CSPS
Strategy and Policy Journal

Economic Diversification

Volume 1 • July 2010

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CSPS Strategy and Policy Journal
Simpang 347, Gadong BE1318
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Published by the Centre for Strategic and Policy Studies, Brunei Darussalam
Printed by Brunei Press Sdn. Bhd.

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FOREWORD

The Centre for Strategic and Policy Studies (CSPS) was established in June 2006 with the goal of becoming of Brunei Darussalam's premier, policy research think tank. In addition to conducting independent policy research and analysis, CSPS aims to play an important role in disseminating new research-driven knowledge and perspectives on policy-related issues, and promoting open discussion as a foundation for effective governance.

It is with great pleasure that I introduce the first edition of the CSPS Strategic and Policy Journal. This journal is an international and interdisciplinary publication devoted to the subjects of social and economic development, policy planning and sustainable development in Brunei and the region. It is our aim to publish high quality research papers and commentaries from prominent researchers and policy analysts from within the region and worldwide in a way that is accessible to both specialist and non-specialist readers. We hope that this journal will make a real contribution to policy debate in Brunei Darussalam and thus assist in good policy formulation for the development of our country.

The theme of this first issue is 'Economic Diversification'. The papers chosen for this volume deal with key issues faced by Brunei in confronting both globalisation and the need for Brunei to promote a vibrant, non-oil and gas economy.

Currently, Brunei is in the midst of pursuing a bold 30-year development plan called the Brunei Darussalam Long Term Development Plan which aims to place the country in the top ten globally in terms of quality of life and income per capita (Wawasan or Vision 2035). In order to achieve our Wawasan 2035, we recognise that there is a need to diversify our economy away from the oil and gas sector. Economic diversification, and finding viable strategies to broaden our economic base, is therefore one of the most pressing policy concerns for Brunei. In order to meet our objective as the leading think tank for the analysis and dissemination of relevant policy issues, the theme of 'Economic Diversification' is therefore a timely and very relevant topic for our first issue.

Let me acknowledge and congratulate all involved in making this journal a success. Special thanks must go to the authors of this first issue: Manu Bhaskaran, Roger Neil Lawrey, Abdul Amin Haji Hashim, Ismail Duraman, Shankaran Nambiar and Euston Quah Teong Ewe.

Dato Paduka Haji Ali bin Haji Apong
Chairman
Centre for Strategic and Policy Studies
Brunei Darussalam
28th May 2010

CSPS Strategy and Policy Journal, Volume 1, July 2010, Pages 1-12

Economic Diversification in Brunei Darussalam

Manu Bhaskaran

This is a commentary brief of a consultancy report prepared earlier for the Centre for Strategic and Policy Studies. This paper assesses the pace of economic diversification in Brunei Darussalam. It argues in essence that the lack of sufficient progress in economic diversification is due to weaknesses in the enabling environment and ends with some recommendations on moving forward.

Manu Bhaskaran leads the Centennial Group's strategic advisory initiatives in developing Asian markets. Manu joined Centennial Group in April 2002 and he brings with him experience from close to 30 years working at the highest levels in both the financial sector in South and Southeast Asia and government service in Singapore. Currently, he heads the Group's economic research practice which provides in-depth analysis of Asian macro trends for investment institutions, governments and companies with interests in the region. His particular private sector expertise includes directing economic and investment analyses and equity research and the development of political and economic assessments of Asian issues. He is a widely published author on regional political and economic issues, a regular columnist for Japan's Nihon Keizai Shimbun and Singapore's The Edge, and contributor to Yale Global and Global Asia journals. A Singaporean national, Manu holds an MA from Cambridge University, a Masters in Public Administration from Kennedy School of Government, Harvard University and is a Chartered Financial Analyst.

1.0 What is the Aim of the Economic Policy Regarding Diversification?

It is essential, first, to set the policy goal of economic diversification in the context of what such diversification seeks to achieve. The overall objective of policy is to achieve a good balance between economic growth, employment creation, equity, economic stability and risk management while still maintaining Brunei's unique religious and cultural traditions. Economic diversification is thus one strategy, among others, that is needed to achieve this overall policy aim.

Diversification policy should aim for high economic growth, creating jobs of high quality, distributed equitably among its people. However, this growth must not come at the expense of stability. Inflation, fiscal balance and sustainable levels of loan growth must be ensured. In addition, policy makers must ensure that there is a substantial indigenous ability to drive the economy in order to reduce reliance on foreign companies and workers. Lastly, growth should not compromise the religious and cultural traditions that Bruneians hold dear.

2.0 Past Diversification Efforts

While economic diversification was adopted as a goal of national policy as early as the Second National Development Plan (1962-1966), it was only in the 1990s when such efforts became more vigorously expressed. Major studies in 1995, 1997, 1999, 2001 and 2003 identified various niches such as eco-tourism, food processing and transportation for the economy to diversify into.

Yet, even though most of the recommendations made eminent sense and played to Brunei's strengths in some way or other, Brunei has still not succeeded in making significant headway. Looking at the composition of GDP and FDI over the last decade, the oil-sector's continued overwhelming dominance indicates a lack of progress in economic diversification.

This lack of success in a crucial economic objective is surprising given that Brunei has considerable strengths. It has substantial financial resources as the windfall gains from oil/gas have generally been well-managed. It also enjoys a degree of political stability that few other countries can claim, backed by a competent government that delivers good and well-maintained infrastructure, ensures low levels of corruption and maintains basic services such as utilities, schools and medical care that are of global standards.

With Brunei faring well above average in the World Bank Governance Indicators, it is clear the lack of progress is not because of an ineffective government or other weaknesses so prevalent in the developing world – poor governance, political instability and a collapse in the rule of law.

This observation leads to the conclusion that the relatively slow pace of economic diversification is not because of any inherent weaknesses in the various detailed recommendations and strategies suggested by agencies and consultancies on what sectors to diversify into. Neither is there any real issue with governmental effectiveness or governance.

The problem is instead with the enabling environment. We find policy is being implemented in an environment which somehow does not allow full and effective realisation of policy goals. The challenge is therefore to identify the deeper roots of the weaknesses in the enabling environment.

3.0 What Ails the Enabling Environment?

There are a number of reasons why a weak enabling environment has directly curbed Brunei's capacity to expand beyond its oil/gas sector.

- ***First***, we find there is an insufficient clarity of purpose. In the case of Brunei, it is not public knowledge what the rate of depletion of oil and gas reserves are and just how urgent (or not) economic diversification is. Our visits to Brunei and our meetings seem to show that there is a lack of clarity about how far economic diversification should be pursued if such efforts might potentially undermine some other social or political objectives. For example, tourism is desired, but not if it brings in alcohol and other social ills; growth is desired, but not if it results in a huge inflow of foreigners.

- ***Second***, we find that while senior levels of the Brunei civil service compare strongly with the rest of Asia, it is clear that the middle and lower levels are a major constraint on Brunei's development. There is clearly a culture of risk aversion and lack of accountability. With no apparent penalties for failure to achieve objectives, we find that far too often, the easy way is taken, with officials choosing to avoid risk or minimise it rather than to learn to manage risks. We found many examples of failed ventures due to over-regulation, excessive red tape and inflexible rules. This has deterred other investors. Singapore ranks number 1 on The World Bank survey measuring the ease of doing business in countries across the world. Brunei ranks number 78. Other countries such as relatively under-developed Mongolia managed a ranking of 52.

- ***Third***, we find several structural weaknesses in the Brunei corporate sector.

  - Companies do not keep proper accounts because of anomalies in the tax regime. While banks have adapted to such conditions, we found that they are just not lending as much as they could if companies were better structured.

  - A low household savings rate has led to relatively little surplus to fund business ventures. As the most important source of funding when a business first starts to grow is not bank loans, but the savings of the entrepreneur himself (or those of his family and friends), this has harmed the growth of local businesses.

  - Excessive government control of land, a key factor of production, has also aggravated the corporate sector weakness. As of 1999, 95.4% of land in Brunei belonged to the state. There have been several occasions where new business ventures failed to get off the ground because the authorities were too slow to grant permission for land use or for change in the tenure or permitted use of the land.

➢ ***Fourth***, Brunei is losing out in terms of scale at a time when agglomeration effects are increasing. Increasingly, economic activity gravitates to fewer and fewer urban centres over time. With a population of only 400,000 people and an unequal distribution of income, domestic consumer demand in Brunei is not substantial. The way smaller economies usually get around this problem is to go for scale in regional hub activities such as being the airport hub, or the sea port hub or the regional centre for business headquarters. But Brunei will find it difficult to achieve this because other cities in the region (such as Hong Kong and Singapore) have already cornered these markets.

➢ ***Fifth***, while human capital in Brunei is relatively good, there are some weaknesses that hinder economic diversification.

- Basic education is good, but too few students reach the tertiary level: only 6% are in tertiary institutions. Of those who reach the tertiary level, too few are choosing subjects which would attract investors who have a choice of many locations across the world to invest in. Many students choose "soft" subjects such as religious studies but not enough are in science, engineering or other professional or vocational courses.

- In addition, the prevalence of government jobs and subsidies creates a set of incentives that do not propel workers to strive and compete: if people become complacent because much of what they need is provided for them, there will not be much urge to improve themselves.

- We are also not confident that Brunei has the full spectrum of educational institutions that is needed and so may end up under-utilising its human resources. There is probably a need for more vocational schools for those who are not academically inclined or who start late.

- ***Sixth***, high wages and low productivity in Brunei have led to high unit costs. This structural distortion in the labour market is believed to be the result of the dominance of just two major employers: the government and the oil/gas sector. In addition, the lack of economic scale in Brunei (fourth point, see above) could also be behind the high unit costs.

In addition, this lack of an enabling environment has also indirectly curbed the economic potential of Brunei through two key means:

- ***First***, bureaucratic delays, a lack of clarity on foreign ownership rules, inadequate number of skilled workers with right qualifications, and the small domestic market, have led to an inadequate ability to attract foreign direct investment (FDI) outside the energy sector. FDI is important because it provides a short cut to growth, instead of taking years for a country to grow its own global companies. In order to bring up its other industries, Brunei needs to emphasise FDI as a key source of non oil/gas sector growth.

- ***Second***, restrictive land ownership rules and unfavourable cost structures have led to a wide host of unexploited resources in Brunei. There has been very little of a forestry industry despite Brunei's large amount of forested area. Brunei's large endowment of silica sand has not been exploited. Tourism has been neglected.

4.0 What Needs to be Done?

We propose two broad strategies. First, government needs to improve the enabling environment. And, second, government needs to be a pro-active builder of competitive advantage in the economy.

4.1 Creating the Right Enabling Environment

➢ ***First***, reforms are needed in the government arena. The leadership has to send clear and strong signals of its determination to make the bureaucracy more effective:

- Changing the incentive structure in the civil service, especially in agencies dealing with the business sector. An educational programme needs to be put in place to build a culture of pro-actively supporting economic growth, not taking the safest decisions.

- There should be a clearer demarcation of responsibilities for achievement of policy goals such as those articulated in National Development Plans.

- A streamlined, single agency for economic development that must cover all sectors and which is armed with authority over all major issues involved in business such as land allocation, business licensing, infrastructure development, suggesting educational changes and immigration rules.

- The Government should conduct an audit of all the rules and regulations that affect business with an explicit aim to completely delete a large proportion of such rules. For example, an initial goal to delete a third of all government rules and regulations.

- An investigation should be made of major areas of policy decisions and a comparison made between how countries which have been successful in bureaucratic reforms. We believe more empowerment and delegation to technocrats should be given.

➢ ***Second***, the political leadership must set out clear goals and define a little more clearly what the trade-offs are. It has to accept that some things have to give, in terms of long cherished taboo subjects.

- Inevitably, given Brunei's small scale, higher and more dynamic growth must entail a larger foreign involvement in the economy.

- Creating more diverse recreational activities for tourism to flourish.

In essence, what this means is that a new consensus is needed on a system to manage the risks involved in opening up. More creative means need to be found to accommodate religious concerns.

➢ ***Third***, create a more business-friendly regime: Brunei does not have the luxury of being the same as others – it has to be much, much better than other jurisdictions if it is to attract FDI.

- The most critical reform would be to improve Brunei's ranking in the World Bank's Ease of Doing Business – one aim could be to reach the top 10 in Asia within a short time span such as five years.

- An aggressive transformation of the tax regime into a low tax one would help. We suggest some options:

    - Abolish corporate tax entirely and shift to VAT/indirect tax. Continue with a special tax on oil/gas and other natural resources.

    - Cut the corporate tax to say a flat rate of 10% - no need to shift to VAT but have a higher tax rate for oil/gas and natural resources.

    - Impose just a flat fee of, say, $1,000 per incorporated business – except oil/gas and natural resources as above.

- There is a vital need to reform land legislation and the implementation of land-related policies. In order to allay fears of excess foreign ownership, a regime of quotas for foreigners (or for non-indigenous Brunei residents) could be considered to augment the policies such as the Strata Title Legislation.

4.2 The Government as a Pro-active Builder of Competitive Advantage

➢ ***First***, the government should consider innovative ways of achieving scale through linking up with neighbouring economies. The essential aim is to achieve a seamless interaction between Brunei and the other countries in key areas such as:

- Freedom of operation of corporations: e.g. a company registered in one country could operate freely in the other without the need to re-register or go through involved procedures to set up a branch office.

- Mobility of some categories of labour: Citizens of one country could work in the other without an employment pass for a number of years without need for special immigration permission in the form of an employment pass or work permit.

➢ ***Second***, more efforts are needed to maximise the human capital Brunei has. Policy options could include:

- Consider applying a version of Singapore's Mendaki model adjusted to Brunei conditions: This approach in Singapore to raise the status of the Malay community stressed early intervention and an incentive structure that encouraged students to not shy away from difficult but marketable courses.

- Have a selective but pro-active approach to wooing talent from abroad. Talent can be entrepreneurs or highly qualified graduates.

- Institutional development: As argued previously, Brunei needs a wider range of educational institutions such as more vocational and polytechnic level education.

➢ ***Third***, there needs to be more support for the locally owned business sector. Possible policy options could include:

- More privatisation: The aim would be to create a more dynamic private sector including a class of globally competitive, Bruneian-owned companies.

- SME development: Establish an agency or agencies that are dedicated to the SME sector. Thailand and Malaysia have set up SME banks. Singapore has taken the view that it is not funding of SMEs that is the problem but the underlying capabilities of the SME sector – a problem that is best remedied through upgrading the capacity of the SMEs.

➢ ***Fourth***, Brunei can make more strategic use of foreign investors. A target should be set to attract perhaps 4 or 5 MNCs in different sectors to establish a substantial presence in Brunei. This however will not be easy given the competition and Brunei's characteristics.

MNCs choose to invest abroad for a number of reasons:

- To gain access to resources that they cannot elsewhere. Brunei has already attracted what it can in terms of FDI in the oil/gas sector;

- To gain access to a domestic market that is large enough to require investment in local production facilities – Brunei is too small for this; and

- To achieve high profitability because the destination country offers low unit costs or specialised locational advantages or other competitive advantages. In this area too, it is difficult to make a compelling case in a wide number of activities, especially with the intensive competition from countries like Thailand, Singapore and Malaysia.

Thus it is proposed that Brunei should adopt innovative strategies that differ in some ways from the traditional models used in other successful East Asian countries.

- Strategic relationships could be forged with selected MNCs by offering them lucrative concessions on conditional terms. This could be in the relatively unexploited areas we pointed out above such as forestry or tourism or silica sand.

- Such a strategic relationship could be strengthened through the offer of partnership with the MNC in areas outside Brunei – this could include participating with the MNC in a consortium to make acquisitions.

➢ ***Fifth***, the government should make greater strategic use of its large pool of savings, the only resource other than oil and gas that Brunei has of global scale. Singapore which now yields a very substantial income from its own built up pool of savings is using such income to fund the government budget – after a long period in which it was reluctant to do so. Brunei may want to consider this.

CSPS Strategy and Policy Journal, Volume 1, July 2010, Pages 13-28

An Economist's Perspective on Economic Diversification in Brunei Darussalam

Roger Neil Lawrey

Abstract

Despite nine national development plans and many other development initiatives, Brunei Darussalam is still faced with the problem of how to diversify its economy and rely less on the production of non-renewable hydrocarbons. In some ways, this is a similar problem to that faced by many resource-rich countries that become overly dependent on one source of income. So much so that this state of affairs has a name: the resource curse hypothesis. Yet, despite the similarities, Brunei has its own unique characteristics that can help or hinder diversification. This paper examines the issue of diversification from the perspective of an economist who has worked in the country for several years. It considers the likelihood of "organic" growth occurring in the private sector sufficient to make an impact on the macroeconomic performance of the economy and highlights the challenge at the heart of Brunei's economic performance, viz. that future economic growth depends upon support from the Government through continued public expenditure and possibly public private partnerships but points out that growth is also hindered by the Government which exercises too much bureaucratic control, takes away resources from the private sector, and creates a culture of dependency. The paper argues that, in addition to dealing with these constraints, the dynamic process of diversification requires a coordinating body, representing all relevant ministries, with the power to act on relevant issues.

Keywords: *resource curse, diversification, economic growth, oil and gas*

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1.0 Introduction

As the author has written previously (see Lawrey 2009), in 2010 it is still unclear whether, for Brunei, oil and gas is a blessing or a “curse” for development. The blessing from oil and gas is the wealth and all it brings: good infrastructure; free, high quality healthcare and education; no personal income tax or sales taxes; heavily subsidised retail prices for petrol, diesel, electricity, rice and sugar that have not changed for many years, and a relatively high material standard of living for the country’s citizens.

However, countries that rely on natural resource exports, and especially those with oil and gas wealth, typically have large, well-paid government sectors where, with some exceptions, the best and brightest work, and small private sectors that are dependent, directly and indirectly, on government expenditure. Relatively high wages and low productivity make manufacturing and other private sector activities uncompetitive in the international market and reinforce the dominance of the public sector. Hence the economy becomes almost entirely dependent on the public sector and on the oil and gas industry itself, which is highly capital intensive and not a large employer. This situation is known as the *resource curse hypothesis* and it is a fairly accurate generalisation about the economy of Brunei which, despite nine 5-year national development plans that have attempted to promote economic diversification over the last few decades, is still very dependent on oil and gas.

The resource curse hypothesis concerns the apparent negative relationship between natural resource abundance and economic growth. Also called the Dutch disease, this phenomenon was observed in the Netherlands in the 1970s when the manufacturing sector declined following the discovery and production of large quantities of natural gas. There has been a multitude of academic work in this area.

For an overview of the possible causes of the tendency for resource-rich countries to grow more slowly than resource-poor countries, see Sachs and

Warner (2001). For analysis of the resource curse and its relationship to openness, terms of trade, investment and education, see Papyrakis and Gerlagh (2004). For analysis on the resource curse and public expenditure policies, see Atkinson and Hamilton (2003), and for a discussion of the hypothesis' applicability to Brunei Darussalam, see Tisdell (1997) and Haji Ismail Duraman et al (1998).

This paper does not claim to have the answer to the economic diversification problem. As cited above, many better minds have addressed this question over the years and many better minds in the public, private and semi-government sector are addressing it now, in 2010. Moreover, this short paper cannot address every issue of relevance to economic diversification and does not attempt to analyse issues such as domestic unemployment and the presence of foreign workers, availability of finance and foreign direct investment, land policy and many other important factors. Rather, the paper attempts to demystify the workings of the economy for an educated, non-economist reader highlighting the almost complete dominance of oil and gas that can be hidden by simple reference to national income accounts. While there clearly is no simple, prescriptive answer to the problems of economic diversification, the paper also reviews some of the options available to the country and gives an economist's perspective on the suitability of the various strategies.

The paper is organised as follows: the second section briefly discusses the need and possible urgency for diversification in Brunei. In order to understand how diversification can occur, economists believe it is necessary to have a clear picture of how the economy currently operates, so Section 3 gives a simple description of the way that oil and gas revenues drive the Brunei economy in 2010. Section 4 discusses what to do and how to do it: diversification options, strategies and implementation. It also presents the author's views on the extent to which free markets can, on their own, produce the desired results, and the extent of government intervention that may be required. Section 5 presents some concluding remarks and recommendations.

2.0 Why Diversification?

The problem of dependency on oil and gas is not just that these hydrocarbon resources are non-renewable, within a human planning horizon. Brunei will not “run out” of oil and gas. As fields age, the ease of extraction decreases and secondary and tertiary methods such as water and carbon dioxide injection are required to extract the resource. In Brunei, “snake wells” have been developed in which horizontal drilling allows access to less easy-to-get-at pockets of oil and gas. These techniques increase the cost of extraction, and when production costs approach or exceed market price, extraction becomes uneconomic and remaining reserves have no economic value until and unless market prices increase sufficiently to cover costs or new technologies are developed which allow profitable access to these resources (see Tietenberg (2005) for the distinction between economic reserves and physical resources).

Another problem concerns the economy’s over-dependency on one particular source of external revenue, whether it is from natural resources or any other product or service. Over-dependence results in the economy being subject to world fluctuations in demand and prices that are outside the control of the country. As an example, oil prices actually received by Brunei Darussalam have recently fluctuated between US$13.43 per barrel in 1998 (Department of Economic Planning and Development or Jabatan Perancangan Dan Kemajuan Ekonomi (JPKE) personal communication) to more than US$100 per barrel in 2008 and have subsequently declined to approximately US$75 per barrel in 2010. More diversified economies are better able to withstand these fluctuations with less dramatic changes in per capita Gross Domestic Product and government revenues.

There is an argument that the best use of oil and gas revenues is to invest them overseas to build up a sufficient stock of wealth such that the annual dividends could be used to support the country’s citizens as government servants, with welfare payments or with subsidised private sector jobs as discussed in Tisdell (1998). From a purely financial perspective, this view has some merit. Returns from overseas investments may be higher than those possible in the domestic economy at the present time. But this is a risky strategy largely dependent on the performance of the investment managers, which has come under intense criticism since the 2007-2009 global financial crisis. Moreover, this strategy would only promote a dependency syndrome among the local population, which may not serve it well in the long term. So it is generally agreed that, although surplus revenues should be invested where they give the highest return, there is also a need to have a well diversified, productive and economically competitive local economy in Brunei.

A major issue concerns the dynamic process and timing of diversifying away from oil and gas. In theory, during the period when there are plentiful reserves and production, coupled with high potential returns overseas, it may be most appropriate to invest oil and gas revenues overseas, use the returns as described above, and only repatriate these funds when oil and gas revenues start to decline. But with the main shallow water fields having produced for some 40 years and beginning to show declining output (see Table 1), it appears that, despite the merit of that argument, the time for diversification has become more urgent.

As the author has argued previously, the urgency for diversification depends on the rate at which production from existing fields declines and the potential for production from new areas, in particular the deep offshore Block J (see Sobrina Rosli, Brunei Times 2008). These deep offshore oil and gas areas that, a few years ago, looked such good prospects to extend the life of reserves came into dispute with Malaysia in 2003 and, although officially resolved in March 2009, development drilling is yet to commence. The details of the agreement are not in the public domain but it appears that a technical committee has been established to consider issues related to surveying, delimiting and demarcating the land and maritime boundary between Brunei and Malaysia. With limited potential for new large scale discoveries outside this area and a declining reserve-production ratio in the older fields, the need to diversify the economy and resolve the access to Block J becomes more important.

In this regard, Table 1 shows what appears to be the systematic decline in crude oil and, to a lesser extent, natural gas production and exports. While historically high prices for both crude oil and liquefied natural gas (LNG) over this period have more than offset reduced production, and thereby increased nominal GDP, the decline in production, and constant dollar GDP, is worrying. If these declines were due to planned conservation of the resources they would be admirable, but it now appears that the declines are due to the age of the fields and declining productive capacity. This makes it even more important to find new economic drivers and/or to resolve the on-going issue of access to Block J.

Table 1.
Key Economic Data for Brunei Darussalam 2006-2008

	2006	**2007**	**2008**
Crude oil production (thou bbl/day)	219	194	175
Crude oil exports (thou bbl/day)	199	173	153
Natural gas production (MMscf/day)	1,250	1,215	1,182
LNG exports (MMBtu/day)	1,032,150	996,328	999,622
Oil and LNG exports as a % of total exports	96.3%	96.1%	97.8%
Crude oil and LNG export revenues (BND million)	B$11,671.60 (US$8,337)	B$11,110.70 (US$7,936)	B$14,615.30 (US$10,440)
GDP (B$ millions)	B$18,225.80 (US$13,018)	B$18,458.40 (US$13,185)	B$20,397.90 (US$14,570)

Source: JPKE (2009)

Given that Block J is in deep offshore waters, only substantial production in the approximate range of current total production for Brunei would make economic sense. So if this development is successful, revenue flows and the impact on GDP would be very substantial. However, the problems of over-reliance on one source of income, such as extreme price fluctuations and limited direct employment remain. Moreover, should this development not be economically viable, the need for economic diversification becomes even more urgent[1].

[1] Other recently awarded blocks are L and M onshore and Block K in deep offshore waters. Although exploratory drilling is being done onshore, the real potential for large reserves is deep offshore where currently no drilling is being undertaken.

3.0 A Simple Stylised Picture of the Brunei Economy

In order to understand the issue of economic diversification, it is first necessary (at least from an economist's point of view) to understand how the economy operates at the present time.

Figure 1 highlights the main features of the Brunei economy. Oil and LNG export revenues initially accrue to Brunei Shell Petroleum (BSP) Sdn. Bhd. and Brunei Liquefied Natural Gas (BLNG) Sdn. Bhd. and indirectly to Total Sdn. Bhd. Some of these revenues are used to pay direct employees, contractors and suppliers. Direct employees of the oil and gas industry are only approximately 4,000 in total. The remainder of the revenues may be retained earnings for future investments and dividends sent overseas.

The Brunei Government takes a large share of the revenue through corporate income taxes, royalties and dividends due as a fifty percent owner of BSP. Approximately 90 per cent of government revenue comes from this source with the remainder coming from import duties and administration charges[2].

The greater the value of oil and gas production, the greater will be the percentage of government revenue from this source. BSP operates on a concession arrangement whereas, since the formation of the Brunei National Petroleum Company, or PetroleumBrunei, in 2002, new upstream operations have been on production sharing arrangements. PetroleumBrunei was originally granted the mineral rights to Blocks J, K, L and M, and with the Brunei Economic Development Board (BEDB), it is actively involved in promoting the Sungai Liang petrochemical projects, in which it is expected to be the local partner.

Government spends its revenue on staff emoluments and development expenditures. When oil prices and government revenues are high, surpluses accrue, which are invested mainly overseas. When oil prices are low, the

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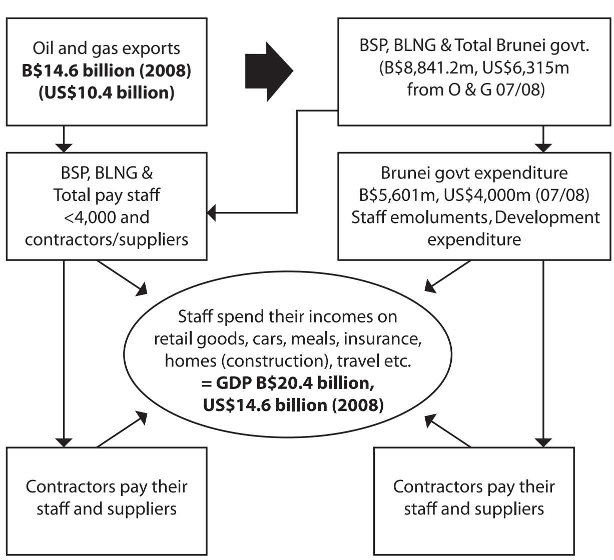
[2] In the 2007/2008 financial year, oil and gas contributed B$8,841.2 million of total government revenue of B$10,041.6 million (88 per cent) (Ministry of Finance 2009).

Government has budget deficits. Employees of the Brunei Government, of BSP, BLNG, Total and the staff of their contractors spend their money on consumer goods, houses, cars etc. The value of these expenditures multiplies as it works its way through the economy so that Gross Domestic Product (the value of goods and services produced in the economy in one year) is greater than the initial value of the money released into the economy by Government and BSP, BLNG and Total Sdn Bhd. In 2008, forecast GDP was B$20,398 million (US$14,570 million) and oil and LNG exports totalled $14,615 million (US$10,439 million). The non-oil private sector contribution to GDP in 2008 was only B$3,946 million (US$2,819 million) and even this was still largely reliant on oil and gas since it is based on the expenditures of government servants and others who are paid with the revenues from oil and gas exports. There is very little economic activity that is completely independent from oil and gas with fisheries, forestry, agriculture and tourism contributing only approximately one per cent of GDP. The only other major export earner is the declining garment sector which contributed just B$121 million (US$86 million) in 2008 (JPKE, 2009)[3] .

Figure 1.

A Simple Stylised Representation of the Brunei Economy



Source of data (JPKE, 2009)

[3] All conversions to US dollars are at B$1.40 to US$1.00

Figure 1 does not show "leakages" from the domestic economy, but whenever money is spent outside the economy (by purchasing equipment, consumer spending across the border etc.) it may reduce the multiplier effects of the original injection of oil and gas revenues and thereby reduce potential output and employment. This effect is, however, conditional on there being productive capacity in the country. Without the necessary productive capacity, increased domestic demand may simply lead to inflation. Another caveat concerns the importation of capital equipment that could, in the medium to long term, increase domestic output and GDP. The simple picture given here highlights that there are two ways the economy can grow: either through increasing exports (oil and gas or other products or services), or by import substitution.

New and existing small and medium enterprises (SMEs) that sell their output in the local market can aid economic growth and employment by expanding their activities, but this import substitution alone cannot truly diversify the economy as long as the original source of income of consumers (the Brunei population), is revenue from oil and gas exports.

4.0 Diversification Options

Diversification can be considered in two parts: what to do, and how to do it? What to do has been considered many times, in the various National Development Plans, by the Monitor Report of 2001 and other consultants' reports. Financial services, business services, hospitality and tourism, and transportation and logistics were identified as prioritised clusters by the Monitor Report, using its principal's (Michael Porter) cluster analysis as the basis for the recommendations. Other clusters that were identified as potential sources of diversification were education and knowledge creation, apparel, and agricultural products[4] .

[4] The Department of Agriculture, Ministry of Industry and Primary Resources has recently released an aggressive strategic plan to grow the agricultural sector in line with the current strategy to promote greater self sufficiency in rice production (Department of Agriculture and Agrifood (2009)).

These industries were in addition to the two-pronged approach of the Brunei Economic Development Board (BEDB) at that time to develop the Sungai Liang Industrial Park (SPARK) for downstream oil and gas industries and Pulau Muara Besar as a container terminal and transshipment hub.

Over the last few years since the Monitor Report was released, the BEDB (2010) has been very active in promoting and developing a wide range of development initiatives in Brunei. These range from downstream oil and gas activities such as the Brunei Methanol Company, through housing and other infrastructure projects to the Brunei Halal brand and support for start-ups in the iCentre. The BEDB's core business is to attract Foreign Direct Investment (FDI), and it is marketing Brunei aggressively over this range of investment opportunities as well as Pulau Muara Besar. The big question is why, with the exception of SPARK developments, there has not been any large-scale investment that could add substantially to, or partially replace, export revenues from oil and gas? Part of the answer lies not just in the strategic selection of niche markets and products to target, although this is obviously important, but in the planning, commitment and implementation of those strategies.

4.1 Institutional/Philosophical Perspectives

One issue that has been raised many times in debates on the diversification of the economy concerns the fact that Government plays too big a role in the Brunei economy and "crowds out" potential private sector involvement because of its activities in areas that could be undertaken by the private sector, such as electricity generation. This thesis postulates that the private sector will grow if the role of Government is reduced. Moreover, government employment is usually preferred to private sector employment by locals, because of the higher salaries, better benefits and job security.

Consultants have argued that one way to address this imbalance is to freeze or even reduce government salaries and benefits thereby making the private sector relatively a more appealing option for job seekers. The trouble with this argument is that to a very large extent the private sector in Brunei is dependent on the expenditure of public servants so, in the short-term, reduced expenditure by government servants will result in a smaller private sector with even lower wages and the potential for the economy to go on a downward spiral.

The theory is that consumer confidence will be increased by the reduced role of Government, and the public would then use their savings both to consume and to start businesses that would then replace the Government as the main employer. This view also maintains that, despite the logic of the Monitor Group recommendations, there is more risk in the Government targeting specific sectors than by letting private enterprise decide what the best areas for growth are. This view argues that the economy will grow "organically" if the right infrastructure and incentives are put in place.

There are two distinct issues here:
1. The economy will grow organically if left alone
2. The size of Government should be reduced

Regarding the first point, there certainly is a small, vibrant private sector in Brunei. There are restaurants, computer retailers, fabric shops, as well as the banks and insurance companies and many other successful businesses. These firms can be help re-circulate the oil and gas revenues in the economy and can substitute for consumer imports from neighbouring countries, but they cannot drive the economy. New industries will be needed to complement oil and gas revenues, but who will build these industries if Government is not involved? At the time of the 2001 census, there were less than 30,000 Bruneians in the private sector (JPKE, 2005). There are 3,800 students in Universiti Brunei Darussalam and approximately 500 in the Faculty of Business, Economic and Policy Studies (FBEPS). There is not the critical mass of potential innovators and developers that would normally be expected to develop large scale industries. Although it is not out of the question that a new Bill Gates or Michael Dell will emerge from Brunei, is it sensible to base policy on it happening?

Proponents of the second point that the size of Government should be reduced, argue that even if government spending is reduced, aggregate demand may not fall because consumers will increase their spending by reducing savings or actually spending their savings, thereby offsetting lower government expenditure. The trouble with this argument for Brunei is the very limited level of private savings. In response to the loan-capping directive in 2005 by the Ministry of Finance, personal loans have been on a declining trend. But despite this, in the first quarter of 2008 personal loans still accounted for 43 per cent of total outstanding loans of B$6 billion of which personal loans were B$2.6 billion (Ministry of Finance, 2009). Given an estimated local population (citizens and permanent residents) at that time of approximately 289,000 (JPKE, 2009), this translates to B$9,000 for every man, woman and child. Alternatively, every member of the labour force of 189,000 owes B$13,750, and this includes foreign workers, many of whom would not qualify for personal loans. Personal indebtedness is greater if outstanding mortgages of B$1.08 billion (Ministry of Finance, 2009) and credit card debt are included. Under these circumstances, the consequences of reducing government employment, salaries and benefits are very likely to be unemployment, reduced economic activity, bankruptcy and poverty.

The alternative approach would be to increase government expenditure, stimulating economic activity in the private sector. Some of the recent budget surpluses could be spent on Public Private Partnerships to build industries to aid diversification. At the same time, changes can be made to education, bureaucracy, availability of finance, SME promotion etc. No approach is perfect. The problem with this approach is that it continues the reliance on Government in the short term. The problem with the other approach is the potential social problems and whether organic growth will ever happen.

The World Bank Group's ranking of international competitiveness highlights problems inherent in an economy that has become so dependent on the Government sector. Brunei is ranked 96 overall out of 183 countries and every measure for 2010 is the same or lower than in 2009 with the exception of paying taxes. It is very difficult to start a business in Brunei, but when one has done so, it is quite easy to pay taxes! Brunei ranks last out of the 183 countries for registering property and greater than 100 for starting a business, getting credit, protecting investors and enforcing contracts. Brunei ranks fourth for the ease of employing workers (World Bank Group, 2010).

While small changes in annual ranking should not cause any great concern, the overall picture is one of great difficulty for the private sector to participate in the economy. This picture is reinforced by the World Economic Forum's Global Competitiveness Report for 2009/10 in which it highlights problematic factors for doing business in Brunei as restrictive labour regulations, inefficient government bureaucracy and access to financing.

It seems that the Government's role in the economy is a "two-edged sword". Government expenditure, both development and recurrent, is the driving force behind the economy and without it, much of the current private sector would be in dire straits. Yet it is government bureaucracy that appears to be the cause of much of the difficulty of doing business in Brunei. Small population is not necessarily a problem. The major development issue for Brunei is the development of new export industries and these are not dependent on the national population base.

5.0 Recommendations

From the discussion above, this paper argues that Government must be involved in the diversification of the economy. There simply is not the critical mass of entrepreneurship, availability of financing, patents and innovations to base development policy on "organic" growth. The key, I believe, is coordination. A policy to down-size Government through measures to increase productivity, contracting-out, corporatisation and privatisation will allow increases in government salaries tied to performance. However, as argued previously, it is naïve to believe that the laid-off workers will, themselves, start private sector enterprises sufficient to absorb this new resource. So, while increasing productivity in the public sector, private sector developments must be started.

These are most likely to be successful if in the form of Public-Private-Partnerships (PPPs) whereby the private partner (very likely from overseas) supplies expertise, possibly existing markets and capital, while Government supplies at least some of the financing and ensures that its own bureaucracy does not block the enterprise. Moreover, the difficulties in starting a business that are highlighted by both the World Bank and the World Economic Forum must be addressed by streamlining regulatory procedures and reducing bureaucracy. The current developments in e-government could have an important role to play in this area.

This then raises the question of the institutional arrangements necessary for this system to work. The BEDB can attribute at least some of its success to its relative independence as a statutory body. But it still has to deal with all the various Government ministries and departments in order to get things done. The success of a major export-oriented foreign direct investment is dependent upon a whole range of inputs and processes such as: the availability of appropriately trained labour; access to land with the necessary infrastructure and road access; provision of suitable, reliable energy at the right price; clarity about taxes, regulations and laws for an extended period into the future etc. These issues cross government departmental boundaries and any one of them could stall otherwise successful investments.

This paper argues that what is required is a coordinating body, representing all relevant ministries, with the power to act on these issues. One of the great benefits of the political stability inherent in Brunei is that it allows long-term planning so that given the right institutional environment and clear vision, everything from education to energy and land can be brought together to achieve national goals. Downsizing Government should only be undertaken in conjunction with the active promotion of the private sector and with appropriate sequencing of relevant policies. Once there is a critical mass of private sector economic activity, the Government can more actively reduce its role and let market forces contribute to a greater extent.

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CSPS Strategy and Policy Journal, Volume 1, July 2010, Pages 29-54

Challenges in Achieving Wawasan 2035 Goals: Economic Diversification in Perspective

Abdul Amin Haji Hashim

Abstract

Brunei Darussalam has experienced more than fifty years of development planning since the launch of its first National Development Plan 1953-1958. The efforts to diversify its economy have been the recurrent theme in the Plans due to Brunei Darussalam's heavy dependence on the hydrocarbon resources. Despite continuous efforts, from policy formulations to implementations of programmes and projects, the prominence of oil and gas is still clearly visible in the socio-economic landscape of Brunei Darussalam. As in the past plans, the new Long-Term Development Plan (LTDP) also emphasises economic diversification with the added impetus of optimising its comparative advantage. This paper discusses the extent of Brunei Darussalam's dependence on the hydrocarbon resources and the challenges that Brunei Darussalam has to overcome to accomplish the goal of ensuring a dynamic and sustainable economy as spelled out in Wawasan Brunei 2035. The biggest challenge for Brunei Darussalam is how to attract and congregate investors in sectors that promote diversity and the sustained benefits derived from them. Lessons from economies such as Singapore and the UAE have enlightened us about the need to focus and invest more in areas that relate to both macro and microeconomic management.

Keywords: *economic diversification, economic dependency, locational advantages, microeconomic management*

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1.0 Introduction

Brunei Darussalam has experienced more than half a century of development planning which started in 1953 with the launch of the first 5-year National Development Plan (1953-1958). Since then, Brunei Darussalam has progressed from being a backwater, underdeveloped and impoverished third world country to a country straddling the developed and the less developed - with a high level of per capita gross domestic product (per capita GDP) and a high quality of life.

However, its economic structure continues in many respects to be similar to that in the 1970s and even earlier. A range of efforts (from policy formulations to the implementation of programmes and projects) has already been actively undertaken by various agencies to transform the economic structure of the country – from one which is solely dependent on its hydrocarbon resources to one that has diversified sources of income. We are not short of ideas and initiatives; however, today we still observe the significant contribution of the oil and gas sector to the economy and to development as a whole. There are impediments and challenges to overcome in the effort to diversify the economy of Brunei Darussalam.

This paper discusses challenges in the attainment of economic diversification from a macro perspective and how they relate to the long term goals of Wawasan Brunei 2035. Section 2 provides the general background to this paper and the first part of the section describes briefly some conceptual and theoretical underpinnings of economic diversification.

This is followed by a historical account of economic diversification in the context of development planning in Brunei Darussalam. Section 3, which is the core of this paper, discusses some macroeconomic indicators that relate to progress in economic diversification and the implied challenges faced by Brunei Darussalam. Some empirical evidence of how other countries grow and develop is also discussed. This is complemented by a brief discussion of composite indices to determine specific areas that need attention. Section 4 wraps-up the discussion.

2.0 Some Background to the Concept of Economic Diversification

Economic diversification has often been promoted as a means of achieving the economic goal of stability and sustainability. In Brunei Darussalam, the concept was meant to diversify the economy away from oil and gas which, in the process was hoped, would strengthen the non-oil private sector as a major source of income and employment. This has been the recurring theme in the previous development plans. In the new Brunei Darussalam Long Term Development Plan (LTDP), economic diversification is still emphasised but with an additional weight put on optimising Brunei Darussalam's comparative advantage.

2.1 Economic Diversification in Theoretical Perspective

The concept of economic diversification is derived from development economics which, among others, deals with the topics of development planning and policies. The word 'development' itself is open to numerous interpretations and deliberations and generally refers to economic development. Todaro (2000), for example, states that

> *"Economic development in the past has also been typically seen in terms of the planned alteration of the structure of production and employment so that agriculture's share of both declines, whereas that of manufacturing and service industries increases."*

This essentially is the core of the theories of structural change and therefore economic diversification.

However, development, according to him, is not only about the changing structure of the economy but is multi-dimensional in nature,

> *"Involving major changes in social structures, popular attitudes, and national institutions, as well as the acceleration of economic growth, the reduction of inequality, and the eradication of absolute poverty".*

Indeed, Gillis et al (1987) made the distinction between economic growth and economic development. Economic growth is clearly defined as a rise in national or per capita income and output. They further opined that economic development,

> *"in addition to a rise in per capita income, implies fundamental changes in the structure of the economy, ... the rising share of industry ... in national product."*

In line with the changing demographic structure, consumption patterns also change as the people no longer spend all their income on necessities, but instead spend more on durables and eventually on leisure time products and services. Furthermore, as maintained by Gillis et al, the key element in economic development is that the people of a country must be the major participants in the process of change. The benefits of growth and development must necessarily trickle down in a big way to the people.

Three questions may also need to be outlined here in the context of economic development and diversification in Brunei Darussalam, i.e., the relationship between oil and economic development. Kong Tse and Fernandes (1991) address the following questions: (i) whether the oil industry functions as a leading sector and gradually induces the development of other related industries; (ii) whether the increase in income broadens the size of the domestic market, making economy of scale more attainable, and eventually leading to the development of more domestic industries; and (iii) whether the Government used the enormous sum of petro-dollars to build-up a broad and diversified economic base? The answers to these questions are obviously related to the concept of linkages as proposed by Hirschman – forward-backward linkage is related to the first question, consumption linkage associated with the second question and fiscal linkage to the third question. In the context of economic diversification in Brunei Darussalam, the three linkages mentioned do contribute to economic development in one way or another and they are interlinked with each other.

2.2 Previous National Development Plans (1953 – 2005)

Brunei Darussalam adopted the planned-economy model through the implementation of a succession of its National Development Plans or Rancangan Kemajuan Negara (RKN) which began in 1953 with the execution of the first 5-year RKN (1953-58). Before the new LTDP was launched in 2008, the country had implemented eight RKNs, each one with its own emphasis in accordance with the needs of the time. The preoccupation of the first national development plan or RKN1, for example, was with building the necessary social infrastructures such as schools, roads, water, electricity, housing and hospitals. The development and construction of those social infrastructures continued in the RKN2 (1962-1966) especially with the construction of more schools, utilities, and transportation networks.

Table 1.
Long-Term Objectives of the National Development Plans (1986-2005)

1) Improving the quality of life of the people
2) Maximising the economic utilisation of national resources
3) Developing non-oil industries
4) Accelerating human resources development
5) Maintaining full employment and increasing the level of productivity
6) Maintaining a moderate rate of inflation
7) Fostering a more disciplined, self-reliant and caring society
8) Encouraging and nurturing the development of rakyat Melayu as leaders of industry and commerce
9) Maintaining a clean and healthy environment

Source: 8th National Development Plan

On the economic structure, it was recorded in RKN2 that oil and gas contributed to around 80 percent of Brunei Darussalam's GDP. Due to this dependency, one of the main objectives in RKN2 was to develop and expand the primary industries.[5] This continued in both RKN3 (1975-1979) and RKN4 (1980-1984), alongside the plans to expand existing infrastructure further to accommodate the demands of the growing population.

After Brunei Darussalam gained its full independence, the country introduced its first long term development objectives which encompass a twenty-year period between 1986 and 2005. The nature and structure of the economy warrants the continued use of the plan model. A total of four medium-term development plans were formulated, consisting of RKN5 (1986-1990), RKN6 (1991-1995), RKN7 (1996-2000) and RKN8 (2001-2005). Development strategies, policies, programmes and projects for each of the RKNs developed for the two decades were aligned to the nine development objectives (Table 1). Among the nine development objectives, economic diversification, as denoted by the objective of "developing non-oil industries", is visibly one of the major foci of policy makers and a list of strategies has been developed towards that. Furthermore, a few other objectives are also directly related to the accomplishment of this objective such as maximising (optimising) the economic utilisation of national resources, and encouraging and nurturing the development of *rakyat Melayu* as leaders of industry and commerce. Generally, Brunei Darussalam has accomplished the socio-economic objectives and this is confirmed by the Human Development Report 2009 which ranks Brunei Darussalam 30th out of 178 nations. However, improvements are called for on its achievements of the purely economic objectives.

3.0 Past Achievements and Challenges Ahead

As briefly discussed above, economic diversification has consistently been one of the main development themes or objectives pursued by Brunei Darussalam in preparing itself for a "non-oil" future. However, the current socio-political

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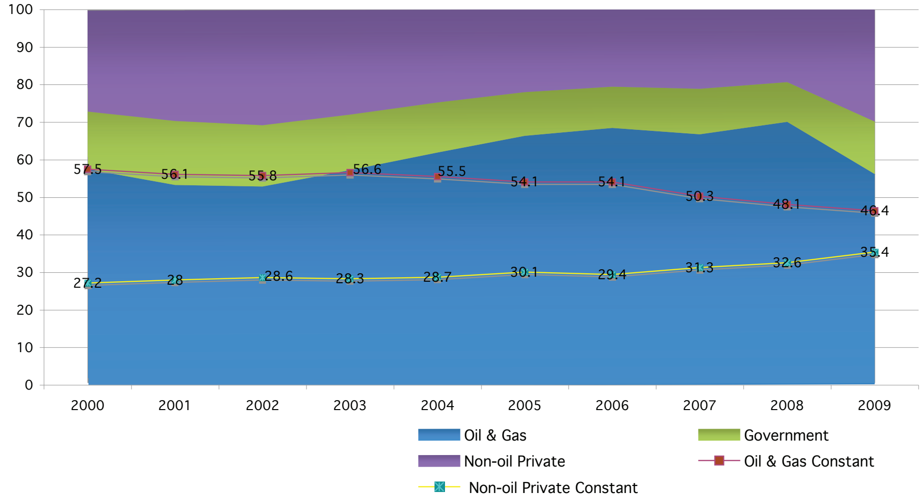
5 See also Yunos (2009), pp. 144-150

and economic structure of the country proves that economic diversification is an intricate issue that needs bold and calculated measures for it to be fully accomplished. In *Brunei Darussalam: Developing Within Its Own Paradigm,* a paper contributed to Southeast Asian Affairs by Haji Duraman and Haji Hashim (1998), it is noted that *"There are some areas where government could use its influence and others where it should allow the 'invincible hand' of the market to determine resource allocation."* They further argued that *"Since development from Brunei's perspective incorporates essential values, high economic growth itself is considered meaningless if undermined by frequent social unrest and political instability. Such a situation can create tension and compromise Brunei's development objectives."* Kong Tse and Fernandes (1991), Ali (1992), Cleary and Shuang Yann (1994), Haji Duraman (1994), Haji Duraman and Haji Hashim (1998), Opai (2008) and Yunos (2009) have made their assessments of the extent of achievement of the objective of economic diversification and discussed the impediments and challenges faced by Brunei Darussalam. The macroeconomic perspective of economic diversification and how it relates to Brunei Darussalam's growth and development are discussed below.

Figure 1.
Sectoral Contribution to Gross Domestic Product

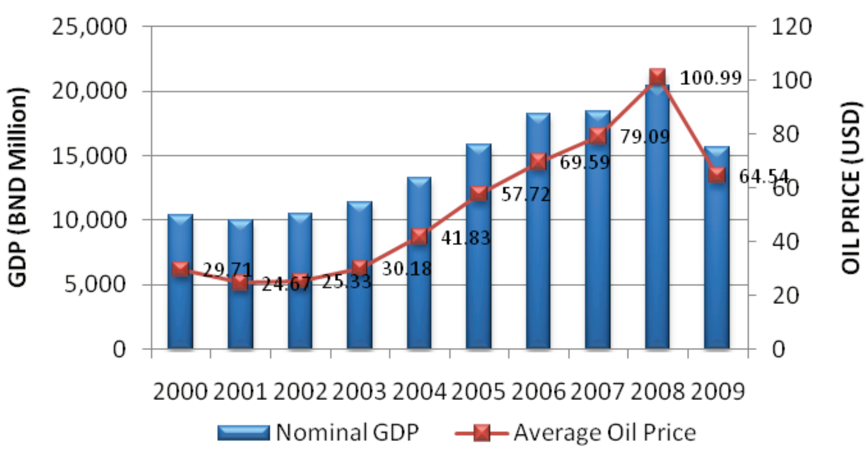


Source: Department of Economic Planning and Development

An examination of the sectoral contribution of GDP elicits a number of observations about the nature of the country's economic growth and distribution. Figure 1 shows the sectoral contribution to the GDP of Brunei Darussalam between 2000 – 2009. It can be clearly observed that the contribution of the oil and gas sector to nominal GDP has been relatively high over the past few years and peaked at approximately 70 percent of GDP in 2008 compared with about 58 percent in 2000. The corresponding figures for the Government and non-oil private sectors were 10.6 percent and 19.3 percent for 2008 respectively.

One of the consistent features observed is the determining influence of the global prices of the hydrocarbon products on nominal GDP and the correlations between them. When oil and gas prices were high, the contribution of the sector to the economy was also high, as evident in 2008 when the average price during the year was US100.99 per barrel as shown in Figure 2. Correspondingly, when prices were low, oil and gas contributions to GDP were also low as exemplified in the early 2000s. During the last two decades, the most adverse effect on Brunei Darussalam was the Asian financial crisis of 1998 that triggered reduced demand for the petroleum products and consequently a record oil price declined to approximately USD12.00 in that year.

Figure 2.
Nominal Gross Domestic Product & Average Oil Price (USD)

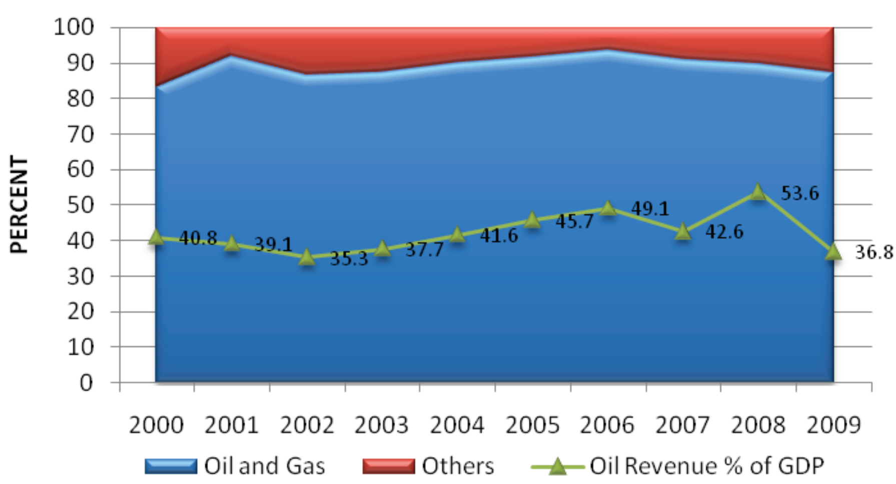


Source: Department of Economic Planning and Development

As additionally illustrated in Figure 1, the picture looks quite different when the effect of price increases has been factored in. To be precise, the real contribution of oil and gas to GDP (GDP at constant prices) has actually declined gradually over the years, from around 58 percent in 2000 to around 46 percent nearly a decade later. The corresponding figure for the contribution of the non-oil and gas private sector has also gradually increased to 35 percent by 2009. Evidently, the fate of Brunei Darussalam's economic growth and the eventual prosperity hinges a lot on an external factor – volatility of oil prices – which poses an equally big challenge to both the oil and gas industry and also Brunei Darussalam's economic development in the future.

The trend in the real GDP growth is also indicative of the consequence of the structure of the economy and the high weightage of the oil and gas sector. Generally, the positive economic growth of the economy of Brunei Darussalam is incumbent upon the level of oil and gas production. Any shortfall in production will lead to negative growth rates. The non-oil sector, combining the government and the non-oil private sectors, struggles to offset the adverse effects of any decline in production of the hydrocarbon sector.

Figure 3.
Nominal Gross Domestic Product & Average Oil Price (USD)

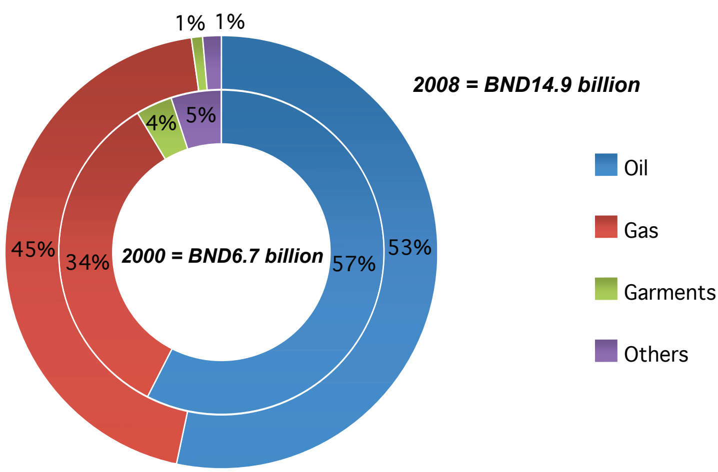


Source: Department of Economic Planning and Development

The effects of the dependence on the hydrocarbon resources are not only limited to the structure of the economy but also government finance. As the economy is not well-diversified, the Government relies mainly on revenue in the form of taxes, incomes and royalties from the oil and gas sector. As shown in Figure 3, over the past few years, together these revenue sources constituted, on average, around 90 per cent of the total revenues collected.

As a result, the Government's revenue from the oil and gas sector as a percentage of GDP has consistently been above the 30 percent mark. Again, the influence of oil and gas prices were evident particularly in 2008 when the average world's oil price was at its peak: oil and gas revenue as percentage of GDP increased to a record 53.6 percent. Economic development in Brunei Darussalam arising out of fiscal linkage therefore has depended to a large extent on the revenue generated from the hydrocarbon industry. The challenge for the Government is how to optimise the revenue transmission mechanism in order to quickly turn those revenues from the oil and gas sector into other non-oil industries and enable more revenue to be raised from the non-oil sources.

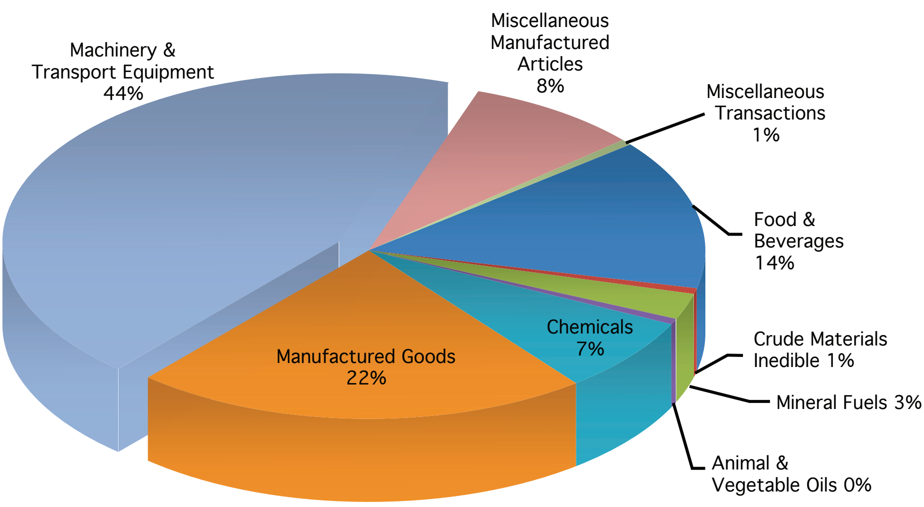
Figure 4.
Brunei Darussalam's Expo



Source: Brunei Darussalam Statistical Yearbook 2004 and 2008

Brunei Darussalam's external trade too has been directly influenced by the oil and gas sector, especially its exports, since oil and gas exports contributed well over 90 percent of total. In 2008, for example, its oil and gas exports together accounted for 98.8 percent (BND14,615 million) of its total exports of BND14,942 million. In comparison the exports of hydrocarbons in 2000 were BND5,884.28 million which was 87.4 percent of total exports. The increase in oil and gas exports between 2000 and 2008 was again primarily due to price increases as well as increases in the volume of their exports. Also, quite obviously the production of oil and gas and their exports go hand in hand and, as mentioned above, this is by far the principal source of government finance. The export of garments, which is the only significant non-oil export component, has declined in importance. Its share of total exports decreased from around 4 percent in 2000 to only 1 percent in 2008.

Figure 5.
Imports of Brunei Darussalam in 2008



Source: Brunei Darussalam Statistical Yearbook 2008

The import components of Brunei Darussalam are also, to a large extent, a consequence of the structure of the Brunei Darussalam's economy. The country imports almost all of its consumer and capital goods requirements. Imports have gradually grown in value over the years. In 2000, Brunei Darussalam imported just about BND2 billion in merchandise, and this figure increased to more than BND3.6 billion in 2008. The bulk of these imports in 2008 comprised machinery and transport equipment (44%), manufactured goods (22%) and food and beverages (14%) (Figure 5). Ali (1992), through his examination of the imports components, suggested the viability of import-substitution industries of consumer products in Brunei Darussalam. Many imported products, which are price inelastic, have backward linkages with the agricultural sector, are produced from the same source of raw materials and, most importantly, their production requires only intermediate technology suitable for small-scale industries. One of the challenges in this respect is the competition local producers have to face against the more established and competitively-priced imported products, especially as Brunei Darussalam is party to bilateral and multi-lateral trade arrangements.[6]

The economy of Brunei Darussalam, thus far, resembles that of a *rentier economy* in which it is solely dependent on income accrued from abroad for the sale of its main product – oil and gas – from a "booming sector" and thereby has a relatively "neglected" non-oil sector.[7] The existing size and structure of the non-oil private sector in Brunei Darussalam do seem to indicate the legacy of rentierism. More than 95 percent of all establishments in the private sector are considered as micro, small and medium enterprises and a large proportion of them are actively concentrated in the services industry.

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[6] However, it is observed that some locally produced food products have been able to compete with imported ones. Perhaps their quality matters most to the Bruneian consumers and for sure we can learn from these successful producers.

[7] Beblawi delineates four characteristics of a rentier economy. First, rent situations must predominate in that there really is no such thing as a pure rentier economy. Second, the rent must come from outside the country. Third, in a rentier state only the few are engaged in the generation of rent, while the majority is involved in its distribution and consumption. Translated, this means that government leaders make the deals and take in the revenue and then allocate to the public, which is not involved in creation of the wealth. Fourth, the government must be the principal recipient of the external rent in the economy. (source: http://en.wikipedia.org/wiki/Rentier_state)

The size and structure of local private enterprises indicate some underlying problems and therefore challenges such as market size, labour force size and quality and ownership structure. There are only a handful of private business enterprises that can be considered as "big" in Brunei Darussalam and can command enough confidence as a sustainable source of income and employment.[8] For a company as large as Brunei Shell Petroleum (plus Brunei LNG Sdn. Bhd. and other oil-related companies) in total employs only approximately 4 percent of Brunei Darussalam's total workforce, understandably due to their capital-intensiveness. Nevertheless, it is the micro, small and medium size establishments that employ a sizeable number of workers in Brunei Darussalam, although ironically approximately 70 percent of those employed in the private sector are foreigners.[9]

Well-educated Bruneians shied away from these establishments and opted for the Government in their bid to secure a more reliable and sustained source of income. In view of this, and especially to put more weight on the economic diversification drive, the Government effortlessly amplified its efforts through various policies and the implementation of those policies. One of the biggest challenges in this respect is to encourage more locals to look for opportunities outside the public domain as well as take up risks as entrepreneurs. There are a number of grant schemes for small- and medium-sized enterprises (including IT entrepreneurs) offered by the Government through the Ministry of Industry and Primary Resources (MIPR), such as the Enterprise Facilitation Scheme and the Microcredit Financing Scheme, to *"reduce financial risks of going private"* (The Report: Brunei Darussalam 2009 [The Report]). The latest offering administered by the Ministry of Industries and Primary Resources is the BIBD Export Refinancing Scheme with the objective to make it easier for local SMEs to acquire export financing from Bank Islamic Brunei Darussalam by providing direct and indirect exporters short-term financing to local enterprises before and after making cross-border deliveries, and eventually promotes sustained export-oriented industries.

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[8] In 2007, there were only 17 out of 9,266 establishments in the private sector that employed 500 workers or more, and six of these are in construction sector that engage in short-term employment.

[9] The dualistic structure of the Brunei Darussalam's labour market is a mirror image of the nature of its economy where approximately 30 percent of the total workforces are employed in the public sector contributing about 20 percent to GDP, and the remaining 70 percent in the private sector. Conversely, within the private sector, the locals made up about 30 percent of the workforce while the remaining bulk of employed workers constituted of foreigners.

The challenges in ensuring a well-diversified economy are as significant as ensuring those conditions necessary for economic diversity to happen. For Brunei Darussalam, economic diversification is almost synonymous to economic growth. Therefore in considering what needs to be undertaken to ensure a diversified economy in the future it is important to emphasise the role of capital formation or investment for growth to happen. In other words, the biggest challenge is how to attract and congregate investors in sectors that promote economic diversity and the sustained benefits derived from them. The discussions that follow, therefore, take the conviction that for investments to accumulate and turn into sustained projects it is important to examine and improve Brunei Darussalam's locational advantages.[10]

The role of the Government in economic development is well-known – from policy making to implementation of programmes and projects. The Report precisely concluded that *"the government has intensified its own co-investment efforts in order to act as catalysts for what it considers as strategically important non-government sectors."* In line with an earlier study carried out by the Monitor Group, which was commissioned by the Brunei Economic Development Board (BEDB) and the recommendations thereof, the BEDB has successfully embarked on the Sungai Liang Industrial Park (SPARK) and secured its first tenant, the Brunei Methanol Company, which was expected to produce methanol for exports in the first quarter of 2010.[11] The initial costs of providing infrastructure for SPARK were sourced from the Government's BND9.5 billion RKN 2007-2012 funds. Additionally, a similar model is to be implemented in the proposed development of the *Pulau Muara Besar.*

[10] Locational advantages are those factors that favour a business environment which includes, among others, a strong economy; highly educated workforce; low unemployment insurance and compensation rates plus favorable management/labor relations; college and university systems work cooperatively to provide outstanding training programs for employers; high quality, reliable and low cost electric power; efficient and low cost transportation systems that provide businesses with the means to deliver and receive products conveniently and efficiently.

[11] The SPARK project is one example where Brunei Darussalam re-engineers its economic diversification objective by optimising its comparative advantage – the readily available hydrocarbon resources and highly-educated human resources – which is a u-turn from the earlier concept of economic diversification.

We now observe accelerated and co-ordinated efforts on the part of the Government towards diversification outside of the hydrocarbons sector. MIPR, for example, has launched its international halal brand initiative riding on Brunei Darussalam's reputation of strict compliance with Islamic norms of food handling and processing. The change in name of the Department of Agriculture to the Department of Agriculture and Agri-food shows the intent towards making the sector a significant contributor to GDP and more general economic diversification. The Department's Strategic Plan: Medium Term Implementation Programme (2008-2013), among others, is aimed at strengthening capacities in the agriculture sector in order to ensure increased and sustained production.

In 2009, the Ministry of Finance created the Sustainability Development Fund (SDF). Although the primary objective of the SDF is to provide a platform to ensure long-term fiscal sustainability, it is by no means a small feat in its role in helping economic diversification that it has already secured the involvement of a few companies operating in non-oil ventures as well as acquiring a foreign company involved in strategic operations. The Brunei International Financial Centre was created to leverage on the role of the international financial institutions in local economic growth and development. Locally, financial institutions are also responding to the diversification calls by extending their facilities to SMEs. The Report, however, emphasised the need to instil financial discipline and management in running SMEs businesses. It further envisaged that eventually *"these businesses do not remain small indefinitely but that they will grow to become large corporations with scalable business models."*[12]

In the past, the inefficient implementation of NDP projects has been one of the Achilles' heels of Brunei Darussalam's efforts to accelerate economic development. In response, the Government introduced procedural reforms to shorten projects' approval process and to speed-up implementation by, among others, allowing each ministry to appoint its own project consultants and award contracts on a design-and-build basis.

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[12] Interview with Dato Paduka Haji Ali bin Haji Apong, Permanent Secretary at the Prime Minister's Office (formerly Permanent Secretary at the Ministry of Finance) as it appeared in The Report: Brunei Darussalam 2009.

On top of that, for the same purpose of speeding-up implementations, it is also undertaking regular and continuous consultations with all stakeholders, especially, among others, to speed-up payment of completed projects and procurements to contractors.

Table 2.
Wawasan Brunei 2035 Goals

1) The accomplishments of its well-educated and highly skilled people;
2) The quality of life; and
3) The dynamic, sustainable economy

Source: Brunei Darussalam Long-Term Development Plan

The contribution of the oil and gas sector is undoubtedly immense in improving the quality of life and the lifestyle of the people in Brunei Darussalam. The challenges for Brunei Darussalam are, therefore, not only limited to transforming the economic structure but also the cultural aspects such as attitudes of Bruneians, not only with respect to how they want to be employed but also to whether they themselves want to be employers. The ever-changing global landscape and domestic environment makes economic diversification even more crucial. Hence, the challenges in attaining the Wawasan Brunei 2035's goal of ensuring a dynamic and sustainable economy is also incumbent upon achieving the other two goals of ensuring the accomplishment of highly educated and skilled people and ensuring a high quality of life (Table 2).

Do we have what it takes to draw in investors? In this respect it is worthwhile considering the factors that can make an economy grow as explained by Madrick (2002). According to Madrick, market size (and the expansion of markets for goods and services) and the dissemination of information are two major factors that, put together, can cause an economy to grow with the possibility of trading goods in large volume. Economies of scale (producing goods on a large and efficient scale) can be made possible by combining both domestic and cross-border trade and thereby creating demand for services especially in transportation, communications, retailing and wholesaling services linked to the exchange of goods. In turn, this will provide the necessary incentives to create new products and new ways of producing them. The availability of information is considered important with the premise that when markets grow through trading practices, information will also be passed on.

On other causal factors such as the availability of natural resources, accumulation of savings and its financing, the development of banks and similar financial institutions, entrepreneurialism, technological innovations, and human instinct to improve one's material well-being, Madrick is rather unconventional in his thinking and argues that these factors need some contexts to become effective drivers of growth.

According to the 2010 FDI Confidence Index (2010), a number of factors determine investors' decisions to invest in a foreign country. Senior executives of the world's leading corporations that are responsible for more than USD2 trillion in annual global sales identified access to new markets as the leading driver of their investment decisions, followed by building-up capacity to prepare for economic rebound.[13]

Among the seven drivers listed, tax exemptions and financial subsidies are ranked lowest. Interestingly, the United Arab Emirates (ranked 11th) is listed as one of the top 20 most attractive FDI destinations and the most attractive in the Middle East. Also ranked in the top 20 are the Gulf states of Bahrain, Kuwait, Qatar and Oman as well as ASEAN member countries of Vietnam, Indonesia and Malaysia. According to the FDI Confidence Index: "*Investors have expressed their confidence in Dubai's ease of doing business, access to best-in-class infrastructure, advanced logistics facilities and safe environment".* It further noted that the results are a testament to its success at diversification, and access to Middle East markets and consumers as investor's priority in contrast to access to their natural resources.

Obviously, the related challenges for Brunei Darussalam in this respect are its small market size (population of approximately 400,000 people) and the small size of the non-oil private sector. Its association with the rest of the countries in ASEAN, especially its commitment to the ASEAN Free Trade Arrangement (AFTA) and other bilateral trade and investment arrangements, needs to be leveraged by the Government, businesses and entrepreneurs in this country.[14]

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[13] The 2010 FDI Confidence Index survey was carried out in 2009 when the global economy was facing unprecedented housing market collapse which later on developed into banking system turmoil and eventually economic crisis.

[14] See above note on MIPR's Export Refinancing Scheme.

Kotler et al (1997) maintained that there is no single prescription that all countries should follow in order to build their wealth and national welfare as different countries' endowment and the paths they have undertaken resulted in different growth performance. For these reasons, they have suggested a systematic methodology that each country can apply. This includes an assessment of their existing economic environment, opportunities, strengths and weaknesses, by which the most promising pathways to achieving growth and economic revitalisation can be identified.[15]

In general, Kotler et al (1997) suggested the need to develop a nation's strategic postures that include developing the right investment policies, building on its industrial clusters, and developing its national industrial portfolio, trade policies and macroeconomic policies, infrastructure and institutional framework. They maintained that the role of a nation's ability to support companies' growth and prosperity is crucial by coupling corporate strategy with the nation's wealth-building strategy, nourishing business growth, developing strategic cooperatives and implementing the nation's strategic vision. For Brunei Darussalam, the new LTDP has listed eight development strategies and each one of them is accompanied by several policy directions.[16]

To achieve sustained growth, Brunei Darussalam will have to attract foreign investors while at the same time inject more money to finance incidentals necessary to make the economic environment more attractive.

For any government that is committed to ensuring the economic health of the country and the opportunities for its citizens, it will have to do more than focus on its macroeconomic environment. It must also pay more attention to the micro aspects of economic management such as those suggested in the 2010 Ease of Doing Business survey by the World Bank. This survey showed that Brunei's

[15] The most recent study in this respect is one which was undertaken by the Monitor Group in 2003. Prior to this, in 1995 the MIPR has also commissioned the Manchester Business School to develop the Brunei Darussalam Industrial Master Plan.

[16] The eight development strategies and the fifty (50) policy directions as outlined in the Outline of Strategies and Policies for Development (OSPD) are meant to be picked-up by all relevant stakeholders and to be translated further into more specific policies, programmes, projects and action plans.

rank in overall ease of doing business dropped from 94 out of 183 countries in 2009 to 96 in 2010 (the lower the rank the easier it is to do business). This tells a lot about the challenges that need to be overcome in order to attract more investors and thereby ensure economic diversity and prosperity. The results are mixed - where for some indicators Brunei Darussalam is doing exceptionally well, in others improvements are called for. For the latter, this includes indicators of starting a business, registering properties, getting credit, protecting investors and enforcing contracts.

Another composite indicator, the Global Competitiveness Index, however, holds a slightly different image about Brunei Darussalam. Its rank improved from 39th in 2008 to 32nd in 2009 and it is impressive in its macroeconomic stability. As in the Ease of Doing Business survey results, there are also indicators that need some attention such as market size, goods market efficiency, innovation, business sophistication, financial market sophistication, and higher education and training. Obviously, both Ease of Doing Business and Global Competitiveness indicators point to the need for institutional improvements.

However, as maintained by Madrick (2002), the sources of growth are many, and they interact with, and affect, each other. A fast growing economy motivates more savings, thus making capital investment easier and less expensive. It also provides an incentive for people to educate themselves and drives government to spend more on physical infrastructure necessary to accommodate further growth. Hui Ying (2009), in examining the relationship between capital accumulation and growth in Singapore, confirmed that the high rate of capital formation has contributed positively to Singapore's growth performances between 1960 and 2003 and ultimately to improvement in the living standards of Singaporeans. Furthermore, Hui Ying observed that as Singapore's economy matures, its growth is contributed more by total factor productivity and human capital while contribution from physical capital diminishes.

Finally, the success of Singapore in engineering its prosperity may provide some insights. Its experience may not be directly emulated by, or transferred to, the local environment, but the values that help define Singapore's success might be useful reminders and checklists for development. Ghesquiere (2007), the author of the book *Singapore's Success: Engineering Economic Growth,* underlined the importance of the timing and sequencing of Singapore's policies as vital elements of its success – which implicitly means the heavy-handedness of its government in ensuring economic success.

A myriad of pro-growth policies has been carefully crafted and implemented by the Singapore government ranging from policies on fiscal management, corporate and household savings, monetary and exchange rate policies, healthcare, labour market, open trade and investment policies, and human capital formation. The key to the successful implementation of those policies is pragmatic adaptation and correction. Ghesquiere (2007) noted the following four broad principles as the key factor behind Singapore's enviable growth performance (listed ad-verbatim):

i. fiscal discipline helped generate savings and formed the basis of macroeconomic stability that inspired confidence;
ii. the use of price incentives in key areas such as healthcare, transportation, and the labour market, and integration with world markets promoted efficient resource allocation;
iii. opportunities for participating in economic growth were created and shared widely among the population by raising people's productivity through better health, education, and housing; and
iv. policies were well designed.

To achieve the long term sustainable growth of the economy and the resulting socio-economic benefits, it is important therefore to widen the economic base. This will generate more income and employment and, at the same time, will also widen the sources of revenues for the Government. In this respect, the LTDP was framed with the recognition that economic diversification is even more important now than it was in the past, given that the hydrocarbon resources are not just depleting but alternatives to its usage are continuously being developed. Not only does oil price volatility, which is well beyond the control of the Brunei Darussalam, matter, but also the improving technology that may render oil less relevant to energy needs in the future.

The LTDP, which consists of three major components – *Wawasan* (Vision) Brunei 2035, Outline of Strategies and Policies for Development (OSPD) and the National Development Plan (RKN) – provides the framework for future socio-economic development in Brunei Darussalam.

The *Wawasan* Brunei 2035 lists three goals and for each of them is spelled out some general development targets which are benchmarked against international standards. On the economy, the target is to place Brunei Darussalam's per capita GDP rank among the top ten worldwide. To ensure the achievement of the vision's goals, eight development strategies have been set to be implemented in an integrated and well-coordinated way.

Table 3.
Policy Directions in Economic Strategy

1)	Ensuring continued macroeconomic stability
2)	Ensuring high rates of economic growth so that work is always available for our young people entering the labour market each year
3)	Developing further a strong capital market including the Islamic bond market (sukuk) to help finance domestic growth
4)	Promoting national economic competitiveness through policies that encourage productivity, economic openness and competition
5)	Investing in downstream industries and other economic clusters selected on the basis of Brunei Darussalam's competitive strengths, export potential and employment opportunities for local people
6)	Investing in world class infrastructure that is required to attract foreign and domestic investment in new export industries
7)	Developing an energy policy that accords proper priority to our oil and gas industry while giving due consideration to the need to create new industries through downstream diversification
8)	Privatising those services currently provided by the public sector that are best undertaken by the private sector
9)	Developing the expertise and skills required by commerce and industry through investment in our educational institutions; in research and development; and through collaboration with business
10)	Promoting international economic cooperation, bilaterally and multilaterally
11)	Encouraging equal opportunities for women in the work force and in nation building

Source: Brunei Darussalam Long-Term Development Plan

The OSPD provides relevant policy directions for each of the development strategies in order to pursue further the objective of economic diversification. In the Economic strategy, for example, one policy direction explicitly mentioned the need to invest in "downstream industries and other economic clusters selected on the basis of Brunei Darussalam's competitive strengths, export potential and employment opportunities for local people" (Table 3). Furthermore, a few other strategies such as the Local Business Development strategy and Infrastructure Development strategy support the Economic strategy.

Table 4.
Development Thrusts of RKN 2007-2012

1) Widening economic base and strengthening the foundation for a knowledge-based economy (KBE)
2) Accelerating the pace of social progress and maintaining political stability
3) Enlarging the pool of highly skilled labour force
4) Strengthening the institutional capacity

Source: Brunei Darussalam Long-Term Development Plan

The policy directions are elaborated further in the form of development thrusts in RKN 2007-2012, the first in a series of six RKNs for the 30-year period. The thrust of widening the economic base and strengthening the foundation of a knowledge-based economy is directly relevant to efforts towards economic diversification. Any development programmes and projects, therefore, have to be developed in line with this thrust. Furthermore, the other two development thrusts – enlarging the pool of highly skilled labour force and strengthening the institutional capacity – lend support to the aforementioned (Table 4).

4.0 Concluding Remarks

The efforts to diversify the economy are nothing new in Brunei Darussalam as they were propagated as early as the 1960s when the NDP2 was commissioned. To date, Brunei Darussalam's dependence on the hydrocarbon resources is still high. Although in real terms, oil and gas contribution to the GDP has declined somewhat, Brunei Darussalam's dependency on the hydrocarbon resources is quite evident in its exports figures. Brunei Darussalam's imports, too, are a testament of that dependency – the nation imports almost all of its consumption and capital needs. Government revenue is also sourced solely from receipts obtained from the petroleum industry in the form of taxes, incomes and royalties. The structure of Brunei Darussalam's workforce is also indirectly a consequence of the nature of the economy. Bruneians opt for employment in the Government services as well as in private sector establishments where the salary level is relatively higher.

The economy of Brunei Darussalam resembles those economies which have been influenced by rentierism. The linkages effects of the booming oil and gas sector are evident in several aspects of the socio-economy as portrayed in the Human Development Index, and there is little doubt that billions of petro-dollars has been spent in infrastructure and human resources development. In some aspects Brunei Darussalam belongs to the developed world but its economic structure is still in a way characteristic of countries in their early stage of their development – resource-driven.

The new LTDP reemphasises the need for economic diversification elaborated in the form of a few relevant development strategies and policy directions as well as development thrusts in the medium term NDP. A number of challenges and issues related to economic diversification remain to be resolved. Some lessons can be learnt from the experiences of other countries especially from the micro aspect of economic management. Singapore, for example, showed the importance of speed, timing and sequence in implementing new policies and the pragmatic approach in adaptation and correction.

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Economic Diversification: Creating a Conducive Environment for Small Medium Enterprises to Flourish in Brunei Darussalam

Ismail Duraman and Nawin Tharumarajah

Abstract

Apart from their role in terms of their contribution to exports, employment and economic growth, there is a wide recognition about the challenges and barriers facing Brunei Darussalam's Small Medium Enterprises (SMEs). These obstacles have prevented them from growing further and have put them in a critical position to face the new challenges that are arising from globalisation, liberalisation and extensive organisational, institutional and technological changes. In order to prepare for these new challenges, there is a need for SMEs to move swiftly to a free market economy. This involves the development of solid domestic and international Islamic free enterprises in the non-oil and gas as new engines of growth in Brunei Darussalam.

Keywords: *small and medium enterprises, sustainability, diversification, policy reforms, business environment*

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1.0 Introduction

Being an oil-based economy, Brunei Darussalam is fortunate to benefit from the oil boom in the 1970s and in the early 1980s contributing to nation's economic prosperity and welfare of its 390,000 population (The Brunei Report 2009). It has been Brunei's leading industry since oil was first discovered in 1929. Currently the hydrocarbon-driven sector contributes 90 percent of Brunei's exports and generates 90 percent revenue of the government revenue via tax, royalties and dividends (JKPE, 2008 Statistical Yearbook). Amidst concerns about the over-dependence on one sector to fund and fuel future development, there has been growing realisation amongst policymakers to shift-a-gear and diversify Brunei's economic base. The new industrialisation strategy chosen is now concentrated on the efforts to strengthen the non-oil sectors to become major economic drivers so as to achieve and ensure sustainable economic growth.

Historically, the growth of SMEs in Brunei Darussalam has been in the primary sector, compromising extraction of raw materials and agriculture. Oil-related SMEs mushroomed during the oil boom and have evolved to become key suppliers and service providers to Transnational Companies (TNCs) such as Brunei Shell Petroleum (BSP). It is important to note that during the upswing cycle in the oil sector, the state-led development strategy was intended to encourage economic spin-off as a short cut for SMEs in Brunei to flourish and help these enterprises leapfrog over the "traditional" barriers and constraints on achieving competitiveness.

While SMEs in the oil and gas sub-sector have made gains in skills and technological capabilities, these firms in reality grew behind heavy protection and have grown dependent on the domestic market. There was an imperative need to expand non-traditional exports and this situation was further exacerbated by the sluggishness in the growth of import-substitution industries within the domestic market. Thus, stimulating new enterprises required ad hoc and piecemeal measures to be replaced with sustainable, integrated and coordinated interventions by the Government of Brunei.

The policy preparation process towards economic diversification was basically participatory (private-public partnership). The current Ninth National Development Plan (2007-2012) [RKN 9] has identified five new non-oil SME clusters to foster future economic growth. The identified sectors comprise diverse sectors such as *halal* products, business and financial services, transport and logistics, Information Communication Technology (ICT) services and hospitality and tourism. RKN 9 has recognised the importance of these new clusters as potentially significant contribution to the economic development of Brunei, and has allocated a total of B$742 million to promote a vibrant non-oil SME sector in the manufacturing (secondary) and service (tertiary) sector. The development of these sectors are widely regarded as the future ‘balancing factor’ in creating employment, but at present domestic firms have been fairly slow in capitalising on state-led initiatives, while defects in the operating environment have also hampered domestic firms to realise their full potential.

The state of preparedness of SMEs and their operating environment is the central issue investigated in this paper. The paper is organised as follows: Section 2 highlights the gradual transformation and adoption of a new economic growth strategy in Brunei. Section 3 is aimed at examining best practices adopted by SMEs from other ASEAN countries in realising economic complementarities to ensure sustainable SME development. The final section scrutinises the various policies for economic reform for the future development of SMEs in Brunei Darussalam.

2.0 Rebalancing State and Private Sector Roles

Despite advocating the importance of market forces to determine resource allocation in Brunei Darussalam, the state’s role cannot be denied. The modernisation of Brunei is gradually taking shape with state-led development policies emphasised during the 1970s and 1980s. It is generally viewed that modern Brunei begins during the reign of *Almarhum Sultan Haji Omar Ali Saifudien III* (1950-1967). The first five-year development plan 1953-1958 was only introduced then with B$100 million allocated throughout the period.

As globalisation and trade liberalisation were occurring at a fairly rapid rate, it presented two immediate challenges to the future success of Brunei SMEs. First is the challenge posed by the internet technology and the information age which has made knowledge an important input in production and the second is the need to create a freer and more liberalised trading environment. Thus, the economic reform programmes implemented by the Brunei Government have been based on these philosophies to complement the private sector in assuming the lead role in fostering income generation, employment and growth.

The Government of Brunei had to react and new industrialisation foundations were put in place through gradual institutional and structural reforms under a 30-year Long Term Development Plan (LTDP). The LTDP, which began in 2007, is structured in such a way to ensure that future generations in Brunei continue to sustain their standards of living through productivity gains. The new growth paradigm would gradually increase the non-oil private sector contribution towards Gross Domestic Product (GDP). Strategies outlined under the LTDP advocate the role of SMEs as vital 'agents' to execute these strategies by stimulating export growth outside of the energy sector *vis-à-vis* developing the private sector.

The success achieved from the energy sector cluster needed to be reciprocated in the non-oil sector. Policymakers eagerly affirmed the benefits of clustering non-oil SMEs. The argument was that this provided the platform for firms to overcome growth constraints and compete in distant markets. The strategy of encouraging non-oil SMEs to form self-reliant "clusters" while adapting and acquiring a valuable transfer of skill and technology from TNCs operating within its soil, was seen as a milestone in achieving economic diversification. The underlying motif is for Brunei's non-oil based SMEs to play a crucial role in the economy by no longer orientating their business merely towards the domestic domain, but by seeking opportunities in the global marketplace.

The RKN 9 emphasis was then placed on creating sound export-oriented SMEs in Brunei. SMEs were urged to increase their competitiveness under the new state-led capitalism. This economic system encouraged Brunei companies to take advantage of globalisation and to begin to venture abroad in search of opportunities. The ultimate goal is for domestic firms to adopt best practices from TNCs that would enable them to shorten the period for capacity-building, delivery timeliness and to facilitate their ongoing innovation and differentiation strategies in this complex sector (Husain et al, 2008).

Brunei has given priority to SMEs and has put in place a policy and institutional framework that addresses their developmental needs, but ironically, the current business environment does not reflect the stance taken by the public sector. When The World Bank released the Ease of Doing Business (EoDB) Report in 2009, Brunei was ranked 88 from 181 countries, reflecting problems that the SME sector in Brunei, as important as it is to the economy, has been facing a number of problems despite the on-going reform programmes (see Table 1). Among the challenges faced by domestic enterprises in Brunei include complex, bureaucratic and costly legal, regulatory and administrative environment where SMEs are at a greater disadvantage.

Table 1.
Brunei Darussalam, Doing Business Ranking 2008 and 2009

Areas Studied	Doing Business 2009 (out of 181 countries)	Doing Business 2008 (out of 178 countries)	Changes
Ease of Doing Business	88	78	-10
Starting a Business	130	117	-13
Dealing with Licenses	72	66	-6
Employing Workers	5	4	-1
Registering Property	177	178	+1
Getting Credit	109	97	-12
Protecting Investors	113	121	+8
Paying Taxes	35	28	-7
Trading Across Borders	42	36	-6
Closing a Business	35	35	no change

Source: Doing Business 2008 Report, The World Bank. www.doingbusiness.org

Some attribute this strongly regulated business environment in Brunei to the surplus of oil rent during the latter stages of the 1970s and the early 1980s. As surpluses of foreign exchange was either kept as reserves or used as fiscal expenditure, the probability of inefficient disbursement of surplus rent to boost the non-oil sector seems all too plausible. Gleb (1998) argued that oil wealth can be a double-edged sword, 'a blessing or a curse' as inadequate planning of resource allocation can lead to unsustainable economic growth in the future.

As there are many cross-cutting issues to be addressed, it is understood that despite on-going reform efforts, the SME sector in Brunei has still not received due priority to achieve well targeted results. This provided the impetus for current SME development policies to be focused on three main areas: the creation of an enabling business environment, the development of financial and non-financial services and the establishment of a supportive institutional infrastructure. The current SME policies take into account the special constraints and opportunities faced by this sector and are aimed at strengthening institutions that address these constraints and at maximising the exploitation of opportunities by SMEs.

3.0 SME Development in ASEAN

In ASEAN, 99 percent of all companies registered are SMEs and they employ nearly 60 percent of the total workforce (Asean-EC Dialogue, 2005) In Brunei, SMEs account for almost 98 percent of all active business enterprises, employing close to 92 percent of the labour force and contributing 70 percent of the GDP in the non-oil sector (The Brunei Report, 2009). As regionalisation issues take centre stage, the Asia-Pacific Economic Cooperation (APEC) summit in 2006 highlighted the need to create an effective domestic buffer against external shocks such as the Asian Financial Crisis, 2001, dot-com bubble burst, SARs and Avian Flu.

To create this economic insulation, technical support was requested based on the ASEAN SME Blueprint (2004-2014). The Blueprint was charted with the intention of creating a favourable business environment within the region and provided all member nations a pragmatic approach to benchmark and compare policies in assisting them in various management and technical reforms in their respective economies.

However, when scrutinised individually, most member nations have been "competing rather than possess pronounced complementariness" for effective economic cooperation when structuring their respective SME development policies. This individualistic nature of member nations could be attributed to the proliferation of free trade agreements bilaterally, regionally and multilaterally that has brought about trade rules that are complex and difficult for ASEAN SMEs to follow (Cashin et al, 1999). The lack of understanding often creates a feeling of being marginalised by such arrangements, rather than being elated at the opportunities that are created by them.

Another plausible reason for this competing nature among ASEAN member nations is due to their unwavering desire in attracting foreign capital to fund development expenditure in their respective economies. Emerging markets in ASEAN experienced this fate during the recent global downturn in 2008-2009. Foreign Direct Investment (FDI) inflow to the region marked a 15 percent decline, automatically increasing competition for the limited funds available. During this period capital inflow to the ASEAN region decreased from US$69.9 billion in 2007 to US$59 billion in 2008 (Asian Investment Report, 2009).

The ASEAN SME Blueprint provided the ideal platform and opportunity for most ASEAN members to revisit, revaluate and revitalise their domestic capabilities, especially promoting the resilience of domestic SMEs as new sources of growth. SME reform strategies in these countries have resulted in SMEs becoming a prominent investor in the region. ASEAN has overtaken US to become the third largest provider of capital in the region. The bulk of intra-ASEAN SME investments inflow went into electronics, healthcare, automotives, textiles & apparel and agro-based products, all categorised as Priority Sectors under the ASEAN Framework Agreement (World Investment Prospects Survey, 2009–2011).

The current trend of ASEAN SMEs are coordinated and complemented along a development path to prepare them for the eventual creation of a Single ASEAN Market (SAM). SAM is expected to directly benefit SMEs through the creation of a much larger market place. On this note, Brunei SMEs need to consolidate best practices to have any credible chance to have a stake in the region.

4.0 SME Operations in Brunei

In Brunei, the full potential of the SME sector has yet to be tapped due to the existence of a number of constraints hampering the development of the sector. Though faced with various challenges, domestic SMEs have played a crucial role in shaping the Bruneian economy since the late 1990s both as vital wealth generators and employment creators. The broad definition of enterprises in Brunei categorised as SMEs is an entity that employs 0-100 workers, a definition similar to the one used in US and the EU, which refers to the category of business that involves from 0 to 100 workers. In 2003, the official definition for micro SMEs in Brunei was coined; entities that employ less than 5 persons (Asean-EC Dialogue, 2005).

Based on the 2008 Statistical Yearbook, currently 90 percent of all private businesses in Brunei are considered as micro and medium enterprises and are concentrated in various sub-sectors such as construction, general retail, trade & wholesale, ICT and general services. It can be argued that the general trend of economic development originating from SME growth in part has increased over the last 20 years and has continued to do so accordingly to the population growth. The government had purported to help the SMEs through subsidies and incentives over this period of time to enhance competitiveness and attract FDI. Brunei's response to globalisation should be to deal with the challenges, rather than to retreat into protectionism and insularity.

From Table 2, over the period of 1986-2000, the highest non-oil SME contributor is the Community, Social and Personal Services (such as health and education) and the lowest of SME business contribution is forestry, due to the enforcement of Heart of Borneo Conservation Efforts. The SMEs in Brunei have gradually integrated and worked together in five sectors: construction, retail and trade, transport, storage and communication and mining, quarry and manufacturing and forestry. This transition is a clear indication for policymakers to structure specific policies to help SMEs in these specific sectors to develop.

However, these priority sectors must have something to deliver first, in particular export-oriented products. For instance, if there are no export-oriented products created by SMEs for export or import, there is no need for a logistic sector to develop (a catch 22 situation). Hence, regulatory and structural issues are not the only obstacles that SMEs in Brunei must overcome but integrating "niche products or services" are of utmost priority.

Table 2.
The Ranking of SME in Private Sector to GDP (1986-2000)

SME CONTRIBUTOR	Position
Community. Social and Personal Services	1
Construction	2
Retail Trade	3
Banking and Finance	4
Transport, Storage and Communication	5
Mining. Quarrying and Manufacturing	6
Wholesale	7
Agriculture	8
Restaurant and Hotels	9
Insurance	10
Real Estate and Business Services	11
Ownership of Dwellings	12
Electricity. Gas and Water	13
Fishery	14
Forestry	15

GDP based Expenditure Approach, *Source:* RKN 6,7 and 8 (EPU) and Dept. Statistics, JPKE 2005

5.0 Future SME Policy Implications

Brunei's major economy is a planned economy, thus the need to have a centralised bureaucracy system to devise and implement development plans. The new focus on SME development has evolved from the 5th National Development Plan (1986-1990). The government and the private sector both assume a synergistic role; the government acts as a facilitator, the SMEs assume the role of an economic driver. The Ministry of Industry and Primary Resources (MIPR) through its development arm Brunei Industrial Development Authority (BINA) and the Brunei Economic Development Board (BEDB) has gradually put in place a support structure that would help create a dynamic business environment.

These reforms policies encompass all the necessary ingredients to create a business friendly environment. Generally, policy efforts to support and facilitate SME sector development and integration are not sustainable without great cost efficiency and effectiveness in the long run (Easterly, Kremer, Pritchett and Summers, 1993). Inevitably, the SME sectors in Brunei need to constantly expand bilateral linkages in developing factor endowments while improving their transparency. This may prove to be a better guarantee for developing a business-friendly environment for SMEs in the short term. Gradually, national development priorities will adjust themselves to regional initiatives and produce the necessary liberalisation of policies to realise a thriving SME environment. Among the liberalisation strategies to be considered:

5.1 Provision for *Statutory board for Islamic Banking & Innovation* to study niche ways of using an Islamic approach to target financial services to emerging market that hunger for capital, BRIC (Brazil, Russia, India and China) countries for instance. The Board must find people to innovate and carry out exploration to create new opportunities for satisfying the human wants and needs in Islamic countries. Many of the Islamic countries have already available economic expertise and resources on Islamic products and its technology which is new and ahead of Brunei.

Finding the opportunities to partner in one of the ASEAN countries to supply potentially convertible Islamic products can be considered free market opportunities. In free market direction, the culture to safe guard the Islamic way of living needs to be developed while Brunei opens its door to foreign investment and their presence for partnership.

Islamic countries such as Kuwait and UAE have learnt and shown ways to amalgamate Islamic principles with commercial activities. This should then be adopted into the Islamic Products, Service and Standard Board (a Statutory Board) under the authority of Ministry of Religious Affairs and the Ministry of Finance.

5.2 Local SMEs should perhaps take marketing and branding more seriously in the face of greater competition globally. A good, recognisable brand is a valuable asset for all companies - it can differentiate one's business from its competitors, develop stronger relationship with customers, command higher prices, and provide an excellent platform on which to introduce new products. It will also be convenient for customer whereby they can quickly identify the products that they can trust. All in all, branding and marketing may retain as well as expand market share of a product or company. Unlike large enterprises, SMEs are more agile and adaptable to changes in the business environment.

In fact, SMEs must feel the urge to renew the designs of their products, fitting them to changing needs of local and international consumers. BEDB has noted that the public-private partnership does play a crucial role in SME development. The establishment of the "i-Centre" to assist in developing ICT-related firms and the proposed "Business Opportunity Centre" devoted entirely in promoting development of SMEs as a source of competitive advantage for Brunei. More initiatives such as regional programme for the promotion of internship schemes, workers' and entrepreneurs' exchanges, study visits for skills training and inter-firm linkages should take place. This one among many methods used by developed countries to enhance SME-sector skills in management and organisation to become self-reliant.

5.3 Brunei SME entrepreneurs require the design of adequate methods to explore and identify investment opportunities based on the processing of local raw materials from which finished products demanded in the global market can be made. They must be interested to implement a sustainable programme to identify these opportunities which will be developed as formal investment projects using resources such as Venture Capital Funds. There could be more interest from other stakeholders to receive technical assistance for establishing a new technology-based incubator centres related to local universities in order to promote research and entrepreneurial skills among young people, and use local raw materials to develop new manufactured products for local and global markets.

Awareness of the lack of human capital resources and entrepreneurial challenges was highlighted in ASEAN-EC Management Centre (AEMC) Regional Dialogue Forum 2005. The government has put in place plans to develop a strong SME workforce (under NDP) where talents of entrepreneurs can be discovered, identified and nurtured for the “long term transitional strategies” and to become well balanced mixed economy, as stated by Hamid Jaafar during the dialogue forum. The creation of *Entrepreneurship Statutory Board,* equivalent to the one adopted by Singapore, is needed for Brunei to understand and monitor the entrepreneurship development as a strong, dynamic and efficient SME sector which will ensure sustainable economic development.

5.4 The establishment of a Manpower Statutory Board is urgently required to sustain Brunei’s manpower management which requires constant vigilant review and change in an uncertain regional and global economy. Brunei cannot afford to let her economic defences down or to be complacent, else she will stare at the face of stagnation. Brunei’s manpower statutory board should study the demand and supply of various types of labour and understand the nation’s needs accordingly so that appropriate policies and outlook can be adjusted to control unemployment figures.

The Brunei Government cannot continue to take the path of planned economy to provide and find solutions for all its economic challenges and problems which may prove unsustainable in the future. The policy initiatives suggested above require a pragmatic style to manage the new statutory boards and the new hybrid economy of Brunei. Ministerial adjustment needs to be made accordingly to manage the task to oversee the respective statutory boards and uses their outcome to make policy implementation and guidelines to materialise recommendations and create new economic goods and services for this transition to a mixed economy system.

6.0 Concluding Remarks

Just like any other economies in the world, Brunei faces several challenges. Domestic enterprises must face these challenges by continually developing its competitiveness with minimum intervention from the usual government's command economic policies. Capitalising on the full potential for SMEs to contribute to economic prosperity and employment quality is an important strategic initiative of Brunei Darussalam, thus providing an enabling environment for SMEs to operate is of utmost importance.

The increasing importance of SMEs is a global phenomenon brought about by market forces, technological advances, personal career aspirations and underlying demographic changes in the population. The development and strengthening of SMEs have been identified as a priority area for Brunei and the nation as a whole must begin to innovate ideas so that the private sector can produce "Made in Brunei Islamic products or services" and promote them to the Middle East and Asia Islamic markets. Without this concept of Made in Brunei, the International Islamic market opportunities are just only unfulfilled desires of the people of Brunei.

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CSPS Strategy and Policy Journal, Volume 1, July 2010, Pages 69-80

Trade, Economic Policy and Diversification: the Malaysian Experience

Shankaran Nambiar

Abstract

The purpose of this paper is to provide a policy perspective on Malaysia's attempts at economic diversification. It is argued that the need to diversify has been of interest to Malaysian policy makers from the early years of post-colonial independence. Economic diversification has taken a different flavour in more recent years. While initial efforts were aimed at moving from export-dependence that relied on agricultural commodities, more recent initiatives have been directed at shifting towards knowledge-based economic activities. The recent global financial and economic crisis emphasises that it is necessary to review Malaysia's reliance on exports. In particular, it is necessary to reduce the dependence on a narrow range of manufacturing industries.

Keywords: *Malaysian economic development, diversification, trade structure, industrial policy*

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1.0 Introduction

During the colonial period in Malaya, international trade was centred around tin and rubber. The production of these commodities was largely the monopoly of British producers since the Europeans dominated the plantation sector from the 1930s. British involvement in the tin industry was as significant as that in rubber. The British invested actively in rubber plantation and tin mines because both sectors were then growing at an encouraging rate. There were no attempts made in the pre-independence years to develop the growth of domestic manufacturing industries because of the economy's reliance on primary commodities. Indeed, given the stage of the country's economic development at that point in history, it would not have been feasible to develop a manufacturing sector.

Foreign investment in the years prior to Malaysia's independence came in the form of foreign ownership of plantations and tin mines. During this time, up to 75 per cent of export trade and about 65 per cent of import trade were in the hands of European companies. In keeping the vested interests of the Europeans, the agricultural sector was developed during that time, and there was little interest in economic diversification. Accordingly, two important institutions were established to drive the agriculture sector, viz. the Rural and Industrial Development Authority (RIDA) and the Federal Land Development Authority (FELDA). These institutions were set up in 1950 and 1956, respectively, reflecting the needs of the time.

The pattern of economic activity in the Malaysian economy has changed in the years following its independence. There has been a continuing quest to transform the economy, and it has been successful, although not complete at the present time. In discussing these issues, the present paper will trace the historical roots of the quest for economic diversification and transformation in the next section. The third section will briefly examine the recent global financial and economic crisis because it on stresses the need for diversification. This will be followed by a discussion of some of the recent government attempts to restructure the economy. Finally, some concluding remarks will be made.

2.0 Trade and Transformation of the Malaysian Economy

In the first two decades after independence, Malaysia was very dependent on the export of primary commodities (Ariff and Zainal-Abidin, 1998). In 1947, for instance, earnings from the export of rubber and tin amounted to RM701 million (see Table 1). It is instructive to note that this amount formed about 84 per cent of Malaya's total exports (RM835 million) at that time. The situation was not substantially better in the early years after independence. In 1950, export earnings from rubber and tin amounted to RM2,508 million, which was 85 per cent of the country's total export earnings. The heavy dependence on rubber and tin as export earners was reduced by 1970. In 1970, rubber and tin accounted for a mere 53 per cent of total export income. This illustrates the shift from primary commodities, as a consequence of the industrial policies that Malaysia had undertaken in the two decades after independence.

Table 1.
Gross Export Earnings and Rubber and Tin Earnings (RM million)

Year	Gross export earnings	Rubber and Tin Earnings
1947	835	701
1950	2608	2252
1955	2372	2018
1960	2924	2508.7
1965	3782.5	2333.6
1970	5163.1	2729.3

Source: Department of Statistics Malaysia, Economic Statistics (various years)

There has actually been a shift in the types of primary commodities that Malaysia has been exporting over the years. As Table 2 indicates, in 1960, rubber accounted for about 55 per cent of total exports and tin contributed 14 per cent of total exports. There was a gradual decline in the contribution of rubber to total exports from 1965 to 1973, after which the plunge was more drastic. In the case of tin, it constituted about 20 per cent of total exports till 1970 and dropped to about 10 per cent by 1979.

By contrast, timber has featured more predominantly in the late 1970s, while logs assumed a more significant role since the late 1960s. In 1960, timber accounted for about two per cent of exports and rose to about three per cent in 1967. However, the export of logs jumped from about three per cent in 1960 to about 13 per cent in 1967. Similarly, palm oil exports have also compensated for the decline in the exports of rubber and tin. More importantly, there has been a drastic shift from primary commodities to exports from the manufacturing sector.

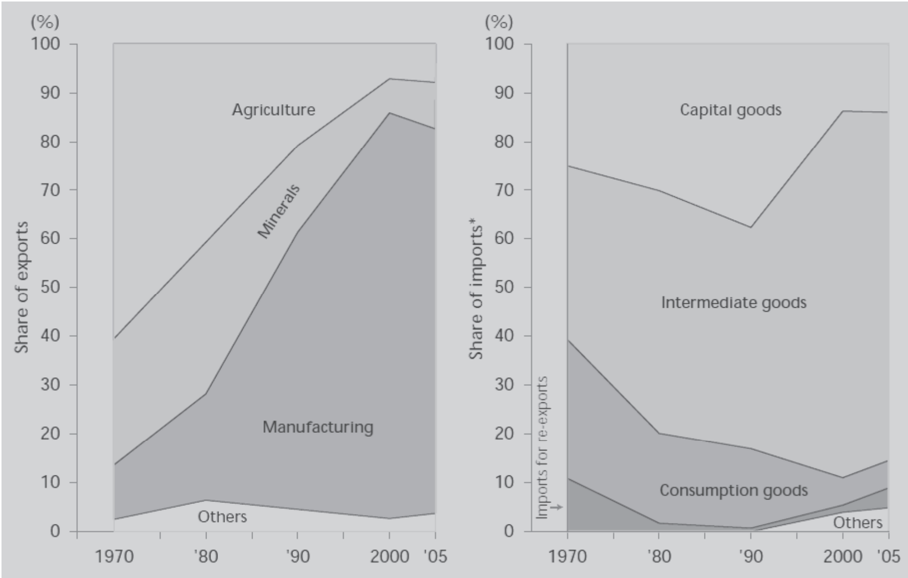
Table 2.
The Value of Exports of Selected Commodities as a Percentage of Total Exports (%)

Year	Rubber	Tin	Timber	Palm Oil	Logs
1960	55.1	14	2.1	1.7	3.3
1963	44.3	19.3	2	2.1	6.2
1965	38.6	23	2.6	2.8	7
1967	34.2	20	2.8	5.1	12.8
1970	33.4	19.5	4	7.8	12.5
1973	34	12.2	3.9	6.3	13.4
1975	23.8	14.1	6	15.5	7.9
1977	30.3	15.3	7.6	15	13.6
1979	18.5	9.6	11.9	5.5	11.9
1980	19.7	9.9	5.7	11.1	11.2

Source: Department of Statistics Malaysia, Economic Statistics (various years)

The change in the profile of exports is more striking if one were to examine the structure of merchandise trade. In 1970, manufacturing constituted about 10 per cent of total exports and it increased more markedly subsequent to the mid-1980s (Figure 1). In the late 1990s, manufacturing accounted for about 80 per cent of total exports. Exports emanating from the agriculture sector have demonstrated a performance that is quite the reverse of that shown by manufactured exports. In 1970, the two biggest contributors to exports were agricultural goods and minerals. Agriculture, at that juncture, contributed about 60 per cent of total exports, and minerals (principally tin) comprised more than 25 per cent of total exports. However, agricultural exports have, over the years, come to play a diminished role. In 2005, exports from agriculture accounted for less than 10 per cent of total exports.

Figure 1.
Structure of Merchandise Trade, Malaysia, 1970-2005



Source: Bank Negara Malaysia, Annual Report (various years)

The changing structure of Malaysia's imports over the years demonstrates how trade policy and industrialisation programmes have had a definite and positive impact on the trade pattern (see Ariff, 1984). It also provides evidence as to how industrial policy has been successful in achieving economic diversification. In 1970, imports were divided more or less equally between capital goods, intermediate goods and consumption goods. At that point in Malaysia's trade history, capital goods were the least important (25 per cent) of imports. Also, in 1970, intermediate goods (35 percent) and consumption goods (30 per cent) enjoyed roughly the same share.

By the late 1980s, the pattern of imports changed dramatically, with capital goods enjoying almost 40 per cent of the total, and intermediate goods accounting for almost as much. The increasing share of capital goods, understandably, increased significantly at this time due to the greater emphasis on heavy industrialisation, something that stretched well into 1990. As for intermediate goods, it is hardly surprising that its share of imports should have been increasing over the last fifty years. This has been especially so with the increasing importance of export-led manufactures. In particular, it must be stressed that the increasing dependence on the exports of the electronics and electrical sector has, in turn, led to the continued increase in related imports in the form of intermediate goods, although in this sense the dependence on exports remains unchanged as compared to the initial years following the post-colonial era (see Khor, 1983). Similarly, the import of consumption goods has been steadily declining. Consumption goods have fallen from about 30 per cent of total imports in 1970 to less than 10 per cent.

As has been observed, there has been a shift in the structure of Malaysia's exports and the corresponding pattern of domestic economic activity. The dependence on primary commodities (that is rubber and tin) in the years before and soon after independence was gradually replaced with a greater bias towards manufacturing industries. During the course of the transformation of the economy, the agriculture sector witnessed a winding down, save for the oil palm sector and its related industries. However, within the manufacturing sector, the electrical and electronics (E&E) industry came to occupy a predominant role. Indeed, the predominance of the E&E sector, and export-dependent manufacturing, in general, was brought to light in the recent global financial and economic crisis.

3.0 Impact of the Crisis on the Malaysian Economy

The effects of the current global financial crisis have had far reaching effects on the Malaysian economy. This is because of Malaysia's reliance on exports and FDI to generate growth and employment (Nambiar, 2009). In fact, the strength of the manufacturing sector in Malaysia depends heavily on export generation. As will be pointed out shortly, it is not only the export-oriented manufacturing sector which is affected by shortfalls in demand. In fact, the effects are transmitted to other sectors in the economy, ultimately affecting aggregate demand and employment.

As a background to the effects of the global financial and economic crisis, it is useful to examine the structure of Malaysia's exports. The manufacturing sector accounts for about 74 per cent of total exports, followed by the export of minerals (about 13 per cent). The export of agricultural commodities contributes only nine per cent to total exports. Of the manufactured goods that are exported, the E&E sector is by far the most important (42 per cent). The heavy reliance on the E&E sector has long been questioned, and besides manifesting its adverse effects as a consequence of the crisis, it is an urgent reminder of the need for economic diversification. Indeed, the necessity for diversification has been realised and will be discussed shortly.

Two indicators that were among the economic indicators to reflect the impact of the current crisis were exports and the industrial production index. Export figures, which were doing well in first three quarters of 2008, took a downturn towards the end of that year (Figure 3). In January 2008, exports increased by 10.4 per cent (year-on-year), and more or less doubled to 20.9 per cent in April 2008. However, in October 2008 a negative figure was reported (-2.6 per cent), only to decline more deeply as the months progressed. In December 2008 a decline was registered (-14.9 per cent), which worsened in January 2009 (-27.8 per cent).

Imports, which tend to follow export trends rather closely in Malaysia, reported a similar pattern. Imports increased by about 11 per cent (year-on-year) in February 2008 and exceeded 10 per cent in the months of June and July 2008 (12.5 per cent and 15.0 per cent, respectively). Again, the change in imports dived into negative territory from October 2008, falling from -5.3 per cent in that month to -23.1 per cent in December 2008 and dropping to -32.0 per cent in January 2009. It is understandable that imports should fall along with decreases in exports because imports of intermediate goods are required to meet the production of exports. The strong demand for exports that emanates from Malaysia's major trading partners (US, Japan and the EU) having fallen, it was only to be expected that exports from Malaysia would also fall.

Figure 2.
Exports/Industrial Production

Source: Author's calculations compiled from Department of Statistics, Quarterly Balance of Payment Report and Index of Industrial Production (various years)

Since most of the manufacturing sector is driven by the growth of exports, it stands to follow that the industrial production index (IPI) would reflect the damp export conditions imposed by the global environment. Accordingly, the IPI has been sinking since September 2008 (-1.7 per cent, year-on-year), deepening towards the end of 2008, particularly in December, and right into January 2009 (-15.9 per cent and -20.2 per cent, respectively) (Figure 2). These results are not surprising in view of a) Malaysia's heavy dependence on the E&E sector and b) the fact that Malaysia's major trading partners were badly affected by the global crisis. Claims that Malaysia has decoupled from the US cannot be defended against these outcomes. The other argument that is made is that Malaysia is shifting its trade towards ASEAN. While there is evidence that trade with Singapore and Thailand has been increasing, this phenomenon must be juxtaposed against the nature of production networks.

Units in other parts of ASEAN are a part of the production processes where the final products are ultimately exported to countries such as the EU and the US.

4.0 Policy Efforts at Diversification

In more recent times, there have been explicit attempts to deepen the process of economic diversification in the country. The most recent Plan document in Malaysia, the Ninth Malaysia Plan (9MP) is testimony to this policy initiative. Two of the key thrusts that were enunciated as part of the 9MP implicitly refer to economic diversification (Malaysia, 2006: 14-16). The first thrust mentioned in the 9MP is a statement of the intention to move the economy up the value chain, and the second thrust is concerned with raising the capacity for knowledge and innovation. These thrusts, clearly, are necessary if Malaysia is to achieve the desired diversification, and the 9MP has conceived of diversification across a broad range of sectors.

The 9MP notes that, with respect to the agriculture sector, efforts to develop new sources of growth were initiated even during the 8MP period. Indeed, some of the new sources of growth that were seen in the 8MP included the production of ornamental fish, seaweed, tuna and floriculture. The 9MP sought to further the approach that was taken in the early plan period by addressing the question of economic diversification in the agriculture sector through the large-scale production of tuna, ornamental fish and plants, herbs, seaweed and floriculture. In seeking to continue the efforts initiated in the preceding plan there is some overlap. But new ground is broken in attending to the commercialisation of products from biomass and new products that result from the use of biotechnology. These projects would impinge upon the plantation sector, particularly the oil palm sub-sector. This is evidence of the shift from increasing palm oil produce to moving up the value-chain with respect to derivatives from palm oil. Thus, the 9MP emphasises the utilisation of advanced oleochemical technology and nutraceutical and pharmaceutical products.

It is observed that there is a similar attempt to effect a shift in the manufacturing sector. The focus of the 9MP period was to achieve higher value-added products in this sector. There was a stress on the incorporation of advanced manufacturing technology to enhance industrial technology and competitiveness so that high-technology industries could be developed. Some of the new sources of growth that were identified in advanced manufacturing included robotics, smart sensors, intelligent software, high-technology packaging, automation and nano-processing. It was also expected that the petrochemical industrial cluster and the agro-based manufacturing sub-sectors would identify new competencies.

The Third Industrial Master Plan (IMP3) documents an intention to lead Malaysia to global competitiveness through the transformation of the manufacturing and services sectors (MITI, 2006). The IMP3 is congruent with the 9MP in the need to take Malaysia up the value chain. In this respect, the element of diversification is present in the IMP3. An examination of the 12 industries that have been suggested for targeted growth is ample evidence of the desire to move beyond the existing reliance on the electrical and electronics industry.

The present export structure of the economy is heavily biased towards the electrical and electronics sectors. In order to redress this imbalance, the 9MP, like the IMP3, identified other sub-sectors within the economy that could be developed. The industries that have been mentioned include the aerospace and ship-building industries. With respect to the latter, the government had specifically specified the building of ships, boats, vessels, ferries and trawlers. Related activities such as those relating to the maintenance, repair and overhauling of seaborne vessels have been targeted. In a similar manner, the government expects the nascent aerospace industry to develop and flourish beyond the existing market niche in the manufacture of small aircrafts.

The services sector is seen as the sector that will drive growth in Malaysia in the years to come. This is to be expected of an economy that has been maturing. The 9MP, accordingly, stated that during the Plan period, shared services and outsourcing (SSO) will be a major new source of growth because it is expected that Malaysia will be able to take advantage of the booming worldwide market for SSO. Aside from identifying the SSO sub-sector as a niche market that should be developed as a new source of growth, the 9MP has discussed strategies that could be employed to boost the industry.

Aside from SSO, other areas in the services sector have been selected as part of the programme for economic diversification. The closely related ICT industry and cognate industries were also picked as holding promise. Some of the areas that were identified under the 9MP include creativity and digital content development, as well as cost-effective fixed-line and mobile solutions for the domestic and global markets. New industries such as computer animation, digital games, mobile applications, interactive television and digital archiving are among the economic activities that will emerge in Malaysia in the years to come as part of the economic diversification programme that stress the development of knowledge-based development.

5.0 Conclusion

Malaysia has long since embarked on a course of economic diversification in order to transform the economy. However, the structural change that has been brought about is not complete because further diversification is required. The task of rebalancing the economy was brought home as a consequence of the recent crisis. Nevertheless, it must be stressed that the issue of diversification and restructuring was discussed as part of the planning process, most notably in the Ninth Malaysia Plan (9MP) and the Third Industrial Master Plan (IMP3).

Although considerable success has been attained in transforming Malaysia into an industrial economy, the process has not been completed. In the first instance, the next stage of the process of economic development requires a shift towards the services sector. Second, there is excessive reliance on the E&E sector, and this has to be attended to. The government is cognisant of these demands. As we have discussed, it is recognised that there is a need to move up the value chain to a more knowledge-based economy. It is also necessary, as plan documents indicate, for a broader range of manufacturing industries to be targeted for growth. These are some of the pressing issues that need to be addressed if Malaysia is to emerge as a more robust and resilient economy.

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Economic Diversification and Environment Security: Key Challenges for Asian Governments

Euston Quah Teong Ewe

Abstract

This paper identifies four major areas of public policy concerning environment management which pose serious challenges for Asian governments as they diversify their economies in the pursuit of economic growth. If mishandled, unsustainable economic growth would result, increasing the likelihood of negative spill-over effects and social strife. The four areas are first, where to site environmentally-unfriendly facilities that are necessary to the country, but whose social costs are mainly borne by locals of the neighbourhood municipalities that host them. Also known as the Not-in-my-backyard (NIMBY) syndrome, this issue is especially relevant for Asian economies as they continue to demand higher growth which necessitates the building of such facilities quickly and without local opposition. The second subject is that of waste generation. Rising affluence of Asian economies increases consumption and thus, generation of waste. Hence, the problem of waste disposal becomes more pertinent, especially for countries with limited land space. The third matter is transboundary pollution, which affects both human health and inter-country relations. The last topic is the pricing of environmental goods, which is necessary to facilitate sound policy decisions that maximise social welfare. Possible solutions to the four concerns and general principals in formulating environmental policy are also discussed.

Keywords: *Asian environmental policy, NIMBY, waste generation, transboundary pollution, paired comparison method*

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1.0 Introduction

Since the 1960s, many Asian economies have undergone a wave of economic diversification, away from exporting primary products to increasingly higher-skilled manufactures, albeit at different times and with varied levels of success. The association of Southeast Asian Nations (ASEAN) first started the transformation in the 1970s (Lim, 2009). China, India, and some Asian economies followed more recently in the 1980s (Chow, 2007).

For Brunei, which is highly reliant on oil and natural gas exports, the need for economic diversification has been long recognised. This is especially so since both oil and gas are exhaustible resources. Hence, in the 1980s, the Brunei government started a push towards a larger manufacturing base as part of its fifth National Development Plan (Tasie, 2009).

The shift from producing primary commodities to low-skilled labour-intensive manufactures, and further to high-skilled capital-intensive manufactures and the accompanying expected increase in affluence have important environmental implications. Each shift requires necessary infrastructure to be built or updated, which unavoidably impacts the environment. Additionally, higher incomes increase consumption which causes further environmental changes.

The environmental consequences due to economic diversification and growth poses a serious challenge to Asian governments, who for most part, have begun to take the issue of sustainable development seriously, where sustainable development is politically accepted as 'economic growth with some degree of concern for the environment and future generations'. There is evidence that Asian governments are paying more attention to sound environmental management and policy whilst pursuing economic growth. Countries like China and India, which currently suffer from large negative externalities due to pollution and are expected to become significant contributors to greenhouse gases, have taken active steps to attempt to mitigate the negative impacts of their actions. A wide range of tools have been employed in this regard. They include incentivising the use of clean technology via tax rebates or subsidies, imposition of higher emission fees, stricter enforcement and monitoring procedures, and heavier penalties for violations of environmental laws. There has also been an increase in required project appraisal and environmental impact assessment in the policy planning process.

On the ground, better educated, more literate and more affluent Asian populations have demanded a higher quality of life, where non-material aspects, such as a clean environment have significant impacts on happiness. This has led to greater public participation and awareness of the impacts of projects on human health and the environment. As a result, there is greater pressure on governments to be transparent and accountable for policies that may adversely affect the environment. The rapid growth of the internet, with its quick dissemination of information and ease of communication, coupled with extensive and investigative media coverage, has catalysed the above process. Protests over perceived environment-damaging projects such as the demonstrations against laying pipelines in Thailand, building power stations in Taiwan and Japan, and constructing landfills in Malaysia are good examples of the Asian public's heightened awareness and participation (Chung and Quah, 2010).

While sustainable development has become a catchphrase, there is still much debate over what it precisely constitutes. Most would agree that the Bruntland Commission's definition of sustainable development being "development that meets the needs of the current generation without compromising the ability of future generations to meet their own needs" is one that is broadly accepted. However, what actions constitute future generations not being able to meet their own needs are highly subjective and vary between individuals. The literature on the issue is already very abundant and it is not in the scope of this paper to add to it.

This paper will discuss four major areas related to sustainable development important for public policy, which will or already have, a significant impact on Asian nations as they diversify their economies and pursue economic growth. The four areas are:

a) The problems of siting necessary environmentally-unfriendly facilities, also known as the NIMBY (not-in-my-backyard) or NIABY (not-in-anybody's backyard) syndrome;
b) The problem of accumulating waste or garbage disposal;
c) The problem of transboundary pollution; and
d) The problem of pricing green goods.

2. Four Areas Related to Sustainable Development

2.1. NIMBY

For economic diversification and growth, the construction of certain facilities and infrastructure such as industrial dumping areas are, by general consensus, necessary. However, there is little doubt that the local residents and the immediate neighbourhood surrounding the facilities would have to endure all the negative external effects and possibly life-threatening risks that come with them. While the nation enjoys the benefits of these facilities, their host communities bear much of the associated burden (social cost), and as such, would prefer to see such facilities located elsewhere.

Such facilities, aptly labelled NIMBY, NIABY, or LULU (locally-unwanted-land-use) facilities, have been the subject of much debate in Europe and North America. It is a pertinent issue for Asian economies as the shift towards manufacturing requires ever-increasing amounts of energy to support the expansion of infrastructure to facilitate economic growth. While research and analysis of the Asian experience in siting NIMBY facilities is still rather limited (Shaw, 1996), there is no doubt that this strand of research will grow in importance.

Generally, a cost-benefit analysis study of such facilities with the nation as the frame of reference would lead to the acceptance of the facility. In other words, building these facilities is Kaldor-Hicks efficient (Quah, 1994; Skaburskis, 1998) where net benefits are positive. For the minority that do not meet the cost-benefit analysis criterion for approval, the proper decision is to not carry out the project and the problem of siting NIMBY facilities does not arise.

The literature seems to suggest siting NIMBY facilities may be more successful when there is active public involvement, coupled with mitigation and compensation actions (Wiltshire, 1987; Kunreuhter, 1998; Kleindorfer et al, 1996).

A simple compensation scheme could involve local governments submitting sealed bids with the minimum compensation they are willing to accept to have a NIMBY facility sited in their locality. The bids can then be compared and the facility sited where the compensation required is the lowest (Randall, 1987).

However, a major problem is that strategic bidding could prevent the revelation of true valuations. In the above example, local governments have incentives to overstate their minimum compensation to prevent the facility from being built in their districts (Quah, 1994). Thus, the difficulty is in designing compensation packages that elicit truthful responses.

Attempts to impose NIMBY facilities on unwilling participants are one of the most difficult challenges faced by governments today. Also, as Asian countries become more developed and literacy rates improve, people would expect a higher quality of life of which better environment plays a part. This, and the fact that Asian communities are becoming increasingly vocal in the decision-making process, makes the siting of NIMBY facilities even more contentious.

Only by reconciling perceived risks, benefits, and costs can community opposition be overcome and Asian governments would do well to learn from the experiences of North America and Europe in siting NIMBY facilities.

2.2. The Waste Generation Problem

One of the most important environmental concerns facing many of the countries in the world today, and more so for Asia, is the management of waste. Observable trends have indicated that as a society's affluence increases, consumption increases and inevitably so do the amount of waste generated. Since Asia is currently experiencing the fastest economic growth, it is clear that waste generation will soon be a major problem for Asian governments.

The main problem with toxic waste is how to safely dispose it. With municipal solid waste, it is in balancing the amount produced and the means and space necessary to dispose it.

Solid waste is a problem due to defects in the pricing system that often fails to take into account the external costs associated with it. The same can be said for using virgin materials and its associated damage costs.

The key environmental problems associated with domestic waste disposal concerns the following:

1) Where waste is disposed via landfills, the solution is expensive, especially for small countries with limited land space. There are also significant external costs in the form of environmental degradation, health hazards, and aesthetic displeasure.

2) The alternative, incineration, is incomplete and also carries significant external costs like air pollution.

3) In view of 1) and 2), facility siting becomes a major problem.

4) An optimal solution requires a combination of technology advancement, education, and a willing public. Economic instruments and control regulations are necessary. However, there may be issues with effectiveness, enforcement, and cost justification.

There is also the often-overlooked fact that active waste reduction in the long run makes it increasingly difficult for households to produce enough recycled materials from waste. In short, waste reduction and recycling share a strong substitutive relationship.

Furthermore, recycling comes with its own set of problems. For example, newsprint recycling, producing 100 tonnes of de-inked fibre from old papers, would produce about 40 tonnes of sludge which must be disposed of somehow. While the total volume of material is reduced, the high concentration of the remainder makes it more costly to dispose of. A report from the Resources for the Future argued that newsprint recycling is likely to decrease, rather than increase, the forestry inventories. This is because most virgin newsprint comes from trees expressly planted for that purpose. If recycling increases, these trees would not be planted!

Aside from the inherent problems of recycling, it must also be noted that recycling and incineration may compete for both financial and political support, and more importantly, for waste. For many large cities, incinerators require large financial investments which may make funds unavailable for recycling which generally requires subsidies. Additionally, private incinerators often require a contractually guaranteed volume of trash, and if recycling and waste reduction are encouraged, these operators may face a financial shortfall and require subsidies. These are significant issues in need of careful assessment and perhaps for each jurisdiction, a cost-benefit analysis.

2.3. Transboundary Pollution

A third area of concern for Asian governments with respect to balancing environment policy with economic growth is the issue of transboundary pollution. Transboundary pollution may be global or regional in nature. An example of global transboundary pollution is the emission of greenhouse gases by a particular country contributing to climate change that affects everyone. In contrast, regional transboundary pollution constitutes environmentally-unfriendly actions taken by a country adversely affecting the welfare of neighbouring countries. An example is a country located upstream of a river dumping its waste into the river and negatively impacting the downstream countries.

While global transboundary pollution is a serious issue that requires immediate attention and action, the issue of regional transboundary pollution should take priority where Asian governments are concerned since their effects are often more immediate. Notable cases of regional transboundary pollution problems include the haze pollution in South-East Asia caused by intentional burning of Indonesian forests (Quah, 2002) and India's strong objection to China's efforts to dam the Yarlung Tsangpo (Brahmaputra) river.

Regional transboundary pollution problems cannot be easily solved due to the state sovereignty largely preventing the formation of transnational institutions with jurisdiction over the signatory states[17]. Within a nation, the negative externalities of pollution may be internalised via taxation, or a pollution fee, or any other conventional economic tool. For transboundary pollution, however, the absence of an institution with jurisdiction over all the signatory countries inhibits the use of these tools.

The solution then, must involve voluntary cooperation of all countries involved to limit their use and damage of common resources. Here, game theory has been actively applied to analyse whether such socially optimal equilibriums may be reached and how stable these cooperative solutions are. However, an obstacle preventing cooperation is free-ridership. Due to the public-good nature of most environment goods, a country benefits from pollution-reduction actions of another. Thus, countries have incentives to free-ride. This is a classic case of the tragedy of commons where the shared resource (green environment) is quickly depleted even though it is in no one's long term interest to do so.

The good news is that game theoretic research has shown that, at least theoretically, so long as countries have sufficiently different benefits and costs of pollution, it is possible to divide the gains from cooperation such that each country would be incentivised to comply with proposed pollution reduction. Two rules that can achieve this outcome are the Shapley rule where each country is assigned a payoff that is equal to its expected marginal contribution and the Chander-Tulkens cost-sharing rule where each country receives an amount to compensate its foregone income from lower pollution and contributes an amount proportional to its marginal willingness-to-pay (WTP) for a better environment (Folmer et al, 1998).

For practical purposes, this means that the transboundary pollution problem faced by Asian governments may be resolved via negotiations and coordination that takes into account the relative contributions to pollution and the relative

[17] The most recent study in this respect is one which was undertaken by the Monitor Group in 2003. Prior to this, in 1995 the MIPR has also commissioned the Manchester Business School to develop the Brunei Darussalam Industrial Master Plan.

costs of pollution abatement. An example of successful cooperation between Asian nations to keep pollution at an optimal level is the ASEAN Agreement on Transboundary Haze Pollution where countries most affected by the haze provide aid to Indonesia, the source of the haze, to reduce the burning of its forests that was causing the haze in the first place.

2.4. Pricing Green Goods

Economic theory tells us that governments ought to handle public goods' provision since the free market will fail to produce them. Public goods may generally be classified into environment goods (e.g. clean air in public spaces) and non-environment goods (e.g. national defence). As governments have limited budgets, decisions have to be made regarding how much of each type the government should provide. Since maximising social welfare entails directing resources into producing goods that society most values, it becomes necessary for governments to know at least an ordinal ranking of the citizens' preference for environment and non-environment goods.

In other words, governments must be able to price green and non-green public goods. This is no easy task since the nature of public goods is such that no markets, and hence no market prices exist for them. The pricing of environmental goods is further complicated by the fact that they lack ownership rights.

The literature on pricing environment goods may be broadly divided into two camps: valuations using revealed preference approaches, and valuations using stated preference approaches. Revealed preference approaches are indirect methods based on actual behaviours of individuals and stated preference approaches are methods based on directly eliciting individual's preferences. The most popular revealed preference approach is the hedonic pricing method while contingent valuation is the most commonly used stated preference approach. Neither method is perfect. Hedonic pricing requires strong assumptions of rationality, perfect information, and perfect mobility to be valid (Quah and Ong, 2009) while contingent valuation is susceptible to a large number of behavioural effects (Kahneman and Knetsch, 1992; Carson et al, 2001).

A third approach, the paired comparison approach, may prove to be the best solution as it avoids the obvious flaws of the above two classes of methods. The approach uses a survey to elicit individuals' preference for public and environment goods. A set of elements are presented in pairs as discrete binary choices in a survey. The set may include gains, losses, activities, environmental resources or whatever is being scaled. From each pair, respondents then choose items to reflect which is more important, in the sense that larger compensation should be paid to it than the other (Rutherford et al, 1998). The variance stable rank method is then used to derive the ranking. This method requires that the total number of times an element is selected by all respondents is divided by the maximum number of times it could have been selected. The result is then multiplied by 100 so that it lies on a scale of 0 to 100. Ordinal ranking is then derived based on the magnitude of the result and some degree of indifference is allowed since scores for different elements may be the same.

Since paired comparison uses surveys like stated preference methods, it leaves out the need for strong assumptions required by revealed preference methods. Also, the key behavioural effect that plagues contingent valuation methods, the endowment effect (that causes a divergences in Willingness-to-accept (WTA) and Willingness-to-pay (WTP) of the same individual for the same good), is avoided. This is because WTP is obtained from a buyer's point of view while WTA is obtained from a seller's point of view and the different reference points result in different valuations where WTA is often higher than WTP (Knetsch and Sinden, 1984). Paired comparison offers a third reference point – that of a selector. As no real or perceived loss occurs in this case, behavioural effects on WTA such as loss aversion is avoided (Kahneman et al, 1999). Eliminating these affects allow for consistent valuations of public goods.

Studies that have made use of paired comparison approaches to rank environmental goods (Peterson and Brown, 1998; Rutherford et al, 1998; Chuenpagdee et al, 2001; Quah and Ong, 2009; and Quah et al, 2006) demonstrate the ease and usefulness of this method. Additionally, paired comparison allows the possibility of receiving public feedback regarding prospective public policies before implementation.

In view of the above, paired comparison of environmental and non-environmental public goods may present a solution to Asian governments in deciding the people's preferences and hence, the governments priorities in the provision of public goods.

3.0 Concluding Remarks

The economic growth and diversification of Asian economies necessitate that a balance be struck by Asian governments between pursuing growth and environmental policy. Four areas of challenges (NIMBY Syndrome, Waste Generation, Transboundary Pollution, and Pricing of Green Goods) and possible solutions were presented in this paper. Going forward, Asian governments must recognise that environment policy is not a question of not wanting or of an inability to be greener. It is a question of how much the society wants to be green. While growth and being green are not necessarily mutually exclusive (e.g. some countries are targeting 'green growth'), being green still incurs costs, including foregone income and consumption. While costs are immediate, benefits of being green accrue to the future and the trade-off between current priorities and future welfare must be carefully calibrated by taking into account both the economic benefits and user costs of any exhaustible resource.

Assuming Asian societies' desire to be green is sufficient to warrant government action, there are a number of pragmatic principles that Asian governments should follow regarding environmental policy. The first is that although money spent on addressing environmental issues is diverted from other equally pressing needs (e.g. education) and cost-benefit analyses (CBA) should be employed to decide if the proposed actions really yield net benefits, in conducting the CBA, governments must take into account that being green may be complementary to growth (e.g. development of green industries) and such benefits must be included. The second is that a long-run solution must involve clean technology although one must keep in mind possible conflicting end results. For example, a technology that reduces waste will also reduce the amount of waste recyclable which may make it very costly to recycle due to the lack of economies of scale and hence, a green plan must be holistic in nature. The third is that the use of market solutions should be explored and expanded as it allows the greatest amount of flexibility for firms and consumers to make adjustments. The fourth is that any solution must account for all stakeholders to reach more acceptable solutions. The last is that societies must establish for themselves acceptable environmental standards based on community preferences which may change as quality of life changes. The different expected standards may be manifested via market forces but that is only if society periodically takes stock of natural assets. There is hence a need for environmental accounting if a successful green policy is to be pursued.

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