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The Impact of Trade Liberalisation on Wage Inequality in Malaysia

By
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As the world economy shifts into a more globalised era, every developing nation is harnessing its resources in an effort to take part in a more free trade regime. Globalisation promotes the practice of free trade and it is believed to promote a more level playing field in the world market, as tariff rates are driven down to near zero percent. In other words, protectionism policy is at the brink of extinction with the rise of trade reforms. Trade reforms, in the long run, will reward efficient producers with the competitive advantage that ensures their position in the global market.

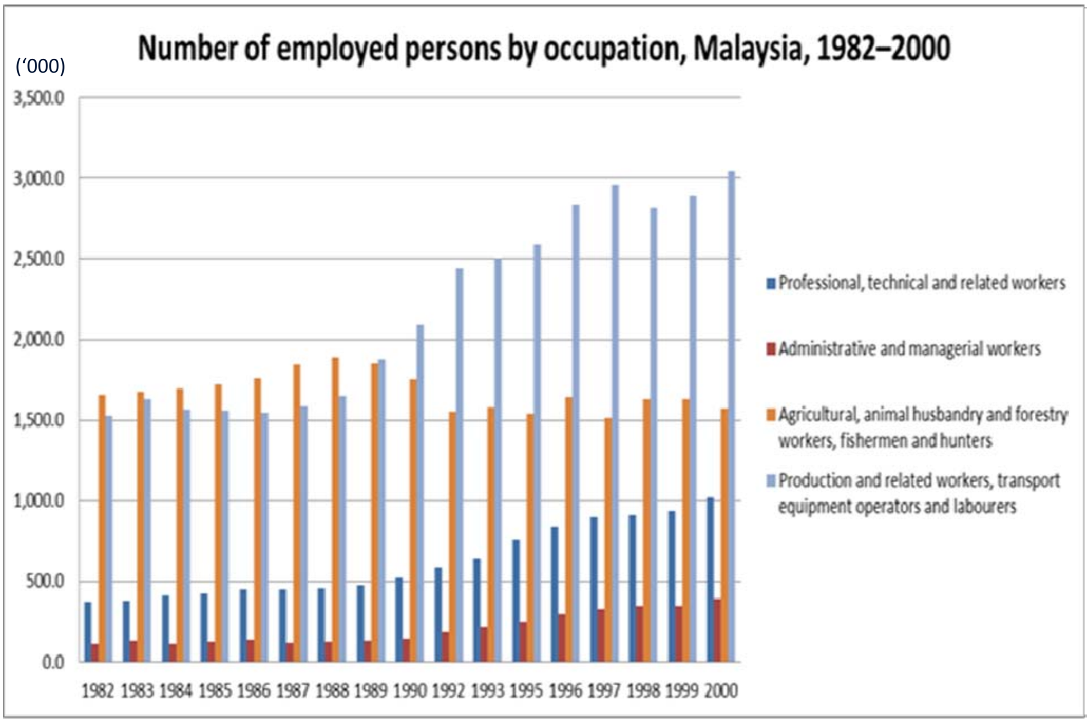
Free trade was promoted by the celebrated Adam Smith in the 18th century who highlighted the idea in his book titled *The Wealth of Nations*. Here was how he put it at that time:

> It is the maxim of every prudent master of a family, never to attempt to make at home what it will cost him more to make than to buy. If a foreign country can supply us with a commodity cheaper than we ourselves can make it, better buy it from them with some part of the produce of our own industry, employed in a way in which we have some advantage. (Smith 1776)

It is with this notion nations undertake free trade in the many different shapes and forms such as regionalism and bilateral trade pacts. As globalisation brings these nations together through intensified trade activities after trade liberalisation is implemented, households will surely benefit. When intensified trade is carried out, households are able to choose from a wide variety of products in the market at significantly lower prices. These products, which are now available locally, may be manufactured within the country's borders or beyond. Producers then are motivated to increase their productivity and quality of products to compete at a global level.

With all of the advantages of free trade, however, a growing number of economists are sceptical about the short-term problems of globalisation. Labour economists have found a trend in many developed and developing countries where, as trade liberalisation episodes take place, wage inequality between skilled and unskilled workers is observed to be increasing drastically. Due to this coincidental sequencing of events taking place abroad as well as in Malaysia, I have, for the past eight years, been vigorously involved in investigating the impacts of trade liberalisation on wage inequality between skilled and unskilled workers in Malaysia, a small, open economy. Figure 1 highlights the trends of the selected skilled and unskilled occupations held by employees.

Figure 1: Number of Employed Persons by Occupation



Source: Department of Statistics Malaysia. Labour Force Survey Online Data, 1982–2010

I am pro-globalisation just like Professor Stiglitz. In his book *Making Globalization Work*, American economist Joseph Stiglitz emphasised that with globalisation, "everyone was supposed to be a winner — those in both developed and the developing world. Globalization was to bring unprecedented prosperity to all" (Stiglitz 2006). Even with all of the advantages of free trade in the long run, there are some groups who are concerned about the downside of globalisation in the short run. Their concerns are real and not without basis. The nature of their concerns served as the focal point of my fascination with this mystery.

In recent years, quite a number of labour economists have found a trend in many developing countries where wage inequality between skilled and unskilled workers was observed to be increasing drastically in the short run as trade reform episodes take place. In the past two decades, the study of wage inequality and trade reforms has had more momentum than it has ever had before. The significant rise in interest on this topic could be explained by the sequencing of incidents of increasing wage inequality, which follows after drastic episodes of trade reform measures in developing countries.

Malaysia poses an interesting case study due to several points highlighted by both domestic and international literature review. Firstly, speculations and suggestions have been made by local Malaysian development economists when they were analysing the income distribution of Malaysians based on ethnicity, location and occupation since the early 1980s. The fact that no clear-cut outcome has been found motivated me to investigate the relationship between trade liberalisation and wage inequality in Malaysia. Secondly, there has been a global trend of increased wage inequality in developing nations. A surge in the number of studies on this topic focusing on both the developed and developing countries such as the United States, the United Kingdom, Colombia, Brazil, India, Mexico, and the Philippines can be observed. Most of the countries under study highlighted the findings that, yes, trade reforms do lead to increased wage

… wage inequality between skilled and unskilled workers was observed to be increasing drastically in the short run as trade reform episodes take place.

inequality between skilled and unskilled workers. However, trade reforms have had a positive impact on wage inequality for some countries like Indonesia and India. In their cases, wage inequality between skilled and unskilled workers has been observed to decrease significantly after an episode of trade liberalisation takes place.

Additionally, Malaysia offers an excellent case to study the effects of trade liberalisation for the following reasons linked to its commitments and previous economic shocks. Firstly, the degree of trade reform in Malaysia was very big. Secondly, the trade reforms in Malaysia were exogenous. To overcome the shocks presented by the Asian Financial Crisis of 1997, the government — more than ever — continued to decrease the tariff rates for almost 90 percent of the products, which were not listed on the Sensitive List, through the commitments of the ASEAN Free Trade Area (AFTA). This commitment was done to prepare for the AFTA Agreement deadline in year 2002, where a more level playing field for trade was to be realised for all the member countries. The reduction of tariff rates and the final tariff rate target were exogenous. Hence, lobbyists were unable to influence the trade reforms. Due to these reasons, the trade reform episode, which was undergone in Malaysia, is believed to be the best case study to explore the effects of trade liberalisation on the issues of wage and employment inequality. Figure 2 highlights the average tariff rate reductions in all industries and the manufacturing industry as well as their magnitude.

According to the assumptions made by the Heckscher-Ohlin theorum and its companion, the Stolper-Samuelson theorum, developing countries should see wage inequality decreasing between the skilled and unskilled workers within their economies as trade reforms enable the

Figure 2: Drastic Tariff Rate Reductions in All Industries and Manufacturing Industry in Malaysia, 1989–2009

Year	No. of Industries	Mean (%)	Standard Deviation (%)	Minimum (%)	Maximum (%)
All Industries					
1989	30	13.33	8.84	2.5	31.48
1992	30	12.59	8.83	1.81	30.7
1995	30	10.87	7.09	1.74	25.6
1997	30	7.61	6.51	0	20.87
1999	30	7.61	6.51	0	20.87
2004	30	6.58	6.51	0	25.85
2007	30	4.97	5.01	0	16.79
2009	30	4.35	4.49	0	14.75
Manufacturing Industry					
1989	21	16.96	7.87	5.1	31.48
1992	21	16.18	8.06	4.89	30.7
1995	21	13.84	6.37	4.2	25.6
1997	21	10.04	6.05	1.06	20.87
1999	21	10.04	6.05	1.06	20.87
2004	21	8.98	6.37	0.14	25.85
2007	21	6.83	4.9	0	16.79
2009	21	6.01	4.42	0	14.75

Source: Author's calculation based on figures from World Integrated Trade Solution (WITS) Database country to export more products produced by the relatively abundant workers in the domestic market. In turn, they will import products from other countries, which are produced by relatively scarce workers. Even with the promise of increased wealth and welfare for all, the widening gap of wage inequality between these groups of workers needs to be addressed in Malaysia.

By employing the National Household Income Survey data and the data on trade policies (tariff rates) from 1989 to 2009, I am happy to report that the findings suggest that trade liberalisation has led to decreased wage inequality between the skilled and unskilled workers in Malaysia when we look at the economy as a whole.

This piece of good news, however, is overshadowed by a looming cloud as I delve deeper into the topic focusing on the manufacturing sector, where data on its workforce is available and abundant. By employing the Annual Manufacturing Survey data from 2000 to 2010, I found that wage inequality has increased significantly among the skilled and unskilled workers in the manufacturing sector through the technology channel. The logic behind this is simple. As tariff rates are driven down to near zero percent, we find that imported technology is now cheaper than before, motivating firms and plants to adopt the usage of highly advanced technologies in their daily operations. Since skilled workers are seen as the closest complimentary factor to technology, unskilled workers lose out when demands for skilled workers are significantly higher in this sector. When demand for skilled workers increases drastically compared to unskilled workers, then the problem of increasing wage inequality is observed.

So, what can we do to deter this short-term problem in the labour market? The solution for this short-term negative spillover is not, however, through eradication or elimination of trade liberalisation episodes. Just like the pieces on a chessboard, we need to strategise and mobilise our pawns to participate and march head-on while at the same time protect the sovereignty and interests of our nation by creating a strong defence mechanism.

If Malaysia is serious about ... elevating its people to a developed-country status, the issues of social safety net and human resource development need to be addressed in a timely fashion.

These mechanisms include strengthening existing social safety nets and increasing capacity building and training efforts by both the public and private sectors. *Bantuan Rakyat 1Malaysia* (BR1M) is an existing but temporary social safety net created to help those in need. This existing framework, however, needs to be reformed so that a more effective and sustainable social safety net can be established to ensure that temporarily displaced workers can seek temporary refuge in between jobs as the labour market readjusts to its new equilibria. When it comes to capacity building, one of the most important areas will be human resource development and skill training. These efforts should not only be initiated by the government or by the private sector separately. These groups can pool their resources into a Public and Private Partnership (PPP) effort that can target more workers more efficiently. If Malaysia is serious about freeing itself from the middle-income trap and elevating its people to a developed-country status, the issues of social safety net and human resource development need to be addressed in a timely fashion.

To withdraw from the short run threat embodied in the opportunity we come to know fondly as “globalisation” is out of the question. This is because it will project the image of weakness, which can have detrimental effects on our nation in the future. To win, we must participate and jump onto the moving wagon.

Radical Rethink Needed for Palm Oil in 11th Malaysia Plan

By
Tan Siok Choo
Visiting Fellow, ISIS Malaysia

Corporate complacency relegated Japan's once titanic Sony to the backwaters of consumer electronics. If Malaysia's policy planners adopt a similar laid-back stance towards oil palm plantations, this sector could similarly be reduced to irrelevance.

For those tasked with drawing up the 11th Malaysia Plan (11MP), the issue is not whether priority should be given either to developing a vibrant oil palm products industry or to nurturing a dynamic plantation sector. Instead, both should be accorded top billing.

The danger is that Malaysian policy makers will focus on developing downstream industries at the expense of the upstream sector. Such a stance will be self-defeating; the foundation for continued growth of downstream industries like oleochemical manufacturers is the ability of plantation companies to ensure a consistent and increasing supply of palm oil.

Failure to nurture and develop the potential of plantation companies is like a furniture designer placing a beautiful slab of marble on top of a table without ensuring its legs are strong enough to support it. If the table collapses, both the marble top and the legs could break.

Malaysian policy planners must take cognisance of two headwinds ... shortages of land and labour.

In drawing up an action plan for the palm oil sector, Malaysian policy planners must take cognisance of two headwinds, which oil palm growers currently face — the twin shortages of land and labour.

While the Economic Transformation Programme (ETP) – A Roadmap for Malaysia, has listed five core entry point projects (EPP) in the upstream sector and three in the downstream sector (refer to Figure 1), the question is this: are these EPPs adequate to ensure the long-term growth and sustainability of palm oil's entire value chain?

Or is a radical rethink needed?

Palm oil's upstream sector comprises two segments, namely, (i) plantation companies, including those involved in growing seeds, planting and harvesting oil palms, as well as collecting and milling the fresh fruit bunches (FFB), and (ii) palm oil refining, bulking and trading activities.

Similarly, downstream activities encompass two segments, namely, (i) food and health-based industries, and (ii) the non-food based industry.

Oil palms have been planted on 5.23 million hectares in this country — a figure that represents 70 percent of Malaysia's agricultural land, Plantation Industries and Commodities Minister Datuk Seri Douglas Uggah Embas said recently.

Because it may not be possible to plant the remaining 30 percent of agricultural land with oil palms, this suggests that the scope for a further expansion of oil palm hectareage is limited.

Furthermore, Indonesia's rapid expansion in planting oil palms coupled with its plans for continued enlargement in hectareage could exacerbate the labour constraints Malaysia now faces.

Data from Indonesia's Ministry of Agriculture showed that areas planted with oil palms have doubled from around four million hectares in 2000 to eight million hectares currently.

Figure 1: Entry Point Projects

Upstream Entry Point Projects (EPP)	Downstream Entry Point Projects (EPP)
Accelerating replanting of old oil palms	Developing oleo derivatives
Improving fresh fruit bunch yields	Commercialising second generation biofuels
Increasing worker productivity	Expediting growth in food and health-based segments
Raising oil extraction rate	
Developing biogas at palm oil mills	

By 2020, the archipelago targets to plant oil palms on 13 million hectares. Achieving this target implies that the number of Indonesians available to work in oil palm plantations in Malaysia could fall drastically.

This has already happened. Data from the Indonesian embassy in Kuala Lumpur revealed that the number of Indonesian applicants for jobs in Malaysia's oil palm sector plunged to 38,000 in 2013 from more than 120,000 in each of the previous two years, an article in the *Malay Mail* says.

Industry officials and analysts estimate that planters in this country could lose from five to 10 percent of their FFB each year due to labour shortage, cutting Malaysia's total export revenue by about RM2.5 billion annually, the *Malay Mail* article adds.

The decline in the number of Indonesians applying to work in this country is probably due to the fact that Indonesia's average wage level of about RM700 is now close to Malaysia's minimum wage of RM900, a development that reduces the monetary incentive for Indonesians to work in this country.

For the plantation sector, hiring workers from countries like Myanmar, Nepal and Bangladesh is a short-term palliative, not a cure. For a start, their lack of familiarity with oil palms means that their learning curve will be longer. Yet another obstacle is the difficulty of communicating and training workers who speak neither Bahasa Malaysia nor English.

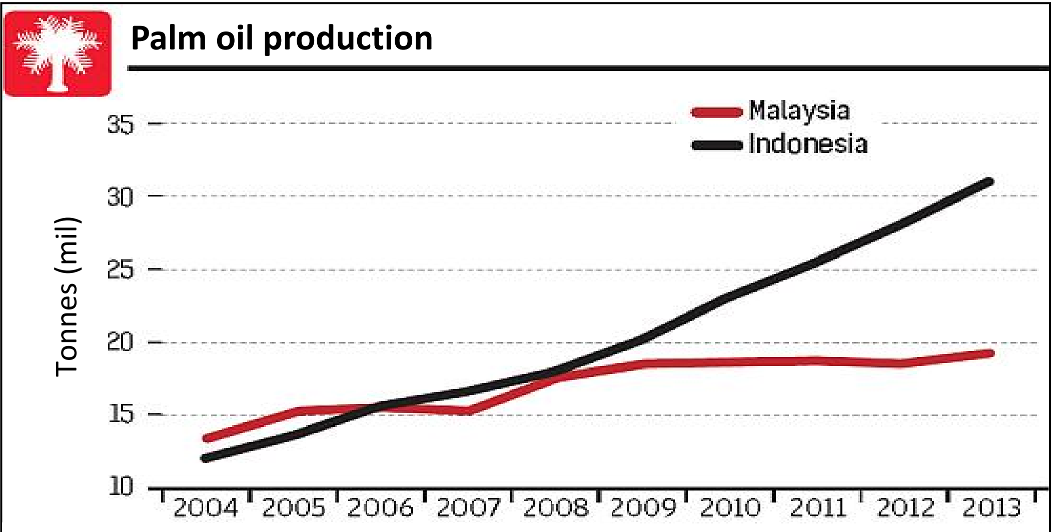
While Indonesian workers may demand higher wages than their counterparts from Myanmar, Nepal and Bangladesh, the trade-off is the former's ability to plant, and more importantly, harvest the FFB at a faster pace.

Not only will the lack of speed impact the quality of FFB harvested and the oil extraction rate (OER), it could also undermine the profitability of plantation companies, particularly when crude palm oil (CPO) prices remain at five-year lows.

A growing shortage of Indonesian workers suggests that Malaysian plantation companies will have to learn to do more with less. For example, plantation companies will have to improve worker productivity through the mechanisation of spraying pesticide, harvesting of FFB and collecting loose fruits.

Presently, many plantation companies' stance towards mechanisation has been characterised by a lack of urgency — an attitude at odds with the unpromising outlook for

Figure 2: Palm Oil Production of Malaysia and Indonesia



Source: US Department of Agriculture

reversing the declining trend in the number of Indonesian workers.

Furthermore, given the shortage of land, increasing FFB output in this country will have to come from accelerating the replanting of oil palms and raising oil palm yields significantly.

According to the ETP, there are 365,414 hectares of oil palms more than 25 years old. If replanting is not speeded up, replacing old palms with higher yielding plants could take a staggering 14 years.

To overcome the twin constraints of land and labour, many plantation companies have moved overseas, primarily to Indonesia. But this option is unavailable for smallholders who account for 40 percent of the land area planted with oil palms.

Exacerbating the shortage of land is the continuing and possibly accelerating trend of converting land planted with oil palms into housing and industrial development as well as for infrastructure.

Going forward, a do-nothing attitude by policymakers in the upstream sector could result in the planting of oil palms in this country becoming increasingly the domain of less cost-efficient growers like smallholders. If so, this could impact the cost competitiveness of the downstream sector.

Recently, the Performance Management and Delivery Unit (PEMANDU) urged plantation companies to venture into downstream activities — a call that is timely but challenging.

For plantation companies, the issue is not whether they should venture downstream but how this transition can be effected. Equally critical is the choice of downstream activities.

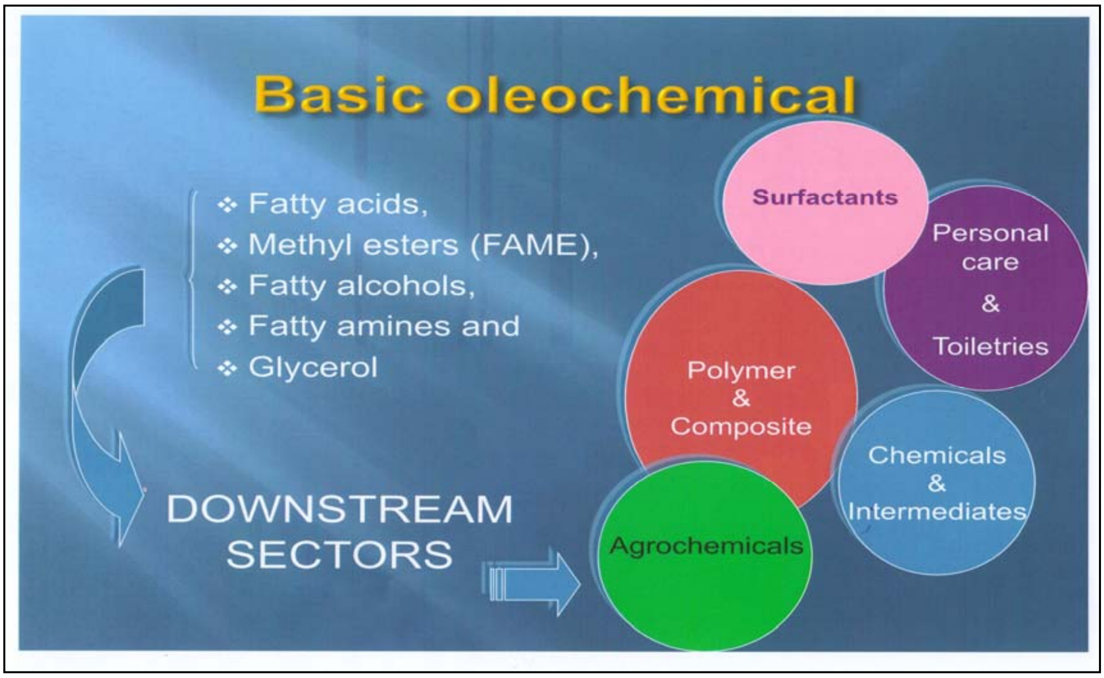
Some downstream activities require different skills from what is generally required for upstream endeavours. This shift could severely test the capacity of plantation companies to adapt to a more demanding business milieu.

According to Ku Kok Peng, PEMANDU's director of palm oil and rubber national key economic areas (NKEA), palm oil exports are highly biased towards the upstream and midstream segments, with 74 percent contribution to the overall industry while downstream's share was a lowly 17 percent.

That downstream activities offer tremendous profit potential is undeniable. Industry trends today indicate that the margins for some downstream activities, such as agro chemicals and biolubricants, could be as high as 35 percent.

Agro chemicals include insecticides and fertilisers. Alternatives to petroleum-based lubricants, biolubricants — one example is

Figure 3: Downstream Sectors from Basic Oleochemical



Source: Zainab Idris, Exploring the potential of downstream sector in the palm oil industry in Sabah. Paper presented at the Seminar on Investment Opportunities in High Growth Sectors in Sabah, 4 December 2012, Kota Kinabalu, Sabah

lanolin — are made from renewable sources and often used to protect moving machinery parts against rust and corrosion.

For highly-efficient plantation companies in Malaysia, however, a 40 percent profit margin is achievable. The problem is that such profit margins are attainable only when palm oil prices are high. In contrast, manufacturing companies' profit margins are less volatile.

One potential area of investment is oleochemicals (see Figure 3). Derived mainly from palm kernel oil, oleochemical products frequently used in daily life include toothpaste and shampoo.

Ms Umarani Muniandy, the chemical and advanced material division director of the Malaysian Investment Development Authority (MIDA), told a recent seminar on oleochemicals titled "Downstream Expansion and Sustainability" that Malaysia is one of the largest basic oleochemical producers with 20 percent of global production.

"By 2020, we hope to be a hub of oleochemical derivatives in the region," she added.

Plantation companies such as IOI Group, Genting Plantations and Sime Darby Plantations have already ventured into oleochemical manufacturing through joint ventures.

Asia is both a major consumer and producer of oleochemicals; the region accounts for 68 percent of global consumption and 60 percent of global production, Muniandy pointed out.

Like the planting of oil palms, Indonesia could be a formidable competitor to Malaysia in the downstream sector.

"Indonesia has a lot of refineries coming up in the last two years as it has imposed a significantly heavier export tax structure than Malaysia...this move has created an incentive for refineries in the republic to process CPO into fatty esters and alcohols, which in turn has brought in a lot of investments in palm oil refining activities there," PEMANDU's Ku said.

A greater challenge for plantation companies is venturing beyond intermediate downstream manufacturing. One promising possibility that deserves consideration is producing Vitamin E tocotrienols from palm oil.

Chemically, Vitamin E comprises two major families — tocopherols and tocotrienols. Past studies have focused almost entirely on tocopherols. Moreover, alpha-tocopherol equivalent (alpha-TE) is often used as a benchmark for Vitamin E content in foods while the Nutri-Facts website omits all mention of tocotrienols and focuses only on alpha-tocopherol.

A two-year human clinical study published in the American Heart Association journal, *Stroke*, suggests that Vitamin E tocotrienols derived from palm oil could slow the degeneration of white matter lesions in the brain. Comprising 50 percent of the brain, white matter is the area of the brain most often affected by strokes.

Despite the documented health benefits of Vitamin E tocotrienols, the biggest problem any would-be manufacturer faces is persuading large numbers of consumers to switch to Vitamin E tocotrienols.

Because palm oil is a commodity, plantation companies may lack the requisite marketing and branding skills.

Going head-to-head with the likes of *Nederlandse Staatsmijnen* (Dutch State Mines, DSM) is foolhardy. DSM is the world's largest manufacturer of Vitamin E with massive advertising budgets and a worldwide marketing reach.

Although selling Vitamin E tocotrienols at a discount is a possible option, this could mean many years of sustained patience before a company recovers the cost of its investment. Furthermore, long-term profitability necessitates moving up the value chain.

A better alternative is to identify a niche market where Malaysia enjoys a competitive edge and where global giants have a minimal presence.

Instead of manufacturing generic consumer products, Malaysian plantation companies should focus on halal-certified palm-based Vitamin E tocotrienols.

Malaysia's halal certification is recognised worldwide. This country is well placed to expand its halal footprint through a broad range of Islamic-certified products, for example, pharmaceuticals, herbal products, cosmetics, and food.

Rising income in populous Muslim countries, like Indonesia and Turkey, suggests that the halal-certified market could expand significantly while growing Islamic consciousness in the oil-rich Middle Eastern countries underscores the potential for high-value Islamic products.

… Malaysian plantation companies should focus on halal-certified palm-based Vitamin E tocotrienols.

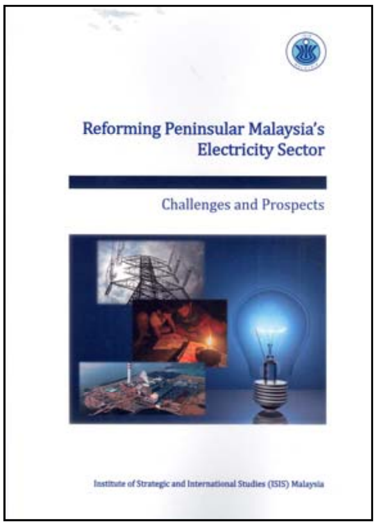
A useful case study is the market for Islamic bonds or sukuk. According to Moody's Investor Service, two-thirds of the approximately USD290 billion outstanding sukuk are issued in Malaysia.

This year, the United Kingdom raised GBP200 million in five-year Islamic bonds, the first non-Muslim sovereign issuer of sukuk. Also noteworthy, investors bid more than 10 times the amount offered.

Two conventional banks from non-Muslim countries – France's Societe Generale and Japan's Bank of Tokyo-Mitsubishi UFJ – have also announced the proposed sale of Malaysian sukuk while non-Muslim economies interested in issuing Islamic bonds include Luxembourg and Hong Kong.

Success in developing the sukuk market, therefore, offers a template for Malaysian companies to manufacture a broader range of halal-certified palm oil-based products.

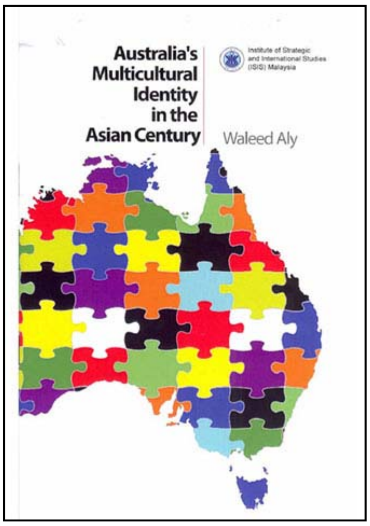
Latest ISIS Publications



Reforming Peninsular Malaysia's Electricity Sector: Challenges and Prospects (E-book)
Kuala Lumpur: ISIS Malaysia, 2014

The e-book discusses the prospects and challenges associated with the objective of reforming the power sector in Peninsular Malaysia. It revolves around four themes, namely energy market outlook and regional experience with electricity market reform; electricity tariff review in Malaysia and its expected impact; reforms to increase competitiveness in Malaysia's electricity sector; and transition and adaptation to a new sectorial structure. These themes were drawn from the discussions that took place during the *Public Forum on Reforms in Peninsular Malaysia's Electricity Sector*, which ISIS Malaysia and MyPower Corporation co-organised on 7 November 2013.

Available at: http://www.isis.org.my/attachments/e-books/Electricity_Reforming_Final-book.pdf



Australia's Multicultural Identity in the Asian Century
Author: Waleed Aly
Kuala Lumpur: ISIS Malaysia, 2014

This monograph is based on a talk titled, 'Australia's Multicultural Identity in the Asian Century', given by the author at an ISIS International Affairs Forum on 30 April 2013 in Kuala Lumpur.

Available at: http://www.isis.org.my/attachments/e-books/Waleed_Aly.pdf

INSTITUTE OF STRATEGIC AND INTERNATIONAL STUDIES (ISIS) MALAYSIA

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