Economic Diversification: The Case of Malaysia

Zainal Aznam Yusof
Council Member,
National Economic Advisory Council (NEAC), Malaysia
Section 1. Introduction

The middle-income country of Malaysia is an example of an economy endowed with natural resources that has been successful in diversifying its economy over the past 40 years of post-independence growth and development. The economy has shifted from being one dominated by agriculture and the exports of agricultural commodities and tin to an economy that is now more industrialized. Manufactured exports now form a sizable share of total exports. Diversification and economic growth has also contributed to the reduction in absolute poverty.

This paper considers the diversification of the Malaysian economy over the past 40 years, focusing on the diversification process and policies that have fostered production and export diversification. Section 2 summarizes the structural changes and the trends in diversification. Section 3 considers the existing policies and strategies that have had an impact on diversification. In Section 4 the policy mix and determinants of diversification are discussed. The conclusion is in Section 5.

Section 2. An Overview of Structural Changes and Diversification Trends

2.1 Structural Changes and Economic Diversification

Between 1957 and 2006 the Malaysian economy grew at about 6 percent per annum, and per capita income increased by slightly more than 24 times. Apart from economic growth, the distribution record has been more than satisfactory. Absolute poverty has been reduced from about fifty percent in 1970 to less than 4 percent in 2008. Tables 1 and 2 show the growth and structural changes of the Malaysian economy from 1971 to 2007. Since the country gained its independence from England in 1957, the economy has diversified beyond agriculture and primary commodities, so that manufactured goods now account for a much larger share of GDP and total exports. Agriculture’s share of GDP has fallen from about 26 percent in 1971 to about 10 percent in 1995 and 8 percent by 2005 (Table 1). The manufacturing share of GDP increased from 12.4 percent in 1971 to 26 percent in 1995 and 30.7 percent in 2005. The share that services contributed to GDP also increased.

It can be argued that Malaysia’s growth record has not been an even one and that it experienced volatile growth. There were episodes of slow and fast growth. Growth in the 1970s was relatively higher than growth in the 1980s. The basis of the faster growth phase of the 1990s were grounded in the strong push for industrialization that was initiated earlier, coupled with the push for heavy industries in the second half of the 1980s, and the introduction of more pro-growth policies that took off in the second half of the 1980s. Public investment in the latter part of the 1970s provided a strong stimulus to growth because the government played a more active role in the economy to support the affirmative action policies. GDP growth in the 1990s averaged more than 8 percent.
per annum up to the eve of the financial crisis when there was more liberalization, greater encouragement of FDI inflows, and an expanded role for private investment.

Oil and gas grew in importance, especially from the latter part of the 1970s. Its contribution to total exports and federal government revenue increased from the 1980s onward. Petronas, the state oil corporation, has played a significant role in exploring and developing the oil and gas industry, and it now has investments in more than 30 countries.
Table 1: Gross Domestic Product by Economic Activity (Millions of Malaysian Ringits in 2000 Prices)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture, forestry and fishing</td>
<td>13,335</td>
<td>16,631</td>
<td>20,429</td>
<td>23,888</td>
<td>28,423</td>
<td>28,105</td>
<td>30,647</td>
<td>35,835</td>
<td>38,177</td>
</tr>
<tr>
<td>Annual growth rate (%)</td>
<td>1.4</td>
<td>-3.0</td>
<td>1.3</td>
<td>2.5</td>
<td>-0.6</td>
<td>-2.5</td>
<td>6.1</td>
<td>2.6</td>
<td>1.3</td>
</tr>
<tr>
<td>Share of GDP (%)</td>
<td>26.3</td>
<td>24.9</td>
<td>20.3</td>
<td>18.3</td>
<td>15.8</td>
<td>9.9</td>
<td>8.6</td>
<td>8.0</td>
<td>7.5</td>
</tr>
<tr>
<td>Mining and quarrying</td>
<td>11,969</td>
<td>11,367</td>
<td>17,351</td>
<td>23,143</td>
<td>24,372</td>
<td>33,358</td>
<td>37,617</td>
<td>42,472</td>
<td>42,881</td>
</tr>
<tr>
<td>Annual growth rate (%)</td>
<td>7.2</td>
<td>-0.5</td>
<td>23.143</td>
<td>1.7</td>
<td>-2.2</td>
<td>13.5</td>
<td>11.8</td>
<td>10.6</td>
<td>9.5</td>
</tr>
<tr>
<td>Share of GDP (%)</td>
<td>7.2</td>
<td>17.0</td>
<td>17.7</td>
<td>0.1</td>
<td>22.9</td>
<td>2.6</td>
<td>11.8</td>
<td>10.6</td>
<td>9.5</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>6,257</td>
<td>9,598</td>
<td>16,719</td>
<td>21,540</td>
<td>42,625</td>
<td>73,889</td>
<td>109,998</td>
<td>137,940</td>
<td>151,257</td>
</tr>
<tr>
<td>Annual growth rate (%)</td>
<td>12.6</td>
<td>3.0</td>
<td>9.2</td>
<td>-3.8</td>
<td>15.3</td>
<td>11.4</td>
<td>18.3</td>
<td>30.9</td>
<td>2.8</td>
</tr>
<tr>
<td>Share of GDP (%)</td>
<td>12.6</td>
<td>14.4</td>
<td>16.6</td>
<td>16.5</td>
<td>23.7</td>
<td>26.1</td>
<td>30.9</td>
<td>30.7</td>
<td>29.9</td>
</tr>
<tr>
<td>Construction</td>
<td>2,518</td>
<td>3,044</td>
<td>5,623</td>
<td>7,452</td>
<td>7,523</td>
<td>14,868</td>
<td>13,971</td>
<td>14,685</td>
<td>15,707</td>
</tr>
<tr>
<td>Annual growth rate (%)</td>
<td>13.9</td>
<td>4.6</td>
<td>5.6</td>
<td>5.7</td>
<td>18.6</td>
<td>21.1</td>
<td>0.5</td>
<td>-1.5</td>
<td>7.3</td>
</tr>
<tr>
<td>Share of GDP (%)</td>
<td>13.9</td>
<td>10.3</td>
<td>17.3</td>
<td>-8.4</td>
<td>4.2</td>
<td>5.5</td>
<td>0.5</td>
<td>3.3</td>
<td>3.1</td>
</tr>
<tr>
<td>Services</td>
<td>17,917</td>
<td>25,293</td>
<td>39,048</td>
<td>54,380</td>
<td>76,851</td>
<td>132,188</td>
<td>175,649</td>
<td>230,043</td>
<td>272,406</td>
</tr>
<tr>
<td>Annual growth rate (%)</td>
<td>7.4</td>
<td>5.6</td>
<td>10.7</td>
<td>1.7</td>
<td>11.0</td>
<td>10.2</td>
<td>6.7</td>
<td>7.2</td>
<td>10.2</td>
</tr>
<tr>
<td>Share of GDP (%)</td>
<td>35.4</td>
<td>37.9</td>
<td>38.8</td>
<td>41.6</td>
<td>42.7</td>
<td>46.7</td>
<td>49.3</td>
<td>51.2</td>
<td>53.8</td>
</tr>
<tr>
<td>GDP at 2000 constant prices</td>
<td>50,657</td>
<td>66,692</td>
<td>100,747</td>
<td>130,770</td>
<td>179,906</td>
<td>282,867</td>
<td>356,401</td>
<td>449,250</td>
<td>506,341</td>
</tr>
<tr>
<td>Annual growth rate (%)</td>
<td>17.5</td>
<td>1.6</td>
<td>7.2</td>
<td>-0.8</td>
<td>9.0</td>
<td>9.8</td>
<td>8.6</td>
<td>5.3</td>
<td>6.5</td>
</tr>
</tbody>
</table>

Source: Bank Negara Malaysia Annual Report.
Table 2: Gross Domestic Product by Economic Sector (Million Malaysian Ringits in 2000 Prices)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Agriculture, forestry and fishing</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average annual growth rate (%)</td>
<td>4.9</td>
<td>4.3</td>
<td>3.2</td>
<td>3.6</td>
<td>-0.2</td>
<td>1.8</td>
<td>3.2</td>
<td>3.2</td>
</tr>
<tr>
<td>Average share of GDP (%)</td>
<td>25.8</td>
<td>22.4</td>
<td>18.9</td>
<td>17.8</td>
<td>12.4</td>
<td>9.0</td>
<td>8.3</td>
<td>7.7</td>
</tr>
<tr>
<td><strong>Mining and quarrying</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average annual growth rate (%)</td>
<td>0.5</td>
<td>9.2</td>
<td>6.2</td>
<td>1.3</td>
<td>6.8</td>
<td>2.5</td>
<td>2.5</td>
<td>0.5</td>
</tr>
<tr>
<td>Average share of GDP (%)</td>
<td>20.2</td>
<td>17.9</td>
<td>16.7</td>
<td>16.7</td>
<td>11.7</td>
<td>11.0</td>
<td>10.1</td>
<td>8.7</td>
</tr>
<tr>
<td><strong>Manufacturing</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average annual growth rate (%)</td>
<td>11.7</td>
<td>11.8</td>
<td>5.3</td>
<td>14.7</td>
<td>11.7</td>
<td>9.0</td>
<td>4.8</td>
<td>4.7</td>
</tr>
<tr>
<td>Average share of GDP (%)</td>
<td>13.4</td>
<td>16.0</td>
<td>16.4</td>
<td>20.6</td>
<td>25.2</td>
<td>28.6</td>
<td>30.0</td>
<td>30.4</td>
</tr>
<tr>
<td><strong>Construction</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average annual growth rate (%)</td>
<td>7.0</td>
<td>13.1</td>
<td>6.1</td>
<td>1.0</td>
<td>14.7</td>
<td>-0.2</td>
<td>1.0</td>
<td>3.5</td>
</tr>
<tr>
<td>Average share of GDP (%)</td>
<td>4.9</td>
<td>5.0</td>
<td>6.1</td>
<td>4.1</td>
<td>4.7</td>
<td>4.8</td>
<td>3.7</td>
<td>3.1</td>
</tr>
<tr>
<td><strong>Services</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average annual growth rate (%)</td>
<td>8.7</td>
<td>9.1</td>
<td>6.9</td>
<td>7.3</td>
<td>11.5</td>
<td>5.9</td>
<td>5.6</td>
<td>8.8</td>
</tr>
<tr>
<td>Average share of GDP (%)</td>
<td>36.2</td>
<td>37.6</td>
<td>40.7</td>
<td>41.6</td>
<td>45.5</td>
<td>48.8</td>
<td>50.9</td>
<td>52.9</td>
</tr>
<tr>
<td><strong>GDP at 2000 constant prices</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average annual growth rate (%)</td>
<td>9.2</td>
<td>8.6</td>
<td>5.4</td>
<td>6.6</td>
<td>9.5</td>
<td>4.9</td>
<td>4.8</td>
<td>6.2</td>
</tr>
</tbody>
</table>

Source: *Bank Negara Malaysia Annual Report.*
2.2 Trade Diversification

Export diversification proceeded at a fast pace. Exports of goods and services grew at 17 percent per annum from 1991 to 2000. The trade intensity ratio was about 86.9 percent of GDP in 1970 and increased by slightly more than two and a half times by 2000 (228.9 percent of GDP); it reached 223.2 percent by 2005.1 Malaysia’s export structure has changed dramatically over the past 50 years. Exports of commodities, tin, rubber and later palm oil dominated its exports in the 1950s and 1960s. The export-led industrialization drive from the 1970s raised the share of manufactured exports to about 81 percent by 2005. Exports of electronics and electrical products accounted for a sizable share of total manufactured exports.

Imports of intermediate goods rose in importance with the growth of manufactured exports. On standard international trade classification (SITC), machinery and transport exports accounted for more than half and mineral fuels about 12 percent of total exports since 1990. The rapid growth of manufacturing industries explains these shifts in the pattern of exports. Imports of machinery and transport (SITC7) account for the single largest share of total imports and seem to be rising.

The export diversification trend can also be illustrated by the behavior of the Herfindahl-Hirschmann Index (HHI). The HHI takes a value of one when a single export produces all the revenue for exports, and it becomes more evenly distributed when the HII approaches zero. Figure 1 shows the HHI for exports and imports, and it shows that the exports concentration has been changing. Overall the HHI remained relatively low and more evenly distributed from 1970 to the late ’80s. It then increased up to 2000 and began declining afterward; it reached about 0.2 by 2008, a little higher than the level in 1970.

Imports exhibited an almost similar trend. For manufacturing the HHI is low; there have been fluctuations, peaking in the late 1990s and then falling to about 0.1 by 2007. The volatility of exports appears to have been reduced, and the coefficient of variation for minerals, fuels, and vegetable oils and fats is the highest.

Economic growth has been accompanied by the greater importance of trade to the Malaysian economy and the growth of the manufacturing sector from the 1980s onward. The growth of manufactured exports has contributed much to the diversification of Malaysia’s exports. As shown in Figure 1, while the rapid growth of the 1990s was accompanied by the growth of manufactured exports, the period also witnessed a rise in the concentration of exports. Part of the explanation for this could be due to the continuing rise in the growth of exported electronics and electrical industries. The index, however, may not be capturing the changes in the detailed

---

1 The trade intensity statistic is the ratio of two export shares. The numerator is the share of the destination of interest in the exports of the region under study. The denominator is the share of the destination of interest in the exports of the world as a whole.
composition of these products because Malaysia's exports of electrical and electronics have been undergoing changes. These industries are quite import-intensive, because imports are required to manufacture the final electronic and electrical products.

Figure 1: Herfindahl-Hirschmann Index of Exports and Imports

Sources: Bank Negara Malaysia, Department of Statistics, Malaysia, Economic Report.

2.3 Revenue from Commodities, Oil and Gas

The sources of revenue have also been diversified. Historically export commodities were a major source of revenue for the government, and the export duty on rubber exports contributed substantially. Revenue from export duties imposed on primary commodities, other than petroleum, has been declining as a share of total revenue; revenue from export duty for rubber has been declining from 3.3 percent in 1970 to an estimated 0.8 percent in 1995. Revenue from palm oil, like rubber, has been fluctuating.

Revenue from oil and gas, as a proportion of total revenue, rose from 7.8 percent in 1975 ($154 million) to 37.8 percent in 2007 ($16.1 billion). Dividends (45 percent) and income tax from petroleum (42 percent) account for the bulk of revenue from oil and gas. In 2007, the government collected about $16.1 billion from the oil and gas sector, which is
about 37 percent of the total revenue of $42.6 billion collected in 2007. The revenue from the oil and gas sector helped finance about a third of government expenditures of $48 billion that year. The size of the contribution is equivalent to 8.5 percent of GDP at current prices in 2007.

The importance of oil and gas to the economy and the sector’s contribution to the economic diversification needs to be seen in a proper context. The importance of oil and gas can be divided into two parts: oil and gas as an industry, and oil and gas as a source of revenue. Revenue from the exports of oil and gas can be used to finance other sectors for development without developing the oil and gas sector itself. Or part of the revenue from oil and gas can also be utilized to develop the oil and gas business, including the ancillary services and inputs for the sector. Malaysia has also used revenue from oil and gas to develop the sector, including the petrochemicals industry and the services associated with the oil and gas industry. Even so, these developments have not increased the share of the overall mining sector to the country’s GDP.

However, the revenue that the oil and gas industry generates to the federal government has increased significantly, especially from the latter part of the 1970s. Revenue from the latter part of the 1970s was partly utilized to finance the development expenditure of the federal government, subsidize the price of gas to industries, and restructure the economy away from agriculture and toward more industrialization. Revenue from this sector also helped finance the growth of education to meet the needs of an industrializing economy.

Section 3: Existing Policies and Strategies

3.1 Import Substitution versus Export-oriented Growth

The early manufacturing industries—primary processing ones—that grew were those that had some natural protection because of high transportation costs and location advantages. Peninsular Malaysia had developed a comparative advantage in resource-based manufacturing industries, and its imports were more capital-intensive and exports more labor-intensive in the latter period (Hoffman and Tan 1980).

Industrialization was fuelled by a combination of state intervention in the economy and the growth of public enterprise, the use of fiscal policy and incentives to attract foreign direct investment (FDI), and the provision of industrial infrastructure and low cost labor. The early import substitution phase gave way to an explicit export-oriented industrialization strategy. Within 20 years the economy had to adapt to a labor shortage economy, and the new phase of industrialization relied much less on labor-intensive manufacturing industries.

Well before the adoption of an export-led industrialization in the 1970s, Malaysia relied on import substitution to generate the growth of its manufacturing industries. Most
were resource-based: i.e. the processing of agricultural, forestry and mining products that served the domestic market such as food products, printed materials, rubber products and building supplies. These contributed to development and met the needs of consumers and industries that needed the inputs. Tariffs were used for protection, but it has been noted that the level of effective protection was not very high when compared with other countries that were pursuing an import-substitution strategy. Demand for consumption goods was not completely met, and imports of consumption goods, like food, were still sizable. Similarly the imports of intermediate goods and capital goods were still sizeable, as the protected industries could not meet the demand for industrial inputs. By the late 1960s, with the rise in population growth and new entrants into the labor market, it was apparent that the growth of import-substitution manufacturing industries could not be relied upon for generating sufficient employment opportunities. Import-substitution industries were relatively capital-intensive. Unemployment levels were rising in the late 1960s; Penang Island, for example, had an unemployment rate of about 16 percent. After the May 13, 1969, racial riots, the government embarked on an industrialization drive for the exports of labor-intensive manufacturing industries. The electrical and electronic industries, especially for semiconductors, were promoted on Penang Island, and it became the spearhead for an export-led growth for manufacturing industries. Sizable surplus labor has been absorbed by the manufacturing sector.

Diversification has reduced the importance of agriculture in the economy and has raised the manufacturing and services sectors. Services also expanded as the economy became increasingly industrialized and accounted for the largest share of GDP. Excluding government services, financial services and wholesale and retail trade are the two largest subsectors in services. While growing, exports of services still account for a small share of total exports. Diversification of services is ongoing as more high value-added services like information and communications technology, education and tourism have expanded. Manufacturing-related services have also expanded with the rise of the manufacturing sector.

3.2 Industrial Policies for Export-Led Growth

The government played a key part in the diversification of the economy either directly or indirectly by channeling resources for diversification. Since the 1970s public investment and intervention were also used for distributive purposes (i.e. correcting ethnic imbalances in income, ownership, employment and entrepreneurship). Public investment increased to the early 1980s. Public investment (capital formation) was about 14 percent of GDP in 1985 and 12.3 percent in 1991; it then rose slightly from 1992 to 1993, but fell to about 11.3 percent by 2000.

Private investment’s share of GDP was about 15.8 percent in 1985, 31.8 percent in 1997 and 11 percent in 2000. Private investment after that has been sluggish following the impact of the Asian financial crisis.
The government created a fiscal stimulus through public investment to counteract the economic slowdown after 2000, and public investment’s share of GDP increased to about 18.6 percent in 2002 and fell to an estimated 15.6 percent in 2007. Private investment performance was dismal as its share of GDP was 10.6 percent of GDP in 2002; it rose to 12.9 percent in 2007, but that was less than half of its share in the peak years between 1995 and 1997.

Foreign direct investment (FDI) has played a central role in the diversification of the economy. Overall Malaysia has kept its economy relatively open. FDI was instrumental in the growth of agriculture and mining, and it also helped diversify the economy away from the cultivation of rubber into palm oil. British investment in rubber plantations started in the late nineteenth century, and diversification into palm oil was encouraged through replanting grants and utilizing a cess tax on rubber. Indigenous rubber smallholders also had access to the replanting grants.

The emphasis on getting FDI from the Islamic countries in the Middle East is relatively recent. The traditional approach has been to get FDI, irrespective of its source. A much stronger approach now is in place to develop Malaysia into a financial hub for Islamic finance. Policymakers have been aware for some time of the ample supply of Islamic funds from Middle Eastern countries and of the need to attract those funds to development projects in Malaysia.

Export-oriented FDI got an additional boost in the early 1970s with the development of the electronics and electrical products industries, especially on Penang Island, through a combination of fiscal incentives, infrastructure and aggressive promotion. The Pioneer Industry Ordinance created tax-free holidays for foreign investors for a number of years. Export incentives and accelerated depreciation allowances were also granted to foreign investors. The government provided subsidized industrial land by developing dedicated free trade zones (FTZs) and maintaining warehouses, including utilities, for export-oriented TNCs.

Aggressive promotion to attract TNCs and other foreign investors to Malaysia began in the early 1970s, especially under the leadership of the chief minister of Penang. The government established the Malaysian Industrial Development Authority (MIDA), a specialized federal agency for the promotion of FDI in manufacturing in Malaysia. The provision of a training center on Penang was instrumental in developing the skills that foreign investors needed. The Penang Development Corp. (PDC) played a crucial role in promoting FDI in the island. With its relatively cheap and educated labor force, Malaysia was able to attract FDI.

Malaysia adopted an industrial policy approach for its export-led growth for manufacturing industries. It supported exporters by providing tax holidays and creating export processing zones. The government also used tariffs, import restrictions and government procurement of locally produced goods. These policies helped promote
exports and protect domestic manufacturers. Early in this approach, the government promoted industries that could replace or reduce the amount of manufactured products that were imported and also to support resource-based manufacturing industries.

Subsequently Malaysia’s industrial policy approach was incorporated in its industrial master plans, long-term planning documents designed to promote specific manufacturing industries. Three of these now exist; the third, most recent one covers the period from 2016 to 2020. Essentially, these plans have identified the various types of manufacturing industries that could be promoted. A number of specific resource- and nonresource-based manufacturing industries have been identified, and the opportunities for their growth and estimates of likely investments have been included in the long-term plans. Promotion programs, through industrial missions overseas to attract FDI and domestic investment to the various subsectors are then drawn up in advance by MIDA.

The diversification of exports can also be seen as the outcome of a combination of horizontal and vertical diversification. Horizontal diversification involves policies that promote increasing the production of the existing export commodities. Vertical integration involves adding new values to the existing products or the production of new products. A combination of both, horizontal and vertical diversification, is usually utilized, and the Malaysia case illustrates this. A time element is also involved because vertical integration—usually the more difficult policy approach—could be used at a later stage of the diversification push.

What would constitute new products? The production of rubber is an interesting example in trying to make a distinction between horizontal and vertical integration. Latex production in its raw form is a rubber product by itself. The use of high-yield clones to raise the harvest of rubber production would constitute a type of horizontal diversification because it enables Malaysia to compete with other producers of natural rubber. The better quality natural rubber, in turn, allows producers to make new rubber products, such as Standard Malaysia Rubber I (SMRI), which allows for the “branding” of the rubber product.

The manufacture of rubber products, like tires and gloves, is an example of vertical diversification in the rubber industry. Malaysia is now the biggest producer of rubber gloves, and it is diversifying into higher-end products of medical gloves for the medical and health sectors. Palm oil also provides examples of both horizontal and vertical integration. Investments in research and development (R&D) have increased the yield of palm oil production, and some resource-based products have been developed, including petrochemicals. Currently, there is strong interest in using palm oil to produce biodiesel, another example of vertical diversification. The diversification from rubber into the production of palm oil is an example of vertical integration involving two resources.
The existing policies and strategies have taken the changing global and national environment and conditions into account. The government closely monitored developments in the global economy and carefully assessed the impact of global competition on the domestic economy. For example, opening domestic markets to foreigners created intense competition from the foreign financial sector. Under this situation, the central bank suggested consolidating the banking sector to better withstand the foreign competition. Overall the policy goal is to be a high-income economy and a developed country by 2020. A growth rate of 6.5 percent per annum has been targeted under the New Economic Model (NEM), which covers the period between 2011 and 2020 (incorporating the period of the Tenth Malaysia Plan, 2011-2015).\(^2\) The key emphasis now is on transforming the economy, which will require major reforms in various policy areas. The policy emphasis is still on maintaining the openness of the economy to international trade, and building up and diversifying into new markets for its exports in Asia and elsewhere. Diversification by exploiting the trade opportunities through the various free trade and cooperation agreements with various Asian and non-Asian countries are being pursued actively.

Economic diversification is being promoted by fostering the growth of the services sector, particularly in high value-added manufacturing industries such as electronics, automotive and aerospace that require more skilled labor, and knowledge-workers, and integration into the global production network. Resource- and nonresource-based manufacturing industries are being promoted. In the electronics and electrical industries, for example, the policy is to move up the value-added chain to manufacture more knowledge-intensive products. In palm oil there is a continuing emphasis on developing oleochemicals and alternative fuels. The policy emphasis now is on progressive liberalization and raising the competitiveness of the economy.

Section 4. Analysis of Policy Mix and Determinants

4.1 Rubber Replanting

From 1948 to 1952, rubber accounted for almost 70 percent of the total output value of the major agricultural commodities. From 1963 to 1967 its share declined to about 65 percent of total agricultural output while as a share of GNP it fell from 38 percent to 15 percent (Lim 1973). The successful diversification strategy comprised a number of elements, especially through research and development, and the role of the Rubber Research Institute of Malaysia (RRIM) was crucial in this regard. Replanting schemes for rubber essentially were programs for the reinvestment of profits of rubber estates and smallholdings.

The decision to increase the cultivation of oil palm in the 1960s was a significant policy change and a key component of agricultural diversification. This was pursued because of

falling rubber prices and competition from synthetic rubber. Public and private investment in oil palm estates gained momentum from the 1960s (Khera 1976). The Federal Land Development Authority (FELDA) spearheaded the diversification into oil palm cultivation; acreage devoted to growing palm oil grew from about 99,000 acres in 1960 to 335,000 acres in 1970, a more than three-fold increase. Palm oil production increased from about 90,000 tons in 1960 to 396,000 tons in 1970.

In the 1950s Malaya replanted 679,000 acres with an annual average of 67,900 acres per annum for rubber. The replanting was financed by government grants, which were paid for with export taxes. Replanting with new high rubber clones increased yields/productivity and reduced labor costs. The FELDA achievements show the progress by investing in smallholdings. Operating on an estate basis FELDA’s holdings were plots of 10 acres each. From 1956 to 1966 more than 80 percent of FELDA’s acreage was given to rubber, and the remaining 20 percent was for oil palm. Some 430,800 hectares of rubber and cocoa land were converted to oil palm and other uses. The amount of acres for rubber farming continues to fall, and about 1.3 million hectares were under rubber from 2001 to 2005.

Investment in research and development contributed to the rise in productivity of rubber and agricultural diversification. Established in 1926 the Rubber Research Institute Malaysia (RRIM) played a key role in raising the productivity of the country’s rubber industry. Rubber estates increasingly replanted their acreage with higher-yielding planting materials; in 1955 about three-tenths of the tapped acreage was under high-yielding planting material, and that increased to about 91 percent by 1970.

4.2 Palm Oil – Diversification and Investment

Before Malaysia became the world’s leading producer of palm oil, West Africa was the most important producing region (Lim 1967). A new phase commenced in 1957 when the government became more active in investing in palm oil through FELDA. Before World War Two, oil palm was entirely an estate crop. In the first half of the 1970s FELDA planted oil palms on about 288,000 acres. Almost 90 percent (3.6 million hectares) of the total planted acreage in 2005 was matured acreage compared with 86 percent in 1990 and 75 percent in 1970.

Revenue from natural resources, especially from oil and gas in the second half of the 1970s, has been utilized to achieve this transformation. Macroeconomic policies, as well as industrialization policies, supplemented by a liberal approach to FDI, have contributed to the successful diversification of the economy.

How was revenue from resources deployed for diversification and growth of the new sectors? First, the emphasis on agriculture and rural development that was carried through in the post-independence period helped the drive for diversification. Discovering that the poverty level in rural areas was very high—with the Malays
accounting for most of the impoverished population—galvanized efforts to reduce poverty through the diversification and modernization of agriculture and rural development. Allocating development expenditures in the five-year plans consistently gave high priority to raising productivity and modernizing agriculture.

Second, close attention was given to utilizing revenue from tin and especially rubber for development purposes. In formulating the five-year plans, especially the early ones, revenue from rubber made sizable contributions to financing development plans. In the years of low rubber prices and revenue, the size of the development expenditure had to be scaled down appropriately.

Third, revenues were used to raise the productivity of rubber estates and smallholders through incentives and subsidies. Part of the revenue was utilized for R&D and to develop high-yielding clones. Rubber replanting grants for estates and smallholders were the incentive to replant their land with the clones.

Fourth, diversifying from the cultivation of rubber into palm oil was also part of the response to the competition from synthetic rubber and the pessimism over the long-term price trends for rubber. Revenue was used for R&D, through the imposition of a cess, for palm oil cultivation, and to develop land development schemes for the cultivation of palm oil. FELDA’s schemes, particularly from the 1970s, spearheaded the diversification into palm oil cultivation. The Palm Oil Research Institute Malaysia (PORIM), the counterpart to RRIM, provided the R&D inputs for the diversification into palm oil.

4.3 Manufacturing Export-Led Growth

Financial resources were used for infrastructure development promoting FTZs, industrial estates and warehouses. Fiscal incentives (mostly tax incentives and larger ownership shares) were utilized to attract FDI, especially those involved in manufactured exports. Such exports became a major contributor to economic growth, accounting for more than 70 percent of total exports, by the late 1980s and with the nonresourced-based industries dominating exports.

The impetus to diversify the economy further through industrialization gained additional momentum by the late 1960s, and momentum built up in the 1970s after the May 13 racial riots and the launching of the New Economic Policy (NEP), an affirmative action policy. Urban and youth unemployment was rising, and more modern and better paying jobs had to be generated to absorb the unemployed youth in the urban areas. Support was given to developing labor-intensive, export-oriented manufacturing industries, and the electronics and electrical products industries got special treatment.

---

3 Malaysia has 11 free trade zones, established as areas where manufacturing companies can produce and/or assemble imported products. Customs controls in these zones are minimal, and all machinery, raw materials and components used in the manufacturing process may be imported duty-free.
and support. These industries initially started with the assembly of semiconductors for export, and subsequently other labor-intensive industries for exports were added to the portfolio of manufactured exports. Through investment by the leading TNCs, FDI played a key role in the growth of manufacturing industries for exports.

Export-oriented manufacturing industries through FDI gained momentum in the early 1970s. Export-oriented firms were promoted through introduction of the Investment Incentives Act of 1968, Free Trade Zone Act of 1971, and the Promotion of Incentives Act of 1986. Before these came about, industrial growth was driven by an import substitution strategy (IS) with the introduction of the Pioneer Industry Ordinance of 1958. Establishing the Malaysian Industrial Development Authority (MIDA) in the mid-1960s was a landmark in the drive toward industrialization.

Discussions of Malaysia’s push for industrialization are motivated by three observations. First, although there was rapid diversification away from resource-based industrial exports toward nonresource-based industries, recent years have witnessed marginally faster growth in the former. The recent weaker performance of the latter has kindled a debate about the future government industrialization strategy. Second, the future of labor-intensive industries is a source of concern, not only because of the high dependence on electronics/electrical products and textiles but also because of rapidly increasing labor costs in Malaysia. Third, with the erosion in Malaysia’s comparative advantage in labor costs and labor-intensive manufacturing industries, there has been a strategic push to seek out new growth areas and push toward higher value-added and knowledge-based industries. In this respect, Malaysia finds itself in a similar situation as its East and South Asian neighbors, and may need to take calculated risks as it did during the first phase of its industrialization, but within an entirely different socioeconomic context.

Diversification through the reform clusters approach illustrates policymaking, leadership and learning within the specific industrial contexts. Four manufacturing industries provide insights into the continuing push for diversification: rubber and palm oil products (both resource-based); electronics/electrical and transport/automobile industries (both of which are not resource-based). The two resource-based industries are important because they raise questions about the potential for further developing resource-based manufacturing industries. A natural resource-based industrialization strategy, it has been argued, can bring benefits to economies that produce primary commodities, and several developing countries have tried to go down this route (Yeats 1991). Markets for processed commodities may be more stable than those for raw

---

4 There have been some failures. For example, efforts to develop a wood processing industry by introducing export duties on log exports did not bring desired results, and the industry still needs government support.

commodities, and could in the long run yield more stable and larger secular price increases. The electronics/electrical products industry is the single most important manufacturing sector, making a considerable contribution to the industrialization of the economy. The automobile industry, an example of a heavy industry, is included because important policy changes have recently resulted from a fundamental reevaluation of the big push strategy introduced in the late 1980s.

### 4.4 Electrical and Electronics Products

The increasing importance of industrial electronics has been due to the expanding manufacture of high value-added products such as computers, computer peripherals and telecommunications equipment (Ministry of International Trade and Industry 2006). New high-end products include fabricated wafers, mobile phones, telecommunications equipment, computer notebooks and servers. New services, including the design of integrated circuits, prototyping, testing and failure analysis have also grown and expanded.

### 4.5 Rubber Products

Within the industry, tires and related products have shown the strongest export growth in recent years, followed by latex products (e.g., medical devices, gloves) and industrial and general rubber products (e.g., conveyer belts, floor covering), although rubber footwear has also shown strong performance. Latex products have moved higher up the value-added chain through the introduction of the Standard Malaysian Glove (SMG) scheme and technological developments; polymer-coated and powder-face gloves, and specialty gloves are the newer rubber products. However, cheaper products, particularly industrial and general rubber ones, as well as tires and related products have resulted in rising imports from abroad, especially from within the Association of Southeast Asian Nations (ASEAN). High-end pharmaceutical or medical products, such as coronary catheters used in surgeries, specialty gloves used in clean rooms, and other medical devices, will expand the product range (MITI 2006).

### 4.6 Palm Oil Products

The range of palm oil products increased from the manufacture of soap to margarine and cooking fats, and the trend toward using palm oil for edible purposes has been increasing. Processed palm oil contributes the most to oil palm industry exports, with oleochemicals (e.g., fatty alcohols, soaps, printing ink) accounting for the largest share. Other products (e.g., biodiesel, particleboard), though much smaller, have been growing rapidly.

### 4.7 Automotive Industry
In 1983, the government established Perusahaan Otomobil Nasional Berhad (Proton) as an automobile company and commenced operations in 1985. Component costs accounted for 80 percent of the total costs, and imports were sourced from Japan; the strengthening of the yen in 1994 raised the production costs of Proton’s cars. Proton developed a network of component manufacturers (some in-house manufacturing, some 138 domestic suppliers, and others from within ASEAN), and Proton exported cars to 30 countries. More than 70 percent of the domestic vendors were linked to technical partners from Japan.

Section 5. Conclusion

The track record of the Malaysian economy has shown that diversification played a key part in sustaining the growth of the economy. It was a key strategy for economic growth and structural changes. Diversification has reduced the contribution of agriculture to GDP and as a source of revenue. An export-led growth for manufacturing has diversified Malaysia’s exports, and manufactured exports now account for more than 70 percent of total exports. The diversification process is still being pursued through the exploitation of natural resources as well as moving up the value-added chain in manufacturing.

Macroeconomic and sectoral policies have contributed to the diversification of the Malaysian economy. First, with a few exceptional years over the past more than 50, there was macroeconomic stability, and inflation was kept at a very low level. Second, the exchange rate policy was aimed at maintaining orderliness in the foreign exchange market and was not used explicitly to promote exports. Third, the trade policies promoted and sustained the openness of the economy for both trade and capital flows. Tariffs extensively have been liberalized and reduced, and the economy is now much more integrated. Fourth, sectoral policies have addressed the need to diversify the economy away from relying on a few commodities. In agriculture resources were redirected away from rubber toward the cultivation and exports of palm oil. This was supported by R&D and institutional support to accelerate the diversification process. Fifth, the promotion and support given to the growth of the manufacturing sector has been fundamental in the diversification and restructuring of the economy. An industrial policy approach for identifying and promoting specific industries, supported by fiscal incentives and the provision of infrastructure, and utilities have been instrumental in the diversification strategy. Leadership also has made its contribution to the diversification and growth of the economy.

The two policies that played key roles in the diversification and growth of Malaysia’s exports kept the economy open for both trade and capital flows, and promoted and sustained the growth of manufactured exports. Both policies complemented each other and enabled Malaysia to sustain its export-led growth strategy during a critical phase of economic growth.
The Malaysian story highlights the fact that a diversification policy requires a longer-term perspective; the outcome of diversification will only be seen in the long term. For diversification to succeed, concerted efforts are required to channel resources, especially financial, and to build effective institutions. Specialized institutions for agriculture and manufacturing are needed to spearhead diversification. An export-oriented industrialization strategy will require a combination of macroeconomic and fiscal policies to attract FDI as well as investments in human capital and infrastructure.

References


