were killed.

3. As the tsunami is an uncommon incident and the devastation is mainly confined to the coastal areas, the impact to the Penang's tourism industry is believed to be short-lived. Compared to the terrorism threat, SARS or any diseases outbreak, the impact of the tsunami to the travel / tourism industry is expected to be relatively less severe.

4. Some of the neighbouring tourist destinations were completely wiped out or seriously damaged by the tidal waves. A number of tourists have switched their holidays to another destination of similar characteristics. Penang may be able to attract some of these tourists.

5. The Baywatch warning system provided by the beach hotels & the effective networking with their counterparts in Langkawi have helped save the lives of many who might otherwise have perished from the tsunami. The responsibility & efficiency shown by the hotels to ensure the tourists' safety are the strong selling points for Penang.

The Challenges

The physical damage of the tourism infrastructure in Penang was minimal. The main challenge is how to correct the misperception of international tourists about Penang that resulted from inaccurate information portrayed by some foreign media. A lot of international tourists still do not realize that Penang has not been devastated, unlike some other beach destinations. The State authorities need to rectify this misperception quickly and effectively to ensure the immediate recovery of the tourism industry.

The risk of disease outbreak in the disaster areas is another fear that may deter international travelers from visiting this region in the immediate future. Steps and actions need to be taken by both the authority as well as the people to ensure the hygiene and cleanliness of the tsunami-hit areas. Regular inspections by health department officers need to be conducted and full cooperation from the people is essential. It is also crucial for the local councils to upgrade the quality and cleanliness of the existing public facilities and basic infrastructure, particularly at the tourist spots.

In addition, following the tsunami tragedy, concerns about the danger of consuming seafood has caused the business of seafood restaurants to plunge drastically, not only in the disaster areas but elsewhere in the State. Measures to restore the confidence level of consuming seafood are very much needed.

Travel advisories by the national governments need to be issued and withdrawn in a timely, careful and responsible manner, in order not to cause a double blow to the affected countries. The State authorities will have to cautiously monitor these travel advisories to avoid any adverse effect to the tourism industry of the State.

How soon Penang's tourism industry can recuperate from the tsunami would also depend on the extent and effectiveness of co-ordination and co-operation between the affected countries. Close regional joint efforts and strategies are needed for the industry to deal with the tourism crisis collectively. The regional tourism planners should work together closely to clear the doubts and apprehensions of long-haul travelers to this region.

...Penang's tourism industry is expected to be able to weather through...

The move to ensure the safety and security of tourists is of utmost urgency. Regional discussions are underway for the establishment of an early warning system. Locally, the baywatch early warning system needs to be extended to popular public beaches to alert the picnickers of any imminent danger from the sea. Furthermore, a better mechanism of co-ordination and communication between the State authority and government departments to alert the public of any natural disaster is urgently needed.

Last but not least, the protection and preservation of environment should not be neglected. The tsunami has made us realize that mangroves and coral reefs are vital natural barriers that help prevent or soften the impact of the tidal waves. More emphasis on environment protection and conservation by the State will assist the development of eco-tourism in the long run.

Although the tsunami has caused a catastrophe and hit tourism hard, Penang's tourism industry is expected to be able to weather through, with the close co-operation between the public and private sectors. Accurate information about Penang as a safe, stable and attractive destination should be effectively disseminated through the international travel media in order to restore the travel confidence to this region. ***§ Khor Hung Teik & Lim Wei Seong***

The Ringgit Peg Issue – Again

The falling dollar, to which the ringgit has an unwavering 3.8:1 peg, and a popular scenario of an expected further decline of 20% have once again spun speculations and rhetoric of a rethink by the government on the current exchange rate policy for Malaysia. But the unique way in which the peg and the role of the dollar figure in the country's exchange rate policy, cannot be interpreted using the conventional textbook interpretations that we might be familiar with.

Overvalued or undervalued?

The rhetoric that comes out of the media concerning an overvalued or undervalued ringgit vis-à-vis the dollar over the past couple of years is a bewildering concept. There are perhaps four ways in which we might attempt to measure this in order to decide one way or the other. First, an econometrician would examine the long-term trend-movement of the ringgit vis-à-vis a basket of currencies. What would be observed are times when, following cyclical effects, the ringgit would overshoot and other times undershoot the other currencies and hence provide an indication of cyclical overvalued and undervalued conditions of the ringgit about the long-term trend line. In the case of the ringgit, there is no longer a trend line since September 1998 when the ringgit was removed from trading on the forex market. Extrapolation from pre-1998 trend will not work because a kink would have occurred in the series as the ringgit was traded around 2.4 to the dollar before the 1997 crisis. Thus judging overvalued or undervalued ringgit with an econometric device will not be possible.

....the country's exchange rate policy, cannot be interpreted using the conventional textbook interpretations....

The second approach, popular among market analysts, makes use of relative inflation rates. Different rates of inflation between two economies alter the purchasing power parity (PPP) of the two countries. Based on text-book theory, this leads to exchange rate movements of the currencies of the two countries until the purchasing power between them equalizes. This is a sound approach to judge an overvalued or undervalued ringgit, particularly so because *the Economist* magazine has, for years, published the PPP of the *MacDonald's Big Mac* across the currencies of the world. In the case of Malaysia, the value of the ringgit should be RM1.74 to the dollar when weighted against the relative price of the *Big Mac* in Malaysia compared to its cost in the U.S. This makes the ringgit grossly undervalued by 54 percent. The only flaw here is that the exchange rates at which currencies have been trading over the years bear little resemblance to PPP figures.

The third approach is the market chartist's view. Instead of anticipating PPP changes that would in theory put pressures on exchange rate movements, the chartist would look at past trading trends across different currencies and attempt to mark off support levels and resistance levels previously observed in the market. It is obviously no longer possible to do this with the ringgit as the currency has not been traded for six years.

The fourth approach will not generally indicate overvalued or undervalued currency but is an indication of currency strength. Most currencies are minted by an amount that could be backed by the country's foreign reserve holdings. For an economy that adopts a currency board regime, such as Hong Kong, changes to the size of the foreign reserve will have an immediate effect on the amount of currency issued and in turn the currency's parity vis-à-vis another currency it is pegged to. In a managed pegged system, the foreign reserves are used to intervene in the forex market to keep exchange rate within narrow bounds. In contrast, in a pure floating exchange rate system, not really found empirically, no foreign reserves will be needed as no intervention takes place. In the case of Malaysia, on the other hand, there is no connection between movements in the amount of foreign reserves and the amount of currency on issue or its exchange rate. Our central bank, Bank Negara, pursues a monetary policy in which one is unconnected with the other.

Technically, the question of the backing of foreign reserves to the sovereign issue of currency is called convertibility, i.e., because currency is reserved backed, there will be sufficient financial resources to guarantee a convertibility of local currency into an international currency. In the case of the ringgit, there are ample foreign reserves (more than RM200 b. worth) to ensure convertibility thus making the ringgit strong (but not necessarily overvalued). In this sense, suppose Malaysia's foreign reserve had been dwindling consistently instead, there would come a time when the ringgit becomes weak relative to its reserve backing. This might force a devaluation to be instituted under a peso problem scenario. Does this reasoning imply then that as reserves accumulate, as is the case in Malaysia, the ringgit becomes too strong making a revaluation a necessity? In a currency board situation, the link is immediate and direct. But because the ringgit peg is not a currency board system, the answer is no. The converse is not necessarily true, because in a falling foreign reserve situation credibility is lost making the currency untenable. On the other hand no currency can ever become too strong. There may be lots of credibility but this situation is certainly not untenable.

Claims of an overvalued or undervalued ringgit are thus not at all compelling. If there are only four ways to judge whether the ringgit is overvalued or undervalued and none of them can really tell one way or the other, why are there still so many claims publicised in the media on the value of the ringgit?

Terms of trade effects due to exchange rate levels

The textbook reasoning over the terms of trade is this. A country pays for imports in a foreign currency and receives payment for its exports in its own currency based on price quotations. This is why a weak domestic currency will make exports cheap and price competitive. However, when it comes to imports, a weak currency means having to give more in exchange for foreign currency to fund imports.

Hence, while the current spate of weak dollars will leave Malaysia's terms of trade with the U.S. unchanged due to the strict peg, Malaysians are feeling that the country is unnecessarily paying too many ringgit for Australian and Singapore dollars or euro and pounds sterling for its imports. Such a sentiment by Malaysians is flawed. Ever since the ringgit peg was instituted in 1998, the ringgit has ceased to become a means of exchange as described by the textbook. Instead, Malaysia has both bought and sold its imports and exports using the American dollar. In this respect, while Malaysia's economic fundamentals may be much stronger than the U.S. judged either by a PPP-type inflation situation or by the fact that its foreign reserves have crept up relative to the amount of ringgit on issue (foreign reserve to currency ratio), such fundamentals will not alter Malaysia's terms of trade with the U.S. nor the rest of the world. Such a circumstance brings an advantage to Malaysia that makes its exports unnecessarily cheaper (and thus competitive) but a disadvantage as well in terms of unnecessarily paying more for imports. Unfortunately as a Malaysian, whether one is enjoying the advantage or paying for the disadvantage, there is nothing that can be done so long as Malaysia does business with the rest of the world by using dollars. Nothing short of re-floating the ringgit and going back to the textbook fashion in terms of trade will nullify the advantage as well as disadvantage of a trading with respect to a weakening dollar.

Policy option

Changing the .. currency from its peg.. brings loss of confidence on the ability of the nation…in managing its economy.

There are three policy options, which are liberally discussed in many forums as well as by the media for many months. These are: re-peg, float or do nothing. Re-pegging the ringgit is a popularly expressed choice. Only thing is trained economists feel a chill down their spines whenever this is mentioned. Changing the parity of a currency from its peg amounts to a *peso problem* (see article "*Should The Ringgit Peg Be Reviewed*?" in SERI's Economic Brief January 2004), that brings loss of confidence on the ability of the nation issuing the currency in managing its economy. We have mentioned above that a new ringgit peg will not alter the terms of trade between Malaysia and its trading partners since the country conducts its trade in dollars and is thus caught in the same declining currency trend currently affecting the dollar. Given that the ringgit is not traded on the forex, a stronger ringgit peg against the dollar simply means that Bank Negara will offer more dollars for ringgit, i.e., becomes more generous to those seeking foreign exchange or conversely paying out fewer ringgit for dollars to foreign investors. Should this happen, consumption and investment patterns may likely shift. Malaysians may substitute local products and opting for imports as the latter becomes more affordable. Foreign investors will have to recalculate their rate of returns on the new dollar to ringgit ratio.

Above all, the chief cause behind the loss of confidence is that a re-peg is done by political decision and not through the market where the effects will not be within the control of a small group of decision makers. When Malaysia instituted the its 3.8:1 peg against the dollar in 1998, the global economic community frowned. Nevertheless, Malaysia held its breath, as the peg was a key feature of the nation's economic recovery plan. But doing a peg once was once too many times. Doing it again, who is to say there will not be a third or even fourth time. Malaysia was once told that the pegging the ringgit would not be helpful to Malaysia. The county's economic recovery has shown otherwise. Going back to another peg means conceding that the peg did not work. A re-peg of the ringgit can never be a policy option. Nor is there such thing as pegging against a basket of currencies if is too traumatic to depend on the U.S. dollar alone. Different currencies in the basket will move in different directions making it impossible to simultaneously fix the ringgit against all on a fixed peg.

The float is a possibility. Many economists feel that Malaysia missed the opportunity to re-float the ringgit. The ringgit was weak vis-à-vis the dollar at 3.8:1 at the beginning of the peg. It had slid from its 2.4:1 mark prior to the 1997 crisis when the market brought the parity down to its lowest point around 5:1. When the dollar was weakening, there would have been a point in time when the ringgit would have recovered to a market sentiment level near 3.8:1 at which time it should have been floated. If the market sentiment has it that the ringgit should trade at a level much stronger than at 3.8:1, floating the ringgit now will be fairly disruptive as the exchange rate has to snap to its newly floated level. However, many economists feel that to wait longer would be even more disruptive since the U.S. dollar is expected to fall by a further 20%-30%, the effect of which will mean a market sentiment for the ringgit that is even stronger to the dollar should the float be instituted at such a time.

The third option is to leave the peg alone at its present 3.8:1 level. Despite the agony that this might bring, a pegged currency has the advantage of stability. While most economies float their currencies most economies too intervene in their currency's exchange rate to achieve stability. It is here that many are confused about pegging against a basket of currencies. What they meant is managing a float using movements among a basket of currencies as a reference point. In fact this was Bank Negara's foreign exchange intervention policy for the ringgit prior to the 1997 crisis.

It is such interventions that make currencies targets of forex speculators and it was observable interventionists policies that led to the 1997 financial crisis. Both Thailand and Korea intervened against raids on their currencies causing them to loose their entire foreign reserves. Malaysia too attempted to rescue the ringgit but soon opted to allow the ringgit to float freely instead. The ringgit fell but Malaysia's reserve was fully intact. Former prime minister Mahathir referred to forex speculators as "highwaymen of the global economy" astonished by the fact that financial flows in the world are at a volume that is a multitude of times more than the goods and services flows that currency transactions are meant to represent. Small nation currency issues no matter how well they are supported in terms of foreign reserve to currency ratios by the central banks that mint them are miniscule compared against the strength of international financial institutions trading in forex. Only by taking the ringgit off the market will there be sufficient insulation. In fact the situation has become even more acute. The Bank Of International Settlements reported in September that daily turnover of forex trading (spot transactions and swaps) is about $1.9 trillion, which is 18% higher than in 1998. But trading of currency derivatives is in the area of $1.2 trillion or 77% more than three years ago and seven times more than in 1995.

…floating and then managing the float too tightly to keep stability has its problems…

Thus floating and then managing the float too tightly to keep stability has its problems. On the other hand, with the ringgit out of the market, at least, there is no need to have to keep pace with likely speculators. Meanwhile, with foreign reserves in excess of RM200 billion (RM226 b. on Nov. 8 2004), there will be ample funds to sustain imports and to support domestic money supply growth in conjunction with economic growth in the country. Meanwhile, current account is well on the surplus side, which means that Malaysia's foreign reserves are not in any danger of contracting.

What is really the problem?

The real problem does not lie in Malaysia even though the country suffers from its effects. The problem is America's twin deficits (budget as well as current account). The budget deficit is a critical component of the overall problem because in an economy like America, due to its level of development, public expenditure amounts to as much as half of the GDP or more. Thus cutting down on public expenditure will significantly cut down on spending across the entire economy

The U.S. current account deficit simply means Americans are spending and investing more than they have money of their own to do so. This deficit has to be offset by an equal amount of capital inflow so that balance of payments can be, by definition, zero. For years, economies around the world including huge ones like Japan and small ones like Malaysia have been contributors of these capital inflows into America. In return, America issues treasury bills and bonds which form the bulk of foreign reserves of the economies around the world. As a result, the U.S. has become the biggest debtor country in the world – about U.S.$11 trillion worth (equivalent to more than 110 times Malaysia's GDP or about a third of the world's GDP of $36 trillion in 2003).

It is obvious that the situation is not sustainable because at some point someone is going to realise that the U.S. might not be able to cover its huge debt. Furthermore unlike in the past when there is really no alternative to an international currency like the greenback, today the euro is increasingly seen as a worthy alternative. If economies around the world begin switching out of U.S. treasuries, the needed capital inflows into the U.S. will slow or even stop. This will mean that the U.S. will no longer be able to cover its current account deficit, which will force a devaluation of the dollar and writing off instantaneously trillions of dollars off its international debt.

The prudent policy for America, is to cut back on spending and investments to reverse its twin deficits so that confidence can be restored to the dollar. Unfortunately, this will also bring bad news to the world as much of the world sell their exports to the U.S. (a quarter of Malaysia's manufactured exports goes to the U.S.). Any cut back will mean that export performance across the globe will decline and in a world as un-robust as today's, the danger of a world recession lurks if such a scenario comes to past.

The U.S. became the one international currency through which all other currencies could be converted following the 1945 Bretton Woods Agreement. By the early 70s, the dollar was no longer convertible into gold (which used to be a commitment at $35 per ounce of gold) essentially making the dollar a derivative instrument (its *floated* value purely on the basis of market sentiment over quickly changing supply and demand conditions). Despite this, the dollar continued to play the role of the anchor currency upon which most economies build most of their foreign reserves. Unfortunately, the monetary discipline needed to enable the dollar to perform this role has been lacking on the part of the U.S. What is worse, better disciplining is not within sight in the near future, although the world's financial architecture is desperately in need of some tweaking. This is the real problem that mere floating or pegging unilaterally instituted by one nation will not easily solve. **§**
Dr. Chan Huan Chiang

FORUM

This section aims to provide a platform for the exchange of views on policies and issues that will have a major impact on the Penang or Malaysian economy. Readers are encouraged to respond to the articles published and put forward their views. To start off this forum, Prof. Dr Suresh Narayanan of the Universiti Sains Malaysia will be presenting a series of articles on the Goods and Services Tax (GST) which is scheduled to be introduced in 2007. As the GST will affect each and everyone of us and because a time period has been provided for the consideration and formulation of the policy, we encourage you to put forward your views so that they can be taken cognizance of by the policy makers.

UNDERSTANDING THE GOODS AND SERVICES TAX (GST): Some Basic Concepts

by Prof. Dr. Suresh Narayanan

SERI

Introduction

Perhaps the most significant measure announced by the Prime Minister (and Finance Minister) Datuk Seri Abdullah Ahmad Badawi in the course of his Budget 2005 presentation, on September 10 2004, was the introduction of the goods and services tax (GST) in 2007. Despite the far- reaching effects that this tax is likely to have on consumers and businesses, relatively little public discussion has followed the announcement. The GST will be based on the value-added concept, and is in reality, a value-added tax or VAT. In view of the fact that the government is encouraging industries to shift to higher value added activities, a levy that appears to tax value added may come across as being inappropriate. Thus, the government has wisely chosen to clothe the VAT in a guise called GST. We are not the first ones to do so, however, since Australia, New Zealand, Canada and Singapore (among others) have labeled their VAT as a goods and services tax or GST. Jamaica, on the other hand, calls its VAT a general consumption tax or GCT. Nonetheless, in this and subsequent articles, the GST would be referred to by its generic— VAT.

The VAT or variations of it has been adopted widely across the globe and is now in place even in neighbouring Indonesia, the Philippines, Thailand and Singapore. Although a well-implemented VAT has generally demonstrated a significant revenue-generating capacity, a clear understanding of how it functions is a prerequisite for its success. An ill planned, widely misunderstood and hastily implemented VAT has had disastrous consequences on the people and the governments that tried to pull it off.

In that sense, the government did the right thing by announcing ahead its intention of introducing the VAT and allowing ample lead time prior to the actual implementation of the tax. In Grenada, for example, the VAT was kept under wraps until it was announced in parliament in 1986. It caught consumers, businessmen and tax administrators by surprise and was the major reason for the confusion that followed. Wide publicity and education with respect to the VAT must precede its introduction and we have much to gain from the positive experiences of South Korea, Taiwan and Indonesia in this respect.

In the series of articles to follow, we shall try to explain the basic mechanics and operation of the VAT so that more meaningful public discussions of the tax can ensue.

What is the VAT?

Production of a good or service, in general, goes through several stages before the final product or service reaches the consumer. At each stage of production, value is added through further processing or other improvements on the product or service. To illustrate, if the production process is divided into three basic stages of manufacturing, wholesaling and retailing, we can see that value is added at each stage through further processing, packing or other improvements before it reaches the consumer via the retailer. The value added tax (VAT) is therefore a levy designed to tax the value that is added to an output or service at each stage of the production/distribution process.

How is the Value Added Computed?

What constitutes the value added is open to different interpretations, depending on the base that is utilized. The most widely used base is consumption and this gives rise to the consumption based VAT. Under this variant, value added (V) is defined as the difference between the value of output produced (O) and the value of inputs (I) used to generate the output, at each stage of production:

V= O-I.

The VAT is usually computed by the so-called indirect, subtraction method because it obviates the need to actually compute the value added and achieves the same outcome by simply taxing the output and the inputs used in generating the value added at a given stage of production.

For example taxing value added directly requires computing the value added before applying the relevant tax rate (t) or:

VAT= t (O-I)

The indirect subtraction method, on the other hand, arrives at the same result without requiring the computation of value added, thus:

VAT= t (O)- t (I)

The advantage of this approach is that the value of output sales and input purchases are easily obtained.

It must be emphasized that only taxes on inputs purchased from outside the firms are deductible. Thus, taxes on raw materials, components and parts purchased from outside qualify for deduction. Labour services supplied internally by the employees of a firm, for example, are not subject to tax and therefore do not qualify. On the other hand, labour services supplied by contractors or purchased from outside the firm are subject to tax and therefore the tax paid on these services are deductible.

The indirect subtraction method is often called the credit method because credit is allowed for taxes paid on input purchases. It is also known as the invoice method because tax credit on inputs is available only on the production of invoices confirming that the tax has been paid.

Under this variant of the VAT, all taxes incurred in the purchase of both intermediate and capital goods may be set against the tax incurred on sales. Furthermore, firms at each stage of the production process are permitted to deduct from their sales, in a given period, all purchases of both intermediate and capital goods in the corresponding period. In the case of capital goods this is equivalent to allowing a full and immediate expensing; thus no further adjustments or allowances required. Since firms deduct all capital and intermediate inputs from sales, the taxable base is reduced to consumption goods only. Conceptually, therefore, the consumption based VAT has the same aggregate base as a single stage sales tax on final consumption. From a business perspective, the big advantage of this type of VAT is that it encourages the adoption of capital-intensive modes of production, favours capital formation and places minimum restraints on working capital.

How is Value Added Taxed Under the Credit or Invoice Approach?

We will look at an example of how the VAT is computed and collected under the credit or invoice approach. For the purposes of illustration, let us assume that a given good goes through only three stages of production: the manufacturer, wholesaler and retailer. Let us assume further that the manufacturer produces the good without purchasing any inputs, and sells his entire output to the wholesaler, who, in turn sells all of his output to the retailer. Finally, the retailer sells the final product to the consumer. The assumption that the manufacturer purchases no inputs to produce his output may be unrealistic but it simplifies our illustration without altering the fundamental insights that are gained from the illustration. The hypothetical transactions are shown in Table 1 and all sales and purchase values are *exclusive* of the VAT.

Table 1. The Credit Approach to a Consumption based VAT

	Manufacturer	**Wholesaler**	**Retailer**
1. Sales	RM200	RM600	RM900
2. VAT on sales (10%)	20	60	90
3. Input purchases	0	200	600
4. VAT on inputs (10%)	0	20	60
5. Value added (1-3)	200	400	300
6. Credit for input VAT (4)	0	20	60
7. Net VAT liability	RM 20	40	30

Note: All sales and purchases are exclusive of the tax

The manufacturer, who by assumption purchases no inputs, sells an output of RM200 to the wholesaler. The wholesaler pays the value of RM200 and the 10 percent tax of RM20 due on it. He then receives an invoice from the manufacturer that not only shows the value of the purchase but also that the tax of RM20 on the purchase has been paid. It is incumbent on the manufacturer to transmit this tax collected from the wholesaler to the tax authority.

The wholesaler, in turn, produces an output worth RM600 that is sold to the retailer. The retailer pays for the purchase and the tax of RM60 that is due on it. The wholesaler now becomes responsible for transferring this RM60 to the tax authority. However, before he does so, he is allowed to deduct from his gross tax liability the tax credit of RM20 on the strength of the invoice obtained from the manufacturer. He thus reduces his net tax liability to just RM40, which is then sent to the tax authority.

The retailer who purchases the output of the wholesaler also pays the tax due on it. He therefore receives an invoice from the latter to the effect that the tax of RM60 due on that purchase has been paid. The retailer subsequently sells an output worth RM900 to the consumer and collects RM90 in taxes. Using the invoice from the wholesaler as evidence that he has already paid RM60 in taxes (on his input purchases), he subtracts that amount from his gross tax liability of RM90 and submits the remaining RM30 net liability to the tax authority.

Several features of the consumption based VAT collected through the credit or invoice approach are clear from this example.

1. The credit approach reduces the tax liability on the sales of a firm (row 2) by the amount of VAT already paid on the input purchases (row 4). Thus, the net VAT liability of the firm is the difference between the VAT on sales and the VAT incurred (and paid) on input purchases (row 2 – row 4).
2. The VAT paid on inputs is only deductible when the purchase invoice is produced. This allows the tax payment to be verified.
3. This continuous issuance of invoices by each firm in the production and distribution channel to firms making purchases from it, showing that the tax due on purchases has been paid, constitutes the tax-credit chain or the invoice trail. This is one of the highly touted features of the VAT since the continuous chain of invoices generated creates a good audit trail that helps to identify VAT liabilities and verify tax returns of VAT payers. This, in turn, reduces the chances of tax fraud. Nonetheless, since the consumer is not required to submit the invoice from the retailer to the tax authority, the credit trail ends with the retailer and there is no effective method to verify the sales of the retailer or the tax collectable from him.
4. The VAT is clearly a multi-stage tax; the total tax (of RM90) is collected in stages from the manufacturer (RM20), the wholesaler (RM40) and the retailer (RM30). A single stage tax of the same rate (10 percent) imposed on the final retail stage (RM900) would yield identical tax revenue (RM90). Hence, conceptually the consumption based VAT is equivalent in impact to a retail sales tax (RST), at least in a closed economy.
5. A multi-stage tax like the VAT yields greater protection to tax revenue. Unless fraud occurs at every stage of production, some tax receipts are assured. In contrast, in a single stage tax, fraud at the single point of collection could compromise total collections.
6. By the same token, a multi-stage tax is more complex to administer and comply with. Both the costs of tax administration and tax compliance are apt to be higher.

To summarize, the multi-stage tax like VAT will protect tax collections through several built-in features. First, the multi-point collection and invoice trail minimizes tax avoidance and tax evasion. Second, the need to issue and obtain invoices to claim tax deductions fosters greater compliance. Finally, since the tax is effectively passed forward to the consumer, businesspersons are, on the face of it, free from the burden of the tax. The potential of the VAT to provide more revenue, however, comes with greater administrative and compliance costs, when compared to a single-stage tax like a retail sales tax.

We will discuss further aspects of the VAT in our next article.

INTERNATIONAL HEADLINES

A Reheated Economy
The Economist - January 27, 2005
China's GDP grew 9.5% in the fourth quarter of 2004 compared with the same period in 2003, according to official figures. It also increased by 9.5% for all of 2004, compared with a revised 9.3% for 2003. The Chinese government has tried to dampen rampant growth amid fears of a "hard landing" if demand drops sharply. However, there was no sign of decreased demand in the underlying statistics.

Central Banks Dump Dollar for Euro
Asia Times - January 27, 2005
Central banks around the world are getting rid of the US dollar in favour of the euro in a bid to stem losses from the declining greenback, an international survey reveals. The survey says that more than two-thirds of central banks have increased their exposure to the euro in the past two years, mainly at the expense of the dollar. The report also finds that over half the central banks surveyed now find euro-zone money and debt markets as attractive for investors as those of the United States.

GDP Growth Less Than Expected
Reuters - January 28, 2005
The U.S. economy grew at a weaker-than-expected 3.1 percent annual pace in the final quarter of 2004, its slowest since the beginning of 2003 as the country's trade performance deteriorated and inflation picked up, a government report on 28 January 2005 showed. The increase in fourth-quarter gross domestic product, or GDP, which measures total output within U.S. borders, was down from a 4 percent gain in the third quarter and was the weakest since a 1.9 percent pace in the first quarter of 2003. Despite the softer fourth quarter, GDP in 2004 advanced 4.4 percent, up from 3 percent in 2003 and the most robust since 1999. Private-sector economists generally predict continued expansion in 2005 at around 3.5 percent, which is considered to represent the U.S. economy's long-term growth potential.

Singapore Plans to Triple Tourism Receipt to $30 billion by 2015
The Financial Express - January 28, 2005
Singapore aims to triple its tourism receipts to $30 billion by 2015, according to an announcement made by the Singapore Tourism Board. High-growth potential markets such as India and China are learnt to be among the factors prompting the Singapore Tourism Board to chalk out a 10-year vision plan. The board has identified 3 core areas to meet the 2015 dateline. These are strengthening Singapore's position as a leading convention and exhibition city in Asia, developing Singapore as a leading Asian leisure destination; and establishing Singapore as the services centre (mainly in healthcare and education) of Asia.

Chip Inventory Levels Fell Sharply at Year-End
Reuters - January 27, 2005
Excess semiconductor inventories fell 38 percent in the fourth quarter, a surprisingly large drop that could ease fears of an ongoing oversupply, iSuppli Corp. said on Thursday. Surplus chips in the hands of manufacturers, electronics makers and others in the supply chain fell to $1 billion, below the estimated level of $1.5 billion. Chip makers, gearing for winter holiday sales, overproduced through the first nine months of last year, pushing $1.6 billion worth of surplus chips into the electronics supply chain and sparking near-panic about the potential for painful price cuts and asset write-downs. Chip overproduction has contributed to past downturns in the industry, which tends to be marked by boom-and-bust cycles lasting a few years. Chip sales grew an estimated 29 percent in 2004 to $214 billion, but are expected to be flat in 2005.

Opec Shows Confidence in Strength of Oil Price

Financial Times - January 30, 2005,

The Organisation of the Petroleum Exporting Countries on Sunday suspended its official oil price band, signalling a structural rise in long-term crude prices founded on stronger Asian demand, the weaker dollar and a dearth of substantial new non-Opec supplies. The removal of Opec's nominal $22-$28 a barrel price band underlines the cartel's confidence that crude prices are set for a period of prolonged strength. Opec's price range was originally set in March 2000 when the cartel's members sought a sustained recovery in oil prices from the slump to $10 a barrel in 1998. Yesterday's revision reflects Opec's changed view of global economic conditions since.

OPEC Recommends No Quota Change

Reuters - January 30, 2005

OPEC producers agreed on Sunday to keep output limits on hold, convinced that oil prices near $50 a barrel are not stifling world growth. The Organization of the Petroleum Exporting Countries took little time to settle on no change in supply quotas, despite worries among consumer nations about inflated fuel costs. Gone are the concerns that dominated in OPEC last year about the impact of rising crude prices on the economic growth that drives demand for its oil. With inflation in the world's big economic powers in check and low interest rates still generating above trend growth, cartel ministers see no reason for cheaper oil. OPEC now appears ready to defend oil prices at a floor of about $40 a barrel for U.S. crude, or $30-$35 for a reference basket of cartel crudes. Ministers agreed to officially set aside their old $22-$28 range for the basket, set in March 2000, but are in no hurry to set a new target, saying prices are too volatile.

SERI wishes all readers a Happy and Prosperous Chinese New Year.

GONG XI FA CAI!

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