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Driving forces behind economic transformation and “middle-income trap” risk in Malaysian economy

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Introduction

Malaysia has attracted significant attention from the scholars and policy-makers because of economic growth, economic transformation and affirmative actions while approaching newly industrialized country status. Despite high volatility in the regional level, Malaysia experienced high growth of GDP per capita, especially 1970-79 as 5.2% after oil shock and global recession, then it lowered to 3.1% in 1980-89 after collapse of commodity prices. During 1990-99, notwithstanding the Asian financial crises the growth in GDP per capita was exceptionally high – 4.5% averagely, and just 2.8% in 2000-2010 impacting global financial meltdown¹. But Malaysia could strengthen its domestic demand to mitigate the impact of world economic shocks through encouraging the local economy to produce more high-tech intermediate goods for local industrial consumptions and export markets without damaging competition environment. Malaysia's relatively successful economic transformation from the traditional agricultural economy to the modern export-oriented industrialised economy partly based on relatively effective national development plans. It also takes the challenge the country's future economic growth for several institutional and structural reasons.

For the Malaysian economy, there is a risk to fall into middle-income trap (MIT). It is the phenomenon of low or moderate growth in middle-income economies following a phase of rapid growth due to difficulties to compete with either low-wage economies or highly-skilled advanced economies, as reflected by the slowdown in total productivity growth. To be developed nation requires high quality of life, also sustained and inclusive growth, otherwise without strong institutions and the innovative economy any country can always drop back to its previous level of the development².

In case of Malaysia, previous studies mostly analyzed middle-income trap as a separate phenomenon without linking with Vision 2020. In this respect, this research will answer the question that *is Malaysian economy facing with «middle-*

¹ Hal Hill, Tham Siew Yean, Ragayah Haji Mat Zin. "Malaysia's development challenges: graduating from the middle". Routledge. 2012. (p.2-4)

² Escaping the Middle Income Trap - Global Economic Symposium, <http://www.global-economic-symposium.org/knowledgebase/escaping-the-middle-incom> (accessed June 19, 2015).

income trap» (MIT) phenomenon and has country challenges to be high-developed country if country is in the «trap»?

In this study we assumed that even if Malaysia will overcome “middle-income trap” reaching 15,000\$ national income per capita by 2020 with soaring investments, full pledge to become highly developed country will be challenging goal for the country without innovations and technological progress. Malaysia can face challenges or troubles to meet 2020 goals, mainly to become “highly developed nation” without high-quality institutions.

In the first chapter, we are analyzing Malaysian economy in the past and present chronologically starting from first economic transformation wave of 1950s – 1980s. Then it focuses on “Mahathir era” in the Malaysian economy and his policies from early 1980s to early 2000s, finally studying economic diversification and export-led growth strategy in the current stage after early 2000s. In second chapter paper concentrates on middle-income trap phenomenon in the Malaysian economy shedding light on the theoretical framework of the MIT concept, symptoms of “middle-income trap” in the Malaysian economy and its institutional dimension. The third chapter describes main challenges of the Vision 2020, alternative strategies for the Malaysian economy for averting middle-income trap achieving sustained growth, and ways being high-income country. The paper also includes main findings, theoretical and empirical conclusions, also recommendations for policy-makers.

Prominent Malaysian and development economists were interviewed using central research questions of this thesis. Besides expert interviews, other methods such as desk research and statistical data analysis (including forecasting) are applied in this research.

Chapter 1. Malaysian economy in the past and present

1.1. Historical path of Malaysian economic transformation (1950s – 1980s)

Early economic structural change in Malaysia

The national economy of Malaysia consists of well-integrated social-economic systems of various geographical areas - Peninsular Malaysia, Sabah and Sarawak regions under the tight control of a centralized governance.

Image 1. The map of Malaysia



Source: http://www.lib.utexas.edu/maps/cia14/malaysia_sm_2014.gif

But before 1950, as one of the negative legacies of colonial rule, Malaysian export-based national economy had a segmented economic structure. It was rather dualistic economy where “modern sector” (features: large capital-intensive specialised units of production with wage labour and high technology) and “traditional sector” (small non-specialised producers using mainly household or non-wage labour and low-level technology) co-exist simultaneously. In this system, the modern sector is dominated by foreign companies, but mostly local businesses dominate the traditional sector³.

Historically, export-related production of agricultural commodities, growing role in regional and international trade in the Peninsula, the dynamic growth of the investment and immigration flows, finally infrastructural growth were main

³ John H. Drabble, *An Economic History of Malaysia, c.1800-1990: The Transition to Modern Economic Growth*. London: Macmillan Press and New York: St. Martin's Press, 2000. (p.109, 160-184)

features of the Malaysian economy. Drabble (2000) points out that “*there is “turning point” in the economic history of every country when a transition happens from a generally long period of extensive, mainly labour-intensive growth, to one of the intensive growth in which output enters on a rising trend*”. Extensive growth means that output per capita and population increase at about the same annual rate, but intensive growth means that production starts to outpace population on a sustained basis in accompanied by systematic changes in the composition and uses of national output. By 1950s, the increasing in tin mining output and agricultural industries stimulated infrastructural growth and preparing the way for the significant expansion of rubber production. But besides these two products in Malaysia some other exports fields like timber, iron ore, rice, palm oil and petroleum were started to develop in 1950s.

Stages of development and industrialization

Adelman and Morris (1997) differ 4 “development path” for industrialized economies: (a) autonomous export-led industrialization; (b) government-led inward-oriented industrialization; (c) balanced growth, open-economy, limited government intervention; (d) agricultural, primary export-oriented, sharply dualistic. But from the historical perspective, the sequence of industrialization stages, each with a particular combination of capital, labour, technology and product-mix, are followings:

- 1. Early stage – low capital and technological threshold; labour-intensive production of consumer goods (foodstuffs, textiles etc.).*
- 2. Middle stage – mid-level technology; a mix of consumer and intermediate goods (non-metallic minerals, rubber and wood products, chemicals, petroleum refining).*
- 3. Late stage – capital-intensive production (consumer durables, intermediate and capital goods).*
- 4. High technology – industries based on information technology and materials sciences.*

Malaysian economy had journeyed from the middle stage to the late stage during 1960s-1980s. While the development of agriculture and natural resource-based industries remained outstanding throughout the period, Malaysia looked

increasingly to the manufacturing sector to fuel the pace of economic growth. Policy passed through several phases, each defined by dominant strategy:

- a) 1958-1970: first round of import-substitution industrialization (ISI)
- b) 1970-1980: first round of export-oriented industrialisation (EOI)
- c) 1980-1985: second round of ISI
- d) From 1986: return to EOI

Post-independence the state was the primary initiator of development, creating an environment for domestic and foreign private capital. Underlying these phases were the successive five-year Malaysia Plans (number one to five in this period) from 1966 onwards, and the NEP from 1970-1990.

Policy shifts and state intervention

Alliance government (1952-1957) under general British colonial patronage has fulfilled moderate nationalist and broadly interventionist social-economic policies. Independence in 1957 followed by post-colonial economic diversification with limited government intervention (formation of the Federation of Malaysia in 1963 was driven primarily by political considerations - the inclusion of Sabah and Sarawak). “Laissez-faire” policies were implemented with firstly some export-oriented and then *import substitution industrialization policies, agricultural and rural development plans, and affirmative action efforts. A period of growing state intervention followed the post-election race riots of May 1969*” (Jomo, Hui. 2010)⁴.

Because the main reasons for riots were wealth and income inequality among local Malays and Chinese-Indian communities, and the state decided to intervene to limit the equities of Chinese and Indians and to increase opportunities for Malays.

For Idelman and Morris (1997) underline that “*state-led economic projects included replanting high-yielding trees for rubber industry, rapid improvements in rice cultivation, diversification into new crops mainly oil palms, new land development schemes and import-substitution oriented pioneer industrialisation*”⁵.

⁴ Jomo K. S. Wee Chong Hui. "Lessons from Post-colonial Malaysian Economic Development." Working Paper No. 2010/102. September 2010. (Web. 19 Jun. 2015) http://www.wider.unu.edu/publications/working-papers/2010/en_GB/wp2010-102/_file.

⁵ Irma Adelman and Cynthia Taft Morris, “Development history and its implications for development theory”, *World Development*, 1997, vol. 25, issue 6, pages 831-840 (833)

Effects of state intervention in the economic growth and transformation are spectacular not only in Malaysia, but whole East/Southeast Asian region. Malaysian government moved from a mostly “laissez-faire” stance in the 1960s to more interventionist mode in the 1970s and 1980s while growth rate accelerated, except for the mid-1980s downturn. These policy shifts also were inspired by the experience of South Korea and Japan. Government intervention in the economy had two primary purposes: (i) to increase the size of the national economy through rapid economic growth to meet traditional expectations of higher living standards; (ii) to restructure the economy to redistribute ownership of wealth and the pattern of employment so as to reduce the large differentials in income between ethnic groups. From 1966, the Five-Year Plan for Malaya, Sabah and Sarawak were integrated into a single plan for the whole Malaysian federation. Primary expenditure line remained infrastructure throughout three consecutive decades.

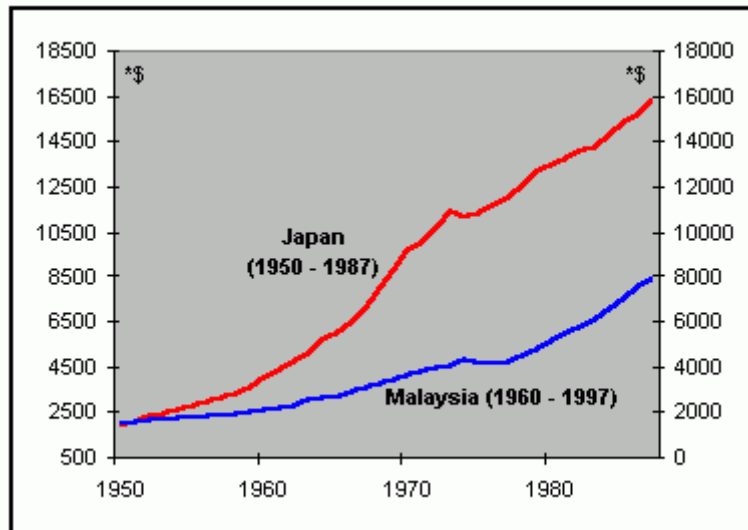
Five-Year Plans as a general framework for integrated development and New Economic Policy (NEP) brought forward large-scale government intervention and public sector expansion for inter-ethnic redistribution (among Malays, Chinese and Indian community) and rural development to decrease extreme poverty. Export-oriented (EO) industrialization created significant employment while vast petroleum revenues financed highly growing state spending. Jomo and Hui (2014) emphasised that “*Alliance government in the 1960s had been marked by import-substituting industrialization (ISI) and increased rural development efforts. ISI through tariff protection generated relatively little employment and collapsed in the mid-1960s while rural development efforts that emphasized productivity avoided redistribution in favour of the poorly capitalized, land-hungry peasantry*”⁶.

Economic performance during 1950s and 1960s

During 1950s and early 1960s Malaysia could be characterized by higher GDP per capita (in 1950 1828\$ in Malaya, 1208\$ in Japan), high level of export earnings (rubber and tin), higher government expenditure towards primary education and satisfactory level adult literacy among males.

⁶ Jomo S. Hui W. "Malaysia @ 50: Economic Development, Distribution, Disparities." 2014. (Web. 19 Jun. 2015) http://www.worldscientific.com/doi/suppl/10.1142/9007/suppl_file/9007_chap01.pdf

Figure 1. GDP per capita: Japan and Malaysia



Source: http://www.icapitaleducation.biz/images/english/articles/meh_14.gif

From 1950's to early 1960's Malaysian economy could diversify export basket from rubber to oil palm that country provided 20% of total world demand. Also to the diversification in the primary sector, Malaysia started to build up various secondary industries to assure for a larger portion of the domestic market for manufactured goods applying the import-substitution strategy. The newly-independent Malayan government passed a Pioneer Industries Ordinance in 1958 which offered inducements such as: (i) tax holidays up to 5 years, (ii) tariff protection, (iii) guarantees to foreign firms on freedom to remit profits and (iv) repatriate capital. The infant industrial sectors (chemicals, non-metallic minerals, basic metals, transport equipment), though still 6% of GDP by 1961, was the most dynamic part of the Malayan economy in the late 1950s and early 1960s averaging 10% annual growth and having strong linkage effects on the rest of the economy. Malaysia's dependence on exports increased very significantly from 42% of GDP in 1963 to 69% in 1990. Between 1960 and 1990 the total Malaysian population increased from approximately 8.2 million to 17.8 million, an annual rate of 2.6% while general fertility declined as a result of urbanization and level of education among woman⁷.

⁷ John H. Drabble, *An Economic History of Malaysia, c.1800-1990: The Transition to Modern Economic Growth*. London: Macmillan Press and New York: St. Martin's Press, 2000. (p.188-89)

Kiong and Jomo (2001) found out that “Malaysia’s gross national savings rate (GNS/GNP) rose from an annual average of 18.1 percent during 1966-70 to 30.4 per cent during 1976-80. Although the rate of capital formation increased significantly from 16.4 percent during 1966-70 to 28.1 per cent during 1976-80. During 1991-96, the share of foreign capital inflows in investment financing was equivalent to 6.2 percent of GNP on average, compared with an average of 3.7 percent of GNP during 1971-75. Foreign capital inflows contributed positively to Malaysian economic growth in that period that every 1 % increase in foreign capital inflows increased the economic growth rate by 0.019 percent”⁸. Malaysian GDP per capita grew at an annual average of approximately 4 % between 1970 and 1990, structural transformation and change was the exclusive characteristic in these decades. In the 1960s, the economy grew at an average annual growth rate of 6.6% and in 1970’s an average annual growth rate of 7.7%. Due to the recession in 1985-86, the average annual growth rate in 1980’s was slowed down to almost 6%, but just after recovering in 1987, the economy grew at roughly more than 8 % annually until the financial crisis in 1997. The economy experienced an adverse growth in 1998 but recovered from 1999 and sustained at an average annual rate of 4.5 %⁹.

Table 1. Historical Performance of Malaysia

<i>Indicators</i>	<i>1960s</i>	<i>1970s</i>	<i>1980s</i>	<i>1990s</i>	<i>2000–06</i>
GDP (average, bln.\$)	3	10.6	30.9	73.5	118.4
GDP per capita (average, \$)	325	848	1971.2	3551.4	4727.5
Average GDP growth (%)	6.6	7.7	5.9	7.3	5.2
Average per capita GDP growth (%)	3.5	5.2	3.2	4.5	3.2

⁸ Wong Hwa Kiong, Jomo K.S. “The impact of foreign capital inflows on the Malaysian economy: 1966-96”. FEA Working Paper No. 2001-02. University of Malaya. January 2001 (p.19)

⁹ Anoma Abhayaratne. “Economic Growth and Poverty Reduction: Lessons from the Malaysian Experience”. Department of Economics and Statistics, University of Peradeniya (p.4-6)

Average export growth (%)	6.0	8.2	9.2	12.7	7.2
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Source: author's calculations, Yusuf, Nabeshima (2009), p.18

State's development expenditure

Malays perceived that development costs were not spent proportionate, especially in the non-rural sector. Social tensions boiled over in May 1969 when severe racial rioting broke out in Kuala Lumpur. It was obvious that mainly laissez-faire policies of the 1960s deepened wealth and income inequalities in favour of non-Malays. The more interventionist outcome was an announcement of the New Economic Policy (NEP) to cover the 20 years from 1970 to 1990. Primary purposes of the NEP were economic restructuring, elimination of racial and ethnic disparities, and poverty reduction. Therefore, main areas of activity were rural development, the promotion of export-oriented manufacturing industry, regional development, preferential treatment for the "bumiputeras" (the indigenous population) in access to higher education and government employment. After the first decade of the NEP implementation, it was observed that the rate of economic growth increased, but local entrepreneurship developed very slowly¹⁰.

Table 2. Malaysia: development plan expenditure by sector, 1966-90 (% of total)

	<i>1 MP</i>	<i>2 MP</i>	<i>3 MP</i>	<i>4 MP</i>	<i>5 MP</i>
	<i>1966-70</i>	<i>1971-75</i>	<i>1976-80</i>	<i>1981-85</i>	<i>1986-90</i>
<i>Economic sector</i>					
Agriculture	26.3	21.7	22.1	11.8	16.0
Industry	3.3.	16.5	15.3	27.3	17.0
Infrastructure	33.7	34.1	26.6	36.2	43.2
<i>Social sector</i>					
Education	7.8	6.9	7.3	5.8	12.6
Health	3.5	1.8	1.4	0.9	1.5
Housing	4.9	2.4	6.1	4.9	2.2
Other	1.6	2.7	2.3	0.8	1.0

¹⁰ Jomo Kwame Sundaram, Wee Chong Hui, "Malaysia 50: economic development, distribution, disparities", World Scientific, 2014 (p.22)

<i>General</i>					
Administration	3.3	3.6	2.2	1.0	1.6
Security	15.7	10.4	16.6	9.3	5.0

Notes: (a) MP = Malaysia Plan; (b) Figures are based on actual expenditure. Source: Drabble (2000), p.196

The NEP as a leading source of development expenditure was an exclusively Malaysian concept to combine economic growth with restructuring of wealth ownership, employment and reduction of poverty. It indicates a significant need for a new political leadership. But also, state involvement in the national economy was very high after the NEP through establishing new agencies to generate assets or to acquire investments for the benefit of “bumiputera” private enterprises. The major political parties also became increasingly involved in economic activity. During the first decade of NEP’s implementation (1970-1980), faster economic growth considerably lowered unemployment over a decade with labor-intensive export-oriented industrialization and public sector expansion. More than any other prime minister of Malaysia, Dr.Mahathir Mohamad planned to become Malaysia into a newly industrializing country (NIC) under “Bumiputera”’s economic power¹¹. Summing up the sub-chapter, the Malaysian economy had relatively high economic growth also thanks to high commodity prices during 1960s-1970s and capital accumulation. Also, there was a huge budget deficit to finance development expenditure through overborrowing¹².

1.2. “Mahathir era” in the Malaysian economy and “Looking East” policy (1980s – 2000s)

In 1981, Malaysia’s new leader Datuk Seri Dr.Mahathir Mohamad started his premiership and did significant shifts in state policy. Taking into account slowing economic growth rate and inspiring from Japan and South Korea, Mahathir initiated a return to import-substitution industrialisation based on heavy industries (iron, steel, cement, cars) which were to produce intermediate goods and to generate linkages within the domestic economy. The investment came from a combination

¹¹ (Jomo 2012. p.19)

¹² Edmund Terence Gomez, Johan Saravanamuthu. “The New Economic Policy of Malaysia: Affirmative Action, Ethnic Inequalities and Social Justice”. Published by ISEAS. 2012 (p.25)

of public funds through the Heavy Industries Corporation of Malaysia (HICOM), Petronas, and private foreign capital (Mitsubishi, Honda). Mahathir did another policy switch that was privatization announced in 1983 and implemented during 1984 to lower burden of the government from non-effective corporations. By mid-1992, 13 big state-owned enterprises privatised (television, telecommunication, highway, shipping, national airline).

“Look East” policy

Mahathir also formulated “Look East” policy promoting high-quality labour practices and “Malaysia Incorporated” policy promoting the public-private partnership. The “Look East” policy advocated for labour work discipline, group loyalty, high productivity, and quality control in Malaysia based on cases of East Asia and particularly Japan. But these policies achieved only mixed success in the Malaysian local context. The positive results of all these policy switches were visible after 1988. With the crucial role of FDI flows into the country, real GDP accelerated from 1.2% growth in 1986 to 8.9%, 8.8% and 9.8% in the three years 1988-90¹³. For political reasons, Malaysian government preferred Japanese investment under the “Look East” policy adopted in the early 1980s, instead of Chinese investment. FDI was cooperated into the second round of ISI which focused on heavy industries. HICOM (1980) established several joint ventures in steel, motorcycle engines, a national car (Proton), petrochemicals and cement, with various Japanese companies (leading investors) as minority shareholders. Between 1970 and 1990 Malaysia’s total labour force doubled from 3.2 million to 6.4 million (average annual growth rate of 3.53%). The numbers in manufacturing grew practically six-fold from 225.000 to just over 1.3 million (9.2% per year)¹⁴. Another aspect of the “Look East” policy was a government-backed drive to form Malaysian super-large trading corporations (equivalents of Japanese “sogoshoshas”) to assist in promoting sales in export markets and help Malaysian manufactures cope with large overseas orders. There were about 6 of these by the mid-1980s.

¹³ John H. Drabble, *An Economic History of Malaysia, c.1800-1990: The Transition to Modern Economic Growth*. London: Macmillan Press and New York: St. Martin’s Press, 2000. (p.202)

¹⁴ Cassey Lee. “The Determinants of Innovation in the Malaysian Manufacturing Sector: An Econometric Analysis at the Firm Level”. Faculty of Economics & Administration University of Malaya, 3 March 2004 (p.13)

The Malay Dilemma

Dr. Mahathir bin Mohamad had developed his “Malay Dilemma” concept even during 1970s saying that “*The Malay dilemma is whether they (“Malays”) have to stop trying to help themselves in order that they should be proud to be the poor citizens of a prosperous country or whether they should try to get at some of the riches that this country boasts of, even if it blurs the economic picture of Malaysia a little. For the Malays it would appear there is not just an economic dilemma (“Chinese economic domination”), but a Malay dilemma*”¹⁵. He argued that ethnic or racial harmony is essential for long-term development in multi-ethnic society. He pointed out the importance of skilful government and efficient decision-making process for Malaysia as a newly independent country.

Structural change and sectoral contributions to the GDP

The Malaysian state played a decisive role in setting the overall direction of the economy through initiating structural changes, such as ISI and EOI, and in the redistribution of the gains in wealth, income and employment from economic growth. During last 30 years, Malaysian economy has undergone a structural transformation from resource-based products to the manufacturing products and urban services. Because of the expansion of agriculture and manufacturing, main source of economic growth was domestic demand in early 1980s. From mid-1980s to mid-1990s with the broad domination of manufacturing goods, economic growth was driven primarily by export. Therefore, economic growth averaged more than 6 % annually from the 1960s to 1990s. Contribution of net exports to the growth decreased during 1995-2000, but still it was significant. After 2001, the contribution of net exports to economic growth started to be negative. Private investment also was shrunk giving dominance to the domestic demand or consumption in that period¹⁶.

Table 3. Average Sectoral Contribution to Growth: Demand Side

	Contribution (%)
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¹⁵ Mahathir bin Mohamad. “The Malay Dilemma”. Times Books Int. Singapore. 1970 (p.61)

¹⁶ Shahid Yusuf, Kaoru Nabeshima. “Tiger economies under threat: a comparative analysis of Malaysia’s industrial prospects and policy options”. World Bank. 2009

Period	Consumption	Government spending	Investment	Net exports
1991–94	39.2	11.7	72.3	-23.2
1995–2000	38.3	7.5	8.4	45.8
2001–06	66.7	27.7	7.4	-2.1

Table 4. Average Sectoral Contribution to Growth: Supply Side

Period	Contribution (%)			
	Primary	Manufacturing	Construction	Services
1991–94	3.2	31.6	5.3	60.0
1995–2000	9.0	45.2	1.8	44.0
2001–06	8.8	38.0	0.5	52.7

After increasing from 1987 to 1997 to 30% of GDP, private investment declined in Malaysia and started to recover slightly in 2004-2005. Guimaraes and Olaf (2006) pointed out that “with the decline in private investment and a relatively stable savings rate, the current account has shifted from a deficit to a substantial and widening surplus since the late 1990s”¹⁷.

Table 5. Malaysia: structural change in GDP, 1960-90 (p.188)

<i>Per cent share of GDP^a</i>					
<i>Year</i>	<i>Agriculture^b</i>	<i>Forestry</i>	<i>Mining</i>	<i>Industry^c</i>	<i>Services^d</i>
<i>1960</i>					
Pen. Malaysia	40.5 ^e	n.a.	6.1	8.6	50.0
Sabah	55.1 ^e	n.a.	n.a.	2.2	42.5
Sarawak	45.5 ^f	n.a.	8.5	8.2	38.0
Malaysia ^g	47.0	n.a.	7.3	6.3	43.5
<i>1970</i>					
Pen. Malaysia	26.6	1.6	5.6	14.0	53.0
Sabah	19.8	34.9	n.a.	2.4	42.9

¹⁷ Roberto Guimaraes, Olaf Unteroberdoerster. “What’s Driving Private Investment in Malaysia? Aggregate Trends and Firm-Level Evidence”. IMF Working Paper. WP/06/190. August 2006. (p.3)

Sarawak	22.7	16.2	3.7	9.4	48.0
Malaysia	30.8	17.6	6.3	13.4	51.3
<i>1980</i>					
Pen. Malaysia	25.2	n.a.	8.0	22.0	48.0
Sabah	14.7	20.4	21.3	4.0	39.8
Sarawak	14.5	13.1	30.3	7.6	41.0
Malaysia	22.8	n.a.	10.0	20.0	47.2
<i>1990</i>					
Pen. Malaysia	16.0 ^h	n.a.	7.0	30.0	47.0
Sabah	26.2	10.4	20.0	7.0	35.9
Sarawak	9.4	14.4	32.9	12.8	31.4
Malaysia	19.4	n.a.	9.8	26.8	44.2

a - not all horizontal rows add to 100% due to variations in source data; b – includes fishing; c – manufacturing only; d – includes construction; e – 1967 (includes forestry); f – 1962; g – unweight average; h – includes forestry.

Between 1963 and 1990 Malaysian agriculture showed the effects of the extensive investment in land development, technical innovations to raise yields, crop diversification and infrastructural supports. Actual expenditure on the agricultural sector over this period aggregated 25 billion \$ or about 15% of the total outlay on development. The mining industry declined in 1960s and 1970s, but could recover in 1980s and 1990s in terms of particular share in GDP. The global depression of the early 1980s substantially slowed the growth of Malaysian manufacturing.

With a slowing of private investment and decreased ability on the part of government to maintain large-scale public funding of projects, that Dr. Mahathir Mohamad introduced the beginnings of the swing towards privatisation (cement, steel, petrochemicals, shipbuilding and a car assembly plant).

Primary source of manufacturing output growth was domestic market demand from 1959 to 1989. ISI strategies and policies expanded domestic market through leading industries namely, chemicals, non-metallic minerals, iron and steel, and fabricated metal products. After mid-1980's EOI strategies and policies caused the

development of major export industries such as textiles and electronics. The sluggish performance of domestic and foreign private investment in industry in the early 1980's (combined with falling official revenues) led to the formulation of plans specifically focused on industry.

The role of the state during Mahathir era

The first major state planning instrument for Malaysia as a whole was the Industrial Master Plan (IMP) announced in 1986. The IMP concluded that the ISI sectors didn't develop behind tariff protection to produce competitive goods internationally. EOI sectors are very narrow based on two major industries – electronics and textiles (65% of manufactured exports in 1983). 90% of components of semiconductors assembled in Malaysia were imported. Other shortcomings were dependence on foreign technology, lack of skilled workforce and inadequate incentives to expand exports. IMP identified 12 industries to develop to 1995: (i) 7 resource-based industries (products from rubber, palm oil, wood, chemicals/petrochemicals, non-ferrous metals, non-metallic minerals, foodstuffs); (ii) 5 non resource-based industries (electronics/electrical machinery, transport equipment, machinery and engineering products, iron and steel, textiles/wearing apparel). Main focus point were renewal of export orientation, strong linkages between the resource-based industries and domestic raw material producers, development of internal technological capability, competitive position of non-resource-based heavy industries in the domestic market of engineering and machinery industry, and more liberal trade regime lessening of tariff protection. As a result of tariff liberalization policies, import duty as a proportion of total import value fell from just under 9% in 1985 to around 4.5% in 1991.

After the implementation of the New Economic Policy (OPP1 for 1971-1990), the government formulated its Second Outline Perspective Plan (OPP2 for 1991-2000). OPP 2 focused on human resource development, the involvement of private sector, eradication of hard-core poverty and Bumiputeras participation in the labour market. The government also had the vision to transform Malaysia into a fully industrialised nation by the year 2020 and to be nation that is fully developed along all dimensions. This futuristic and ambitious vision are required radical

transformation and strategic shift in the overall development policy¹⁸. During the OPP2 period for 1991-2000, total factor productivity (TFP) contributed 25.5% to overall growth while the primary sources of economic growth were factor inputs like labour and capital (investment in infrastructure).

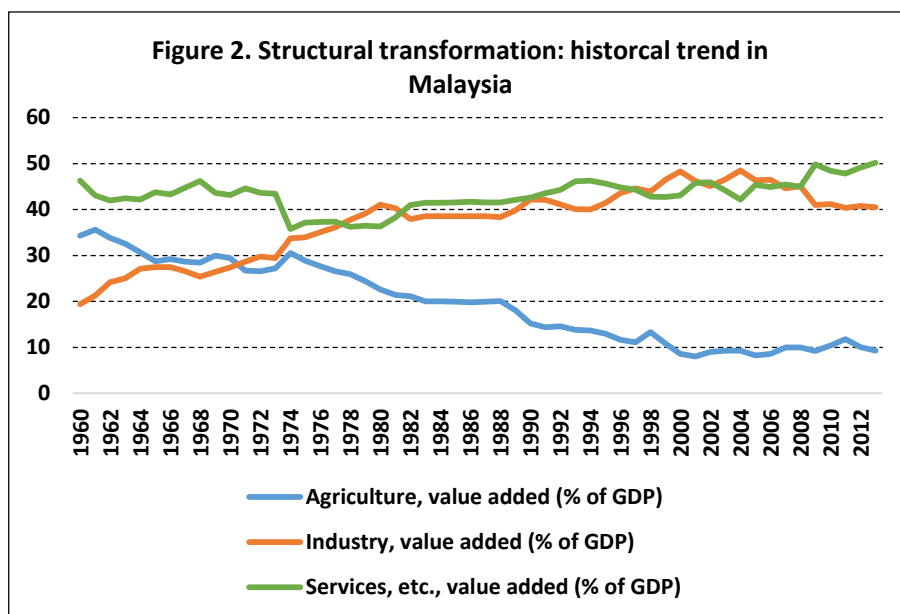
Table 6. Contribution of factors of production (%)

Factors	1970-1990 (OPP1)		1991-2000 (OPP2)	
	Contribution	% of Total	Contribution	% of Total
GDP	6.7	100.0	7.0	100.0
Labour	2.4	36.1	1.7	24.3
Capital	3.4	50.9	3.5	50.2
TFP	0.9	13.0	1.8	25.5

Source: Yussof (2009, p.17)

As a result of global demand shock, between 1980 and 1986 the unit prices for Malaysian primary exports declined by 40% whilst import prices fell by only about 7% that was accompanied with 7 times increase of trade account deficit. Pursuing expansive fiscal policy, Malaysian government increased budget revenues from about 11 billion \$ in 1979 to 21 billion \$ in 1985. In the late 1980s, Malaysian economy recovered from the depression and regional development regained momentum with Free Trade Zones (which was attractive for FDI flows), Pioneer Industries, and “urban industrial corridors” (pushing industries from major centres into less-developed regions as infrastructure developed). Expenditure on infrastructure development over the first five Malaysia Plans (1966-90) averaged some 35% of the total. Industry or manufacture started to run close agriculture as net contributor to GDP assisting the country to shift from early and middle stages of industrialisation into the late stage. *Structural transformation trends in the Malaysian economy was obvious after 1970s when the share of agriculture in GDP clearly declined while industry and services had stable or relatively raising trends despite cyclical fluctuations.*

¹⁸ Ishak Yussof. “Malaysia's Economy: Past, Present & Future”. Malaysian Strategic Research Centre, 2009 - Business & Economics (p.1)



Source: WB Metadata Malaysian Statistical Profile 2014

The structural transformation led raising urban population (40% of total, because of “bumiputera”s movement to towns) and a higher share of the secondary industry over the primary industry. The middle class is doubling with proportionately in Peninsular Malaysia from approximately 16% in 1960 to 32% in 1988¹⁹.

Poverty reduction

Over the period from the mid-1960s to the late 1980s, Malaysia was successful in decreasing inequality along with the incidence of poverty. In Malaysia’s case, the importance of income distribution and poverty reduction was heightened by the issue of inequality between and within the various ethnic groups.

As a second wave, Malaysian economy also experienced a dramatic reduction in the incidence of poverty with rapid growth during the period from 1970-2000²⁰.

Development of export-oriented industrialisation and especially, primary export industries were main driving forces behind the rapid growth of incomes in 1980s and early 1990s. NEP target for poverty eradication by 1990 (16.7% in Peninsula) had been achieved at 15% and living conditions in Malaysia had been improved very significantly between 1970 and 1990. Life expectancy and school enrolment ratio increased substantially. The Malaysian ratio of R&D scientists and technicians

¹⁹ “Towards a middle-class society”. World Bank Malaysia Economic Monitor. December 2014 (p.44)

²⁰ Anoma Abhayaratne. “Economic Growth and Poverty Reduction: Lessons from the Malaysian Experience”. Department of Economics and Statistics, University of Peradeniya (p.4-6)

was 3.7 per 10.000 people in 1985-89 (Indonesia 1.7, Thailand 1.5, Philippines 1.1, and South Korea 21.6)²¹.

Table 7. Malaysian economic progress during the NEP (%)

<i>Indicators</i>	<i>1970</i>	<i>1990</i>
Economic growth	5.0	6.7 (average growth per annum 1970-90)
Unemployment rate	7.5	5.1
Poverty incidence rate	49.3	15.0
Bumiputera employment in administrative and managerial jobs	22.4	31.3
Bumiputera capital shares	2.4	19.3

Source: Yussof (2009, p.14)

Local indigenous “Bumiputera” groups could control state governance system at both federal levels, but no ethnic group or value system could dominate in the society, especially after “Look East” policy. These processes were accompanied by foreign capital flows, technology transfer, trade effects and other processes having a transformative impact on the economy.

1997 Asian crises and policy responses

After 1990, The NEP was replaced by the New Development Policy (NDP) planned to achieve in a fully developed and industrialized economy by 2020²². Prior to the Asian’s 1997 financial crises Malaysia made real GDP growth of more than 9% averagely in particular during the 1991-1997 period. The growth has been accompanied by raised in the per capita income, low rates of inflation, and reduction in the incidence of poverty from 16.5% to 6.1%. But the severe downturn in the economic growth occurred in 1998 with the growth rate of -7.4%. The economy recorded higher growth rate in 2000 which was at 8.9%. Therefore average growth rate for plan period (1991-2000) was 7.0% per annum.

²¹ John H. Drabble, *An Economic History of Malaysia, c.1800-1990: The Transition to Modern Economic Growth*. London: Macmillan Press and New York: St. Martin’s Press, 2000. (p.286)

²² Abdillah Noh. “Historical Institutionalism and Economic Diversification: The Case of Malaysia”. *Asian Social Science*; Vol. 10, No. 9; 2014 (p.42)

But under the strong leadership of Prime Minister Dr. Mahathir Mohamad, the Malaysian central government and Central Bank took series of serious decisions (i) to fix USD-ringgit exchange rate from 01 October 1998; (ii) to freeze external dealing in the ringgit; (iii) to restrict remittances of foreign capital which had been in Malaysia less than twelve month²³. Hill (2012) pointed out that Malaysia as a development case is very unique due to peaceful transition to independence, adequately operating public administration, abundance of natural resources, less domestic violence than neighbour countries, more stable economic policies. In comparison with neighbour countries like Indonesia and Thailand, Malaysia has not encountered large-scale domestic violence and external threat. Additionally, its macroeconomic equilibrium policies were overwhelmingly stable and constant in large extent. Summing up the sub-chapter, Malaysia had largely moved through the first, labour-intensive, stage by the end of the 1970s, and into the middle-to-late stages during the 1980s. There were the larger-scale EOI ventures with few linkages to the domestic economy, and an ISI sector, medium to small scale, catering to the domestic market and requiring some tariff protection. The volume of FDI was crucial determinant of the economic growth in Malaysia. Capital investment was the largest contributor to the growth of industrial output between 1961 and 1988.

1.3. Economic diversification and export-led growth strategy in current stage (2000s – 2010s)

The Malaysian economy during the last 40 years period of 1970s to 2010s has a very definite trend of resilient economic growth accompanying with economic and export diversification, also a reduction of absolute poverty and distributive welfare. Structural change in the national economy (economic diversification from low productivity sectors into high-productivity sectors) and diversified export are possible drivers of Malaysian economy as a way out from the MIT.

Definition of economic and export diversification

The United Nations Framework Convention on Climate Change gives meaning to the economic diversification in its papers as follows: “*Economic diversification is taken as the process in which a growing range of economic outputs is produced. It*

²³ John H. Drabble, *An Economic History of Malaysia, c.1800-1990: The Transition to Modern Economic Growth*. London: Macmillan Press and New York: St. Martin's Press, 2000. (p.295)

*also includes the diversification of markets for exports or the diversification of income sources away from domestic economic activities”.*²⁴ Export diversification refers to the set of policies aimed at changing the shares of separate goods in the structure of export, introducing new products to the export basket and gaining access to new geographic markets²⁵. The major elements of economic diversification are the following: capital (human capital, physical capital and natural resources), competitive markets allowing more efficiency use of resources, infrastructure, sustainable institutional and structural reforms, and flexibility in foreign investments flows and trade and macroeconomic stability. With increased opportunities of natural resource exports, the whole country economy has become dependent on the exploitation of few resources or few sub-sectors. This dependence has already become an important economic determinant shaping the economic growth rate. In the case of Malaysia, the country could diversify economy and export basket from raw materials and natural resources to manufactured products.

Economic performances, 2008 crises and policy responses

After the negative effects of the global financial crisis in 2008-2009 which led to 1.7% contraction of GDP, Malaysian economy recovered growth rate to 7.2% and 5% in 2010 and 2011 respectively which were driven by domestic demand²⁶. Regarding to Human Development Report 2014, “*Malaysia’s life expectancy at birth increased by 6.9 years, mean years of school enrollment increased by 5.1 years and expected years of schooling increased by 3.7 years between 1980 and 2013,. Malaysia’s GNI per capita is increased by about 188.3% between 1980 and 2013*”²⁷. Malaysia had 313 billion USD nominal GDP, 29.9 million population, 10.468 USD GDP per capita and 3.1% unemployment rate for 2013.

²⁴http://unfccc.int/adaptation/nairobi_work_programme/programme_activities_and_work_areas/items/3994.php

²⁵ Akram Esanov. “Economic diversification”. Senior Economist, RWI, July 20-22, 2011, Istanbul <http://www.resourcegovernance.org/issues/economic-diversification>

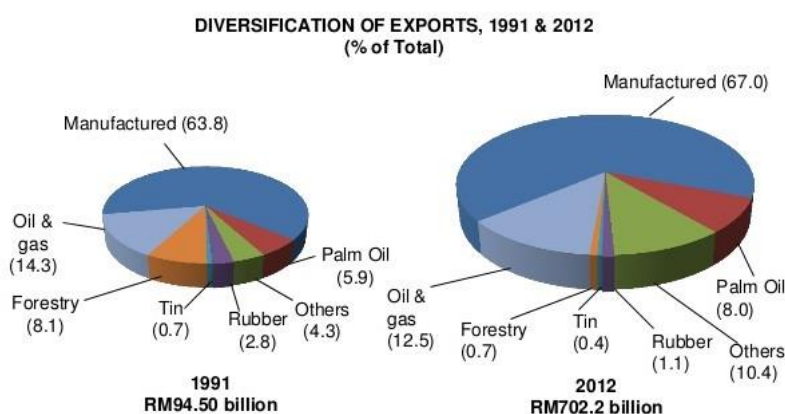
²⁶ G. Sivalingam. “Malaysia’s economic growth moderates”. Institute of Southeast Asian Studies, Singapore. Southeast Asian Affairs 2012 (p.1)

²⁷ Human Development Report 2014. “Sustaining Human Progress: Reducing Vulnerabilities and Building Resilience”. Explanatory note on the 2014 Human Development Report for Malaysia (p.1). <http://www.undp.org/content/dam/rbas/img/docs/Libya.docx>

Export diversification

Primary goods in the country's export were electrical & electronic products (39%), and commodities (23%) for 2013²⁸.

Figure 3. Export diversification



Source: <http://image.slidesharecdn.com/epumalaysiaeconomy2013-140105184156-phpapp02/95/the-malaysian-economy-in-figures>

The role of international trade in Malaysia's economy has been highly significant as reflected by the trade openness index, especially the ratio of trade (export plus import) over GDP (2.3 in 2000). Malaysia has benefited from regional trade arrangements, such as Malaysia-Japan Economic Partnership Agreement and the ASEAN Free Trade Area through "trade creation" effect and attracting new FDI. Malaysian economy was always open to foreign trade and foreign investments. Malaysia's trade regime has always featured with low average tariffs and limited non-tariff barriers. In Malaysia, the simple average applied normal trade relations (NTR) tariff rate is 8.56%, and import duties range from 0% to 50%²⁹. The inflation has always been small – less than 5%, and the exchange rate has been remarkably stable.

Economic diversification from primary commodities into the higher value-added activities had a significant importance for the Malaysian economy to avoid commodity price fluctuations and middle-income trap. In 1980, primary products accounted for 33% of GDP and 77% of exports. Implementation of National Industrial Policy and Industrial Master Plan in the mid-1980s and 1990s, led to the horizontal diversification of the national economy with serious growth in the

²⁸ IMF Country Report for Malaysia (Article 4 Consultation) No. 15/58, March 2015 (p.27)

²⁹ http://www.export.gov/malaysia/doingbusinessinmalaysia/eg_my_072633.asp

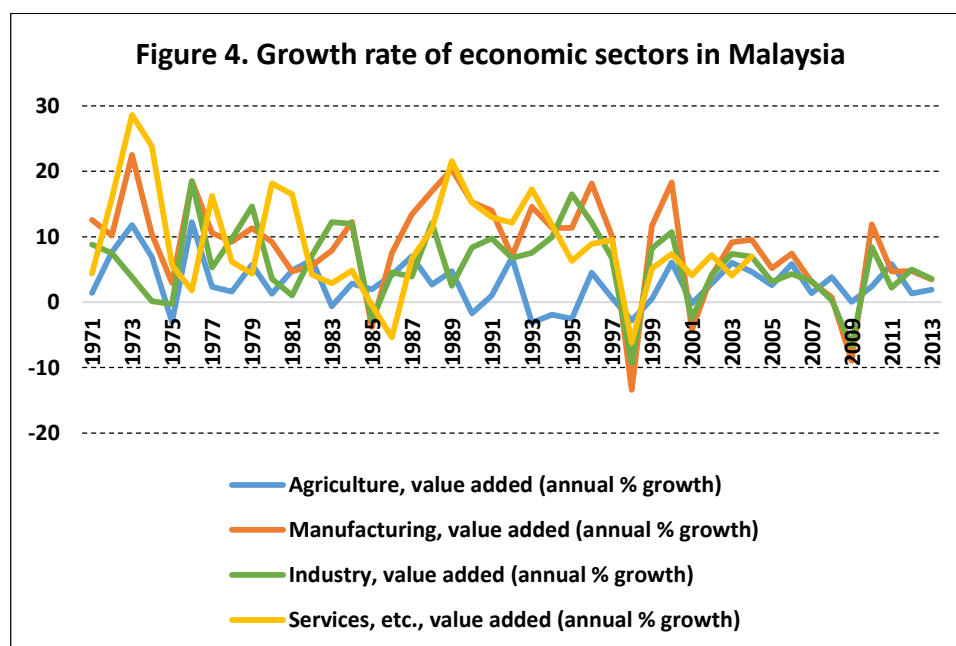
manufacturing and services sectors, and a significant reduction in the reliance on the primary sectors.

Table 8. Top 3 exports by SITC* classification: Malaysia and South Korea
(% of total exports)

Country	SITC	1970	%	SITC	1990	%	SITC	2009	%
Malaysia	231	Crude rubber	33.4	729	Electrical machinery, apparatus	15.3%	729	Electrical machinery, apparatus	12.8
	687	Tin	19.5	331	Crude and refined petroleum	13.4%	714	Office machines	11.4
	242	Wood	12.5	724	Telecommunications apparatus	8.6%	341	Natural gas	7.3

* - SITC – Standard International Trade Classification; Source: Hill et.al (2012: p.9)

But the growth rate of all economic sectors – services, agriculture and industry (especially, manufacturing) sectors showed almost same fluctuations during external demand shocks. The Malaysian economy also could successfully diversify vertically meaning “moving up the commodities value chain from upstream to downstream activities”³⁰.



Source: WB Metadata Malaysian Statistical Profile 2014

Noh (2014) argues that historical institutional narrative is relevant “*explanation about Malaysia’s success in diversifying its economy. Malaysia’s economic*

³⁰ “Further Diversification of Malaysia’s Resource-based Industries”. Economic Development Annual Report for 2013. www.bnm.gov.my/files/publication/ar/en/2013/cp01_001_box.pdf (p.1)

*diversification effort is a function of timing, sequence and path dependence. Its success in diversifying the economy rests on the timing of the state's discovery of oil and also path dependent feature of Malaysia's economy that promotes a diversification strategy. The character of Malaysia's political economy also facilitates the diversification process. Malaysia's consociation democracy or power-sharing arrangement - which is itself a product of the state's historical process – also imposes limits on Malaysia's policy options*³¹. Thanks to pro-reform institutional design in 2013, the government also conducted necessary reforms deleting fuel and sugar subsidies and proclaiming the implementation of the goods and services tax in April 2015 for long-run market stabilization.

Future economic performance and the transformation process towards greater industrialisation by 2020, will depend not only on its available resources and domestic factors, but more importantly the external factors which are likely to have significant impact on its future economic growth. In 2006, the Third Industrial Master Plan (IMP3: 2006-2020) was launched to guide the development of the industry to 2020. IMP3 focuses on expanding the sources of growth and positioning Malaysia's long-term industrial competitiveness in some sectors including private services³².

³¹ Abdillah Noh. "Historical Institutionalism and Economic Diversification: The Case of Malaysia". *Asian Social Science*; Vol. 10, No. 9; 2014 (p.43)

³² Ishak Yussof. "Malaysia's Economy: Past, Present & Future". Malaysian Strategic Research Centre, 2009 - Business & Economics (p.121)

Chapter 2. Middle income trap phenomenon in the Malaysian economy

2.1. Theoretical framework of the “middle-income trap” phenomenon

Many countries successfully upgrading from low-income to middle-income status were unsuccessful to graduate into the high-income country status. It is ““middle-income trap” phenomenon. It occurred because low-income countries benefited from low wages labour force migrating from rural low productivity agriculture to the urban high productivity manufacturing. But reaching the middle-income level the labour and capital accumulation have undergone diminishing return effects, and benefits from imitation of high productivity using imported technologies exhausted and wages started to rise making competitive mass production almost impossible. The situation of grinding to a halt as a middle-income country for an over particular number of years is “middle-income trap” (MIT) - well-known phenomenon based on per capita income thresholds and transition timelines. Felipe et al. (2012) defined 4 income groups of GDP per capita in 1990 purchasing power parity dollars: low-income group < \$2,000; lower-middle-income group from \$2,000 to \$7,250; upper-middle-income group from \$7,250 to \$11,750; high-income group > \$11,750. They found out that refraining the middle-income trap is about relatively faster growth in order “to cross the lower middle-income group in at most 28 years (which requires a growth rate of at least 4.7% annually); and the upper-middle-income group in at most 14 years (which requires growth rate of minimum 3.5% annually)”³³. Scarcely overcoming the upper middle-income threshold does not classify any given economy as a developed nation. If its economic foundations in terms of its technological and institutional capacity and capabilities are not strong, it can backtrack into an MIT.

Kharas and Kohli (2011) describes that “*there is also a Middle-Income Trap in which countries that avoided the poverty trap and grew to middle-income levels subsequently stagnate and fail to grow to advanced-country levels...and most countries fall into the middle-income trap because they fail to adopt new growth*

³³ Jesus Felipe, Arnelyn Abdon, Utsav Kumar. “Tracking the Middle-income Trap: What Is It, Who Is in It, and Why”. Levy Economics Institute of Bard College, Working Paper No. 715. 2012 (p.4)

*strategies once they reach middle-income status*³⁴. They are distinguishing the “middle-income growth strategies” and the “low-income growth strategies” where former should be based on demand side (producing export-oriented relatively high-quality products), while latter is based on supply side of an economy (increasing factor inputs like labor and capital, building relevant policies and institutions). They list some factors which push middle-income countries towards “trap” which are (i) impossibility to expand traditional export services because of higher wages and decreasing cost competitiveness; (ii) “connections between income distribution and macroeconomic growth”; (iii) “stagnation of the middle class and the growing concentration”; (iv) lack of appropriate skills and capabilities for innovation and product differentiation; (v) lack of substantial “sizable middle-class populations”; (vi) slow “transition toward service-sector firms”. Kharas and Kohli (2011) found out that experiences of other countries which could manage the avoidance from middle income trap, successfully transmitted 3 transitions: (i) “from diversification to specialization in production; (ii) from physical accumulation of factors to productivity-led growth; (iii) from centralized to decentralized economic management”. *Presence of consistent political leadership, effective institutions for property rights, capital markets and venture capital, fair competition, highly skilled labor force, attitudes towards innovations in long-run are a precondition to avoid from MIT.*

Ohno (2009) refers to the lack of capability to upgrade human capital. Different researches rely on the growth during the transition period. Spence (2011) found out that most difficult stage is 5,000-10,000 \$ income per capita. Filipe (2012) tries to answer that why some countries grow faster than others, and Eichengreen et al. (2011) explores the reasons for the recession of fast growing economies after some time-lag. They underline the importance of declining growth and productivity as a result of the relatively lower rate of TFP growth than capital accumulation. Gil and Kharas (2007) pointed out that “middle-income economies are squeezed between low-wage competitors that dominate in mature industries and wealthy country innovators that dominate in industries undergoing rapid technological change”. But

³⁴ Homi Kharas, Harinder Kohli. “What Is the Middle Income Trap, Why do Countries Fall into It, and How Can It Be Avoided?”. *Global Journal of Emerging Market Economies* 3(3) 281–289. 2011

for Garret (2004), the effects of globalization on potential “middle-income trap” countries demand relevant knowledge, skills and governance institutions to promote the advanced technologies and innovations.

Carnovallo (2012) analysed 22 countries and revealed that (i) “*economies that have successfully averted the trap are those that have reached high income status; (ii) of the success stories, the economies that took 30 years or more to transition from upper middle- to high-income were stuck in the trap, but eventually transitioned out of it; (iii) economies that have been classified as upper middle-income for 10 years or less are considered to be at the beginning of transition; (iv) the economies that have been classified as upper-middle income for more than 10 years are considered to be stuck in the middle-income trap. The point of growth trajectory divergence becomes apparent within the first decade of transition. So after ten years, it is reasonable to determine whether an economy is stuck in the middle-income by comparing its growth trajectory to success cases*”³⁵.

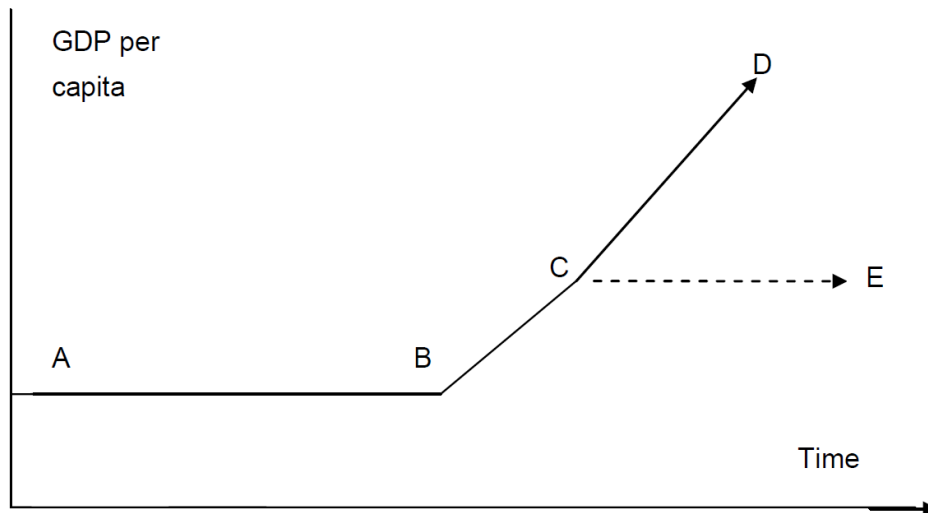
Robertson and Ye (2013) try to develop a concept to “*consider a reference country that is growing on a balanced path at a rate equal to the growth rate of the world technology frontier and to “define middle income band as a range of per capita incomes relative to this reference country*”³⁶. They identify 23 “trapped” middle-income countries for their definition including Turkey, Indonesia and Thailand but excluding Malaysia.

Agenor and Canuto (2012) identifies the middle-income trap as stagnation in innovativeness and misallocation of talents. Besides strength, the protection of property rights in any particular country, active public policies to develop infrastructure and improve labor markets are essential factors to by-pass middle-income trap.

³⁵Two theoretical propositions suggested by Carnovale (2012: p.35-38): (1) “*economies that transitioned to high-income have a more equal income distribution than those that are stuck in the middle-income trap; (2) economies that successfully transitioned in less than 30 years have fewer major religious groups than those that that transitioned in 30 years or more, and those that are stuck in the middle-income trap*”.

³⁶ Peter E. Robertson, Longfeng Ye. “On the Existence of a Middle Income Trap”. University of Western Australia. Economics Discussion Paper 13.1. February 2013 (p.2-3)

Figure 5. Development levels of economies



A–B: Traditional society, underdevelopment, facing poverty trap. B–C: Initial development stage, escape from poverty trap, initial development of markets. C: Middle-income level. C–D: Continuing sustained growth to high-income level (D). C–E: Stagnation or low growth—the middle-income trap. Note: GDP = Gross Domestic Product. Source: Tran Van Tho (2013)

But due to approach in the paper by Felipe et al. (2012), it can take the country 14 years (2007-2023) to cross upper middle income status and to reach high income country group while achieving average 3.5% growth of per capita income annually. They concluded that more diversified export basket, accumulation of productive capabilities and revealed comparative advantage (RCA) in more sophisticated and well-linked products are essential for the countries in the middle-income trap like Malaysia. MIT is the phenomenon of low or moderate growth in middle-income economies following a phase of rapid growth due to difficulties to compete with either low-wage economies or highly-skilled advanced economies, as reflected by the slowdown in total productivity growth. A country can always fall back to its previous level if its economic fundamentals are not strong. The central paradox of middle-income trap is that wages are risen steadily, this positive trend undermines the “low cost” model of development and forcing the country to move up the value chain³⁷.

³⁷ Shahid Yusuf, Kaoru Nabeshima. “Can Malaysia Escape the Middle-Income Trap? A Strategy for Penang”. World Bank Policy Research Working Paper 4971. June 2009 (p.2)

Another aspect of middle-income trap is the difference between wages of skilled to the unskilled labor force. Poor countries permanently increase wages of their unskilled labor because of temporary labor productivity thanks to the technology from advanced countries. But middle-income countries cannot change the ratio of earnings.

Some economists argue that despite relatively higher economic growth in the middle-income countries, there is still gap in per capita income of those countries and developed countries³⁸. This difference doesn't allow "peripheral countries" to enter to the list of "core economies" which are primary drivers of technological-innovational progress and new added-value products in the world economy. Dr. Piasecki also pointed out maybe not directly deterministic, but the quite important role of (i) the migration of young talented people from developing to developed countries, (ii) "cultural factor" and (iii) the phase of state-building as an explanatory variables for middle income trap concept. Talent movement hampers to build an innovative economy based on high-quality human resources. Cultural factors impact through work ethics and labor discipline. That is why Malaysia implemented the "Look East" policy. The substantial role of the developmental state can play double role firstly pushing large-scale development programs, also accelerating "trapping" process through wrong policies.

Flaen, Ghani and Mishra (2013) argues that essential elements to facilitate broad economic transformation are firstly, redistribution of knowledge and then technologies in a "spatially balanced manner". They pointed out that middle-income trap is frequently associated with weak integration of structural and spatial transformation. For transition from middle-income level to the high-income level quality of urbanization (urbanization rate is 72% in Malaysia) also does matter. Because the urbanization can boost the services sector, and services expansion can provide alternative growth driver for middle-income countries like Malaysia. In order to escape from middle income trap Malaysia should have *high valued added manufacturing and modern services where highly skilled workers, rapidly*

³⁸ Expert interview with Prof. Dr. Ryszard Piasecki from University of Lodz (17.04.2015) on "middle income trap" concept.

*expanding tertiary education system, promotion of entrepreneurship and innovation with knowledge spillovers are imperative factors*³⁹.

For Woo (2009) Malaysia's transition to a knowledge-based economy depends on microeconomic right incentives, good macroeconomic balances and proper governance institutions. The government did comprehend that Malaysia must become a knowledge-based economy to be high-income country. But before that the country should avoid middle income trap via reforms for many areas (e.g. civil service, educational and research institutions, the fiscal system, the state procurement system, the judiciary branch, the police force, government-linked companies) putting "the culture of excellence at the core of its administration"⁴⁰. Also, he notes that "ethnic quotas on ownership structure" is demotivating Chinese Malaysian firms become successful exporters of innovative high value-added products rather than producing import-substituting commodities. New Economic Policy (NEP) implemented from 1970s also contained corporate equity distribution for the benefits of local indigenous population which resulted increasing capital ownership share of the "Bumiputera" from 2.4% in 1970 to 20.6% in 1995⁴¹. State-owned companies mainly play an important role in the strategic policy fields like energy. Regarding the IMF's last country report, the national oil company PETRONAS dominates upstream and downstream activity in the energy sector. The production, processing and exports of crude oil, oil products and natural gas, and of other commodities (crude palm oil, rubber, forestry products and tin) amounted to 15 % of GDP in 2014 and contributed a net surplus of 6% of GDP to trade balance. Oil and gas revenue of the federal government amounted to about 30 % of total revenue⁴². International organizations like IMF also appreciates government's attempts for Malaysia as a natural resource-rich country to avoid a middle-income trap and reach high-income status by 2020. Their multi-year transformation programs envisage to improve infrastructure, upgrade the quality of education, and

³⁹ Aaron Flaaen, Ejaz Ghani, Saurabh Mishra "How to Avoid Middle Income Traps? Evidence from Malaysia", WB PRWR 6427, April 2013 (p.3-4, 23)

⁴⁰ Wing Thye Woo, "Getting Malaysia Out of the Middle-Income Trap", University of California Davis paper, 13 August 2009, <http://ssrn.com/abstract=1534454>

⁴¹ Mahani Zainal Abidin. "Malaysia's Past and Present Economic Priorities". FEA Working Paper No. 2002-8. Faculty of Economics & Administration University of Malaya (p.1-2)

⁴² IMF Country Report for Malaysia (Article 4 Consultation) No. 15/58, March 2015 (p.37)

boost Malaysia's research and development spending and raise its effectiveness in generating homegrown innovation. Additionally, IMF's country reports for Malaysia underlines that increasing urban centers, sustainable economic growth and lower income inequality, more female labor force participation, financial sector development, and social safety net can boost productivity growth and promote higher value-added activities.

Lee (2013) argues that although the transition from low to middle income tends to involve trade-based specialization in sectors inherited from the advanced countries (intermediate manufacturing goods, raw materials-based less-technology based commodities), the next stage of transition from the middle to high income level involves technology-based specialization in sectors with short cycle times where there is the frequent emergence of new technologies⁴³.

It is obvious that R&D and innovation are the main drivers of productivity and economic growth, but Vivarelli (2014) emphasises that different middle-income countries have divergent "*competencies and capabilities able to maximize both the endogenous supply of knowledge by a middle-income country itself and its "absorptive capacity" of knowledge coming from more advanced economies*"⁴⁴. He points out that competencies are exclusive values and "capabilities are dynamically accumulated" through the learning process. So education, training and learning are main features of countries which successfully to escaped from the MIT. Petri (2012) describes middle-income trap as a concept characteristic of middle-income Asian economies. He argues that central engines of growth in these economies such as urbanization, infrastructure development and middle-class consumption drive regional demand, increase comparative advantages of countries and provide autonomous foundations for development, but do not guarantee future growth⁴⁵.

⁴³ Keun Lee (Seoul National University), "Schumpeterian analysis of economic catch-up: knowledge, path-creation and the middle income trap", Cambridge University Press, 2013/09 (p.24)

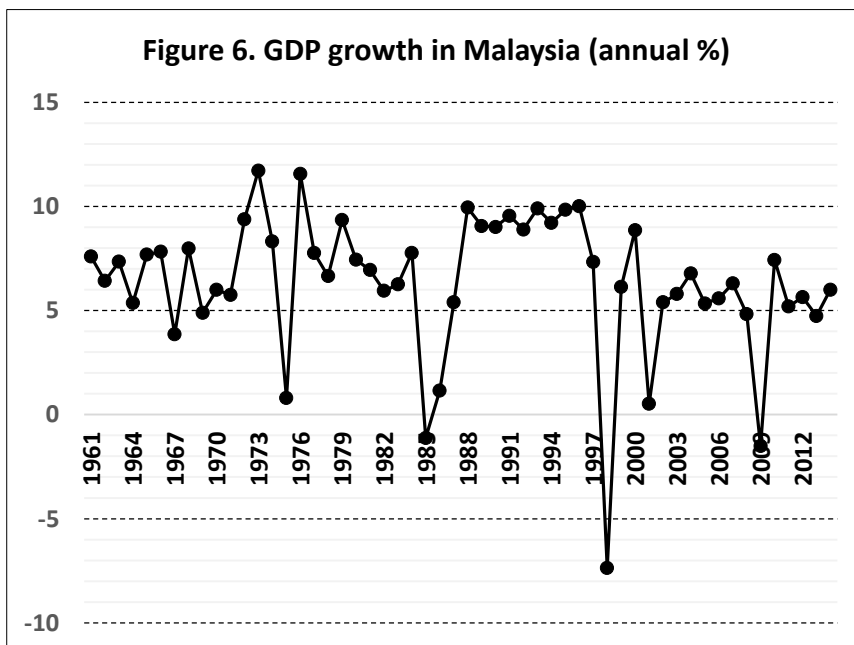
⁴⁴ Marco Vivarelli. "Structural Change and Innovation as Exit Strategies from the Middle Income Trap". IZA Discussion Paper No. 8148 April 2014 (p.2)

⁴⁵ "Can Asia grow fast on its own? The economics of the dynamic middle". Peter A. Petri (Brandeis University and East-West Centre). Joseph Fisher Lecture in Commerce University of Adelaide. 15 September 2012 (p.18-19)

2.2. Symptoms of “middle-income trap” in the Malaysian economy

Malaysia’s economic growth after 1970 had a very volatile tendency. Economic growth achieved its highest level between 1976-1980 reaching 8.5% per annum averagely, because of high export growth and private investment. Both parameters are increased 10% per annum averagely from 1971 to 1980. Exports of raw materials such as rubber and tin were important to the national economy. Economic diversification policy after 1970s has resulted to a significant increase in exports. Sundaram and Hui (2014) indicates that Malaysian economic growth and structural change over the last 50 years have been significantly due to relevant government interventions and the public sector reforms⁴⁶.

Malaysia sustained high economic growth for 40 years allowing it to switch from low-to upper-middle-income country in the relatively short period. But for Carnovale (2012) Malaysia has kept in the upper middle-income country basket for 18 years. Its average GDP per capita growth rate from 2001 to 2010 was less than 3%⁴⁷. Therefore, Carnovale (2012) claims that Malaysia is stuck in the middle-income trap.



⁴⁶ Jomo Kwame Sundaram, Wee Chong Hui, “Malaysia 50: economic development, distribution, disparities”, World Scientific, 2014 (p.15)

⁴⁷ Maria Carnovale, “Developing Countries and the Middle-Income Trap: Predetermined to Fall?”, Leonard N. Stern School of Business, New York University, May 2012 (p.26).

Source: author's calculations, World Bank Meta-Data System

Chirathivat (2014) calculated that number of years in the lower middle-income level, before graduated to upper middle-income level for Malaysia, was 27 years from 1969 to 1998 (5.1% average economic growth rate)⁴⁸. If we take into account the threshold of 28 and 14 years for the lower middle-income and upper-middle-income traps, Malaysia is the borderline case with already remaining from 13-15 years to 19-20 years in the upper middle income level until 2014 depending on methodology (using GDP or GNI, or using constant USD or current exchange rate).

Table 9. Malaysian economy in the “middle-income trap”

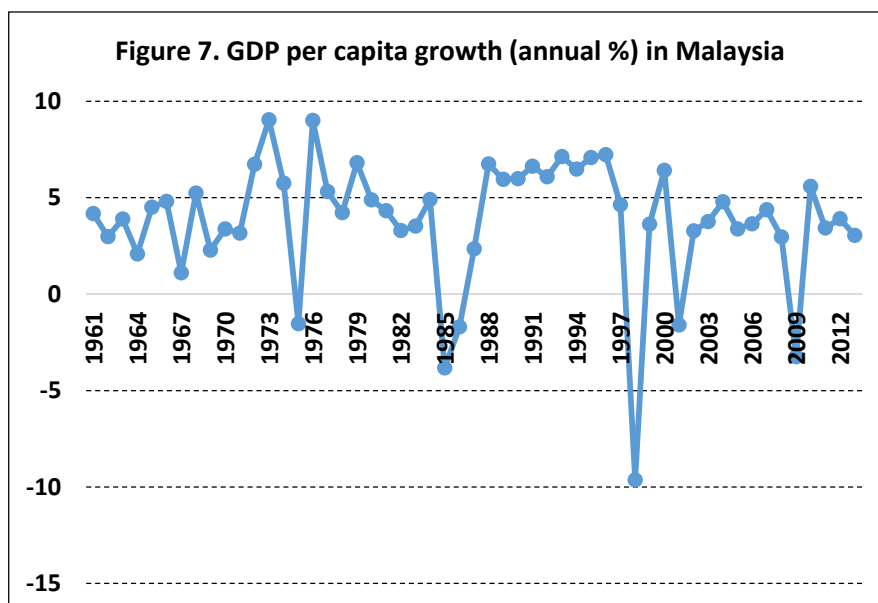
Criteria	<i>WB lower-middle income country threshold</i>	<i>WB upper middle-income country threshold</i>	<i>When it passed upper middle-income threshold (GNI)? (4.086\$)</i>	<i>Last updated year (2013) for GNI per capita in Malaysia</i>	<i>Number of years for “graduation” from upper-middle-income countries group</i>	<i>Number of years for Malaysia to remain in upper-middle-income countries group</i>
Indicators	1.036 \$ - 4.085 \$ GNI per capita	4.086 \$ - 12.615 \$ GNI per capita	1995 (4158.7\$ - GNI per cap. const. 2005 \$)	2013 (6749.8 \$ - GNI per cap. const. 2005 \$)	14 years (for Felipe et al.)	19 years

Source: author's calculation; WB Metadata

According to the revised World Bank income classifications of the world's economies based on estimates of per capita gross national income (GNI) for the previous year low-income countries have \$1,035 or less national income per capita, lower-middle income countries - \$1,036 to \$4,085 GNI per capita, upper middle-income countries \$4,086 to \$12,615 GNI per capita, and high-income countries have \$12,616 or more GNI per capita⁴⁹. The difficulty is different scholars apply different income classification that is complicating to identify middle-income trap phenomenon in one particular country.

⁴⁸ “Middle-Income Trap: Lessons from Emerging Asian Economies”. Presentation by Professor Suthiphand Chirathivat. Chairman of the Chula Global Network, Chulalongkorn University. April 2014

⁴⁹ World Bank. New country classification. 07.02.2013. <http://data.worldbank.org/news/new-country-classifications>



Source: author's calculation, WB Metadata

Malaysia plans to become developed and high-income country with GNI per capita of US\$15,000. Currently, this indicator is around 10,500\$ which is slightly above the world average. But GNI or GDP per capita in Malaysia is somewhat stable in last four years, and it took the country 12 years to increase per capita income from 4000\$ to 10.500\$. If we will use GDP per capita with current US dollars, but not purchasing power parity (PPP), we can see that Malaysian economy reached upper middle-income country basket after 2007. Malaysia per capita income has made minimal progress and GDP growth also slowed gradually after 2003-2004, leading some experts and international organizations to put Malaysia among the countries which already had fallen into the middle-income trap. Carnovale (2012: p.27-38) claims that reasons of Malaysia's stunted growth and stunning into middle income trap are social affirmative action due to NEP, "ethnic quotas on bank loans, business licenses, government contracts, and employment", ethnic and religious fragmentation, quality of education, lack of social capital (institutions, relationships and norms of society's social interactions) and non-equal income distribution.

Malaysian economist Dr. Azlan Tajuddin during an expert interview for this research argued that "the risk of being in the middle-income trap for countries like Malaysia is very real. It is because developing countries do not have the capacity to move beyond what World Systems theorists call "semi-peripheral" economic status, which Malaysia is currently situated. Lacking effective capital, and unable

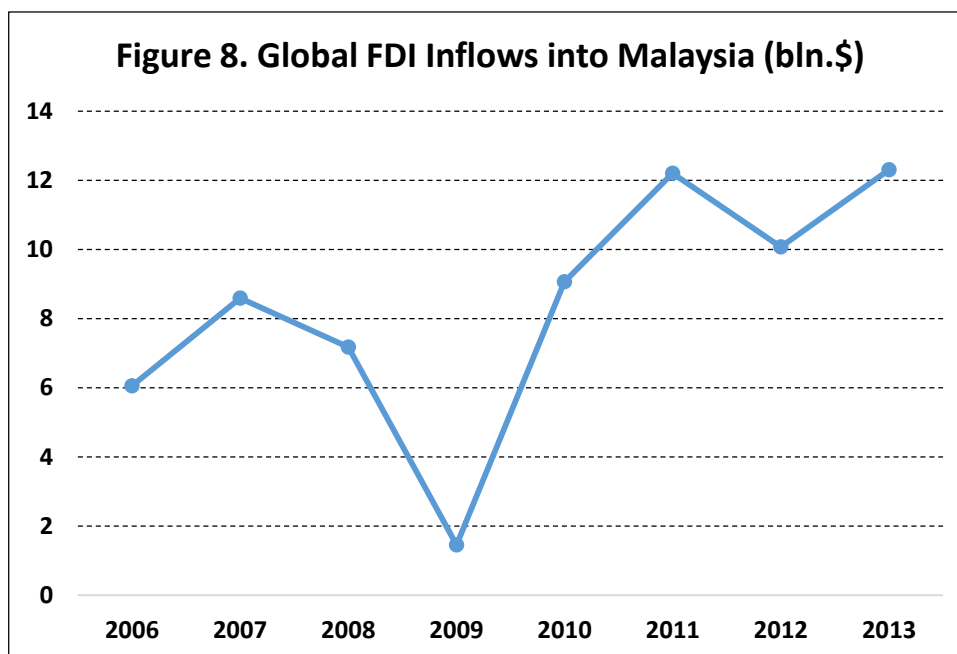
to develop high-technology or circumvent patent rights laws, industries in the developing world do not have the capability to start-up their own advanced production processes or services, without which they cannot compete with industries from the rich countries. They often can only manage a small market - mostly domestic or at the most, regional. Furthermore, corruption, as well as debt, becomes one of the most challenging problems to overcome in most of these countries, which will offset any gains from industrial advancements. Average 7% growth per annum to achieve long-run goals in economic terms is also meaningless if your economic growth mostly comes from the export of commodities between one TNC's subsidiaries located in your country to another subsidiary situated in another part of the world. This is also true if your main export is oil without any effective diversification in other industries. Countries like Malaysia neither profits from technology development nor capital accumulation. The world economy is unequal and will continue to benefit the industrialized countries of the North”⁵⁰.

Tang (2009) points out that there is a long-run relationship between GDP and government expenditure in Malaysia for the sample period 1950-1992⁵¹. Also, public investments - which have not crowded out, but have instead induced private investments - had a meaningful function in the economic growth and the economic policy. Development expenditure played an important role in its policies to achieve the objectives of the New Economic Policy that began in 1971 including diversification. Then the services sector is a major contributor to economic growth, particularly from a new source of growth in the financial sector and business services.

Starting in 1985 until 1999, the government has given higher allocations to economic services by an average of over 13%, followed by social services, an average of 7%. Malaysia’s open economic position has made the country one of the largest FDI receivers, but some declines of FDI inflows were also observed due to the decline in major raw materials prices in the world market and other external economic shocks.

⁵⁰ Interview with Dr. Azlan Tajuddin, Associate Professor and Chair, Department of Sociology, La Roche College, USA (10.04.2015)

⁵¹ Tuck Cheong Tang, “Wagner’s Law versus Keynesian Hypothesis in Malaysia: An Impressionistic View, Monas University, Department of Economics, Discussion paper 21/09 (p.2)



Source: MITI weekly bulletin, volume 280, 04 March 2014

Hussin, Ros and Noor (2013) indicate the significant factors for Malaysian long-term economic growth such as trade openness, foreign direct investment, and government development expenditure⁵². Their study suggests that trade openness leads to good macroeconomic performance playing an important role in the economic development and is presumed to be an engine of growth.

Malaysia had sustained high catch-up growth between 1960-2000s when national economy closed the gap between itself and advanced economies through long-term sustained growth. Carnovale (2012) defines the “growth acceleration” as sustaining a per capita income growth rate of at least two percent for a minimum of eight consecutive years, also the post acceleration growth rate must be at least three and a half percentage points⁵³. Income level before the decades, when economic growth of Malaysia exceeded USA growth, was lower middle after that period income level became upper middle. But latest “growth acceleration” was observed in Malaysian economy in 1988, whereas before “growth acceleration” pace income level was lower middle, but after that it was upper middle that is same today. Lee (2013) underlines that sustained innovations through sustained industrial catch-up requires to specialize short-cycle technologies and after gradual turning points they move

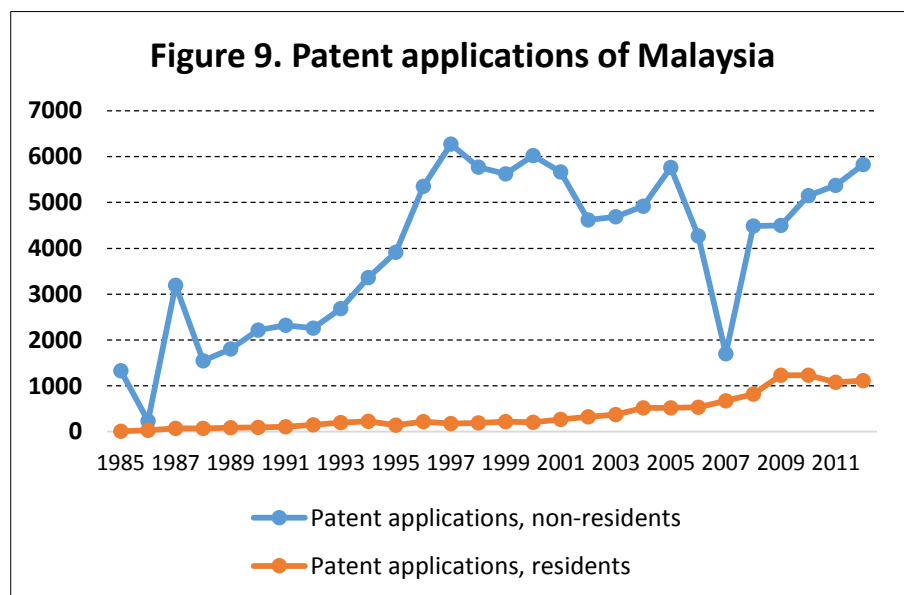
⁵² Fauzi Hussin, Norazrul Mat Ros, Mohd Saifoul Zamzuri Noor, “Determinants of economic growth in Malaysia 1970-2010”, Asian Journal of Empirical Research, 3(9)2013, p.1140-1151

⁵³ Maria Carnovale, “Developing Countries and the Middle-Income Trap: Predetermined to Fall?”, Leonard N. Stern School of Business, New York University, May 2012 (page 12-15).

into production of more advanced technologies⁵⁴. He defines short-cycle technologies as a technologies which “become obsolete” during relatively short period and quick speed for the emerging of new technologies (mostly electronics and related products from the experience of exports of South Korea and Taiwan. Breakdown of Malaysian export basket reveals that the country partly achieve to the export diversification including short-cycle technologies like electronics products. But they are assembled, but not developed in Malaysia as a new technologies. Therefore, it can lead to the specialization on lowest-level long cycle technologies and getting the immovable situation at this technological level.

Technology-based transformation

For some scholars, Malaysia could not realize technology-based change. A very critical indicator in this sense differentiating middle-income countries broad economic performance and efficient transformation is a localization of knowledge creation based on Patent applications by residents and non-residents as a measurement. The below-mentioned diagram demonstrates the tremendous difference in patent applications of residents and non-residents showing the higher mood of innovativeness among non-residents and their companies.



Source: author’s calculations, World Bank Meta-Data System

⁵⁴ Keun Lee (Seoul National University), “Schumpeterian analysis of economic catch-up: knowledge, path-creation and the middle income trap”, Cambridge University Press, 2013/09 (p.18).

For Malaysia, being a developed nation is not just about meeting the numbers set by the inter-governmental organization, but it is also about achieving quality, equitable and sustainable growth for the long term. Preliminary research hypothesis is that (i) it is too early to classify Malaysian economy as being affected by middle-income trap syndrome; (ii) but even if Malaysia will overcome “middle income trap” reaching 15,000\$ national income per capita by 2020 with soaring more foreign and domestic investments, full pledge to become “highly developed nation” will be challenging goal for country without proper qualified institutions and emerging innovations.

Steady Long-run level of economic growth and productivity

In Malaysian economy, long-run steady economic growth will be required in order to avoid from middle-income trap and this kind of growth will depend on rising productivity in the national economy. Regarding Krugman and Wells (2012) sustained growth in real GDP per capita happens only when the labor productivity defining as the amount of output per worker scales up steadily⁵⁵. Of course, Malaysian economy can experience high growth in output per capita by adding a high percentage of the population to working sphere. But over the longer run, the rate of employment growth is synchronized with the rate of population growth. Real GDP can increase because of population growth, but any rapidly rise in real GDP per capita must be the visible consequence of increased output per worker.

There are three main reasons for high productivity of production per worker: (a) *physical capital* - buildings and machinery which makes workers more and more productive (*the average private-sector worker in advanced economies makes use of the around \$130,000 worth of physical capital*). (b) *human capital* - referring to the improvement in labor through the better education and knowledge embodied in the workforce (*education is more important determinant of growth than increases in physical capital*). (c) *technology* - defining as the technical tools for the production of goods and services in the economy.

Physical capital contributed 45% to GDP growth in comparison with 22% contribution of a total factor of productivity (TFP or just technology) during 1970-

⁵⁵ Paul Krugman, Robin Wells. “Macroeconomics”. 2nd edition. Worth Publishers. 2012 (p.372-373)

1980s indicating input-driven growth in the Malaysian economy. Contrary trends were the case in Korea and Taiwan which had productivity-driven growth where TFP contributed about 50% of GDP growth rate. Of course, productivity-driven growth (where the growth is explained by technological progress, productivity and advance knowledge) is more sustainable than input-driven growth where the growth is mainly result of increasing factors of production (labour and capital). During 1985-1995, manufacturing sector of Malaysia was attributed to a higher rate of labour productivity growth which was caused by TFP (58.7%) and capital deepening (41.3%)⁵⁶. Greater attention to research and development (R&D) and human resources development and liberalization of trade and capital led to the active role of private sector in Malaysian economic development.

Malaysian economy firstly grew very fast in 1980's and 1990's, but income levels stalled more or less in the mid-1990. In 1980, its income level about the USA was 17%, this indicator reached a peak of 25.7% in 1995 before declining to 24.8% in 2000 and recovering to 25.2% in 2005. Average GDP growth per capita was equal to 2.86% per annum during 2007-2013. Flaaen et al (2013) found out that Malaysia can be considered as a country case that is trapping into MIT without facing a substantial growth slowdown. Because, despite the fact that TFP growth recovered after 2000s, the economic growth rate was low in comparison with countries already graduated from middle-income country status (e.g. Korea, Singapore or Taiwan).

Eradication of poverty and inequality

One of the serious impediments against economic development and growth in Malaysia is poverty and inequality phenomenon. There are different channels in the literature about how income inequality and poverty may impact on long-run growth prospects based on the assumption that people with the different income level act and interact differently. These channels explain why poor people are remaining poor jeopardizing aggregate production, welfare and growth⁵⁷:

⁵⁶ Fatimah Said, Saad Mohd Said, Azhar Harun, Abdul Azid Hj. Che Ibrahim. "Sources of growth studies in Malaysia: methodologies and results". Faculty of Economics & Administration University of Malaya, FEA Working Paper No. 2003-10 (p.2-11)

⁵⁷ The oxford handbook of economic inequality. Edited by Wiemer Salverda, Brian Nolan and Timothy M. Smeeding. Oxford University Press. 2009. (p.553-554)

- 1) “*Credit constraints and indivisibilities in investment*” – poor households with very low preliminary capital cannot access to higher return investments.
- 2) “*Effort and the effective labor supply*” – low compensation and rate of return for their labor efforts can make them less productive in labor market.
- 3) “*Property crime*” – for poor individuals’ gains from illegal/crime activities can be higher than income from formal/legal job.
- 4) “*High fertility rate*” – poor families usually have higher fertility rates, but they can provide only low quality education to child lowering human capital in society and supplying uneducated and unskilled workers to the labor market.
- 5) “*Taxation and redistribution*” – redistributive taxation can decrease savings of riches in favor of poor and this can lead to the lower growth rate where main driver of the growth is a savings of rich.
- 6) “*The size of demand*” – poverty can cause extremely limited domestic demand for the manufactured and advanced technological products which discourage incentives for investments in the innovations.

Income inequality can be mitigated by strong institutions in Malaysia being less sensitive to difference through rent-seeking. Effective institutions can shape the environment where wealth concentration can contribute to economic growth via investments (“trickle-down process”).

First affirmative action in NEP introduced in 1970 as 20-year plan and it continued after 1990 via similar programs such as the National Development Policy (1991-2000), National Vision Policy (2001-2010) and the New Economic Model which was came up in 2010 as respond to the global financial turmoil⁵⁸. NEP and other affirmative action based policies contributed positively to the poverty reduction in Malaysia. But there is risk that these programs hinder the formulation of interethnic social cohesion and limited access by different ethnic groups. These policies also should possess time limit, primary concentration on high-quality education and productive business.

⁵⁸ Edmund Terence Gomez, Johan Saravanamuthu (editors). “The New Economic Policy of Malaysia: Affirmative Action, Ethnic Inequalities and Social Justice”. NUS Press and ISEAS Publishing. 2013. (p.1-24)

Employment is a critical component in poverty eradication in Malaysia. The Malaysian government found out that “*the labour market remained stable with total employment increased to 13.21 million persons in 2013 (12.72 million people in 2012) contributed by higher working age population. The economy operates under the conditions of full employment as the unemployment rate registered below 4% for the period of 2009 to April 2014. By category, the employment in service and sales workers increased substantially to 2.9 million persons in 2013 (2.6 million in 2012)*”⁵⁹.

New innovative service sectors and R&D policies

Banking, financial and investment subsectors play an important role in the Malaysian economy’s service sector. Malaysia is a leading player in the emerging Islamic finance being considered as the largest “Sukuk” (Islamic equivalent of bonds granting share of an assets) market (65% share of the global market) and the second largest “takaful” (Islamic insurance system of reimbursement or repayment in case of loss) market (26% share of the global market) in the world in terms of total assets. Relevant financial infrastructure and high skilled human resource have attracted a huge amount of Islamic funds and large investors into the country. Contribution of Islamic finance and banking sector to the country’s GDP increased from 0.3% in 2000 to 2.1% in 2010 with annual average expansion of 32% and providing 11% of the total job opportunities in the financial sector⁶⁰.

The shift towards market-based financing among corporations is prompting banks and other financial institutions to move from corporate loans to retail-based financing to household consumers and small-medium enterprises (SMEs). But service sector generally has a challenge for middle income countries like Malaysia called “Baumol’s disease” meaning “rising share of services in output and a subsequent slowing of total economy productivity” (Flaen et al.2013. p.7). Wage

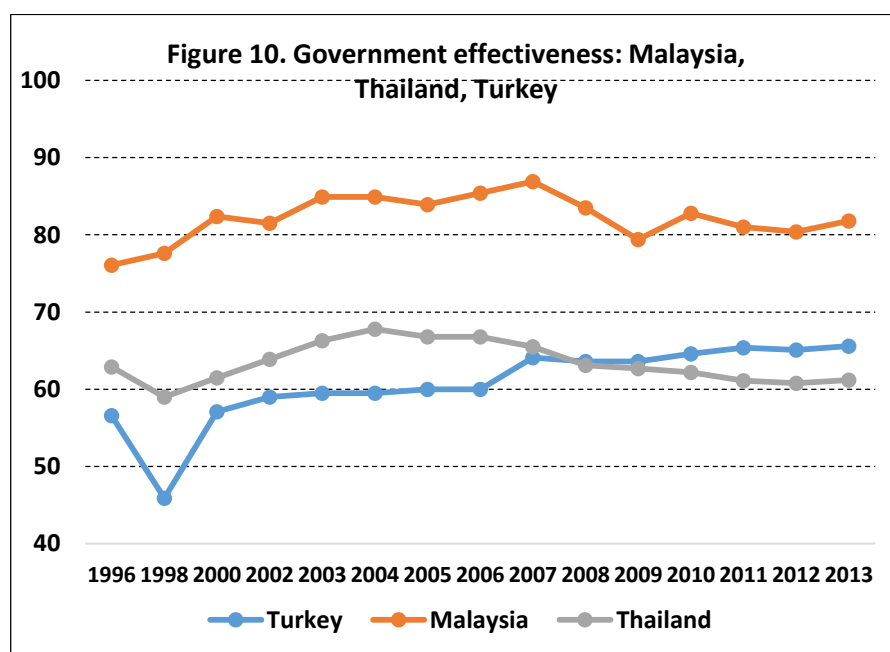
⁵⁹ “Post-2020 Malaysia’s Economic Structure and Policy Implications to Resource Allocation and Development”. Presentation by Dr.Khalid bin Abdul Hamid Deputy Undersecretary (Economic Research) Fiscal & Economics Division, Ministry of Finance (National Economic Outlook Conference 2015-2016). 2014. (slide 7)

⁶⁰ “*Encyclopaedia of emerging markets: Malaysia*”. Gale, Cengage Learning. 2013. p.192

increases and nominal costs of services raise in higher rates than productivity growth.

2.3. Institutional dimension of the “middle-income trap” concept

To measure the quality of institutions in any given country, one of the widely-used database or more reliable source is up-to-date World Bank Governance Indicators. Regarding to these Indicators “government effectiveness captures perceptions of the quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies”⁶¹. For Malaysia, government effectiveness started to decline slightly after 2007, but still a level of the indicator is relatively higher than countries with same development level such as Turkey and Thailand.



Source: author's calculations, World Bank Governance Indicators

Taking into consideration of then existing institutional shortcomings which retarded productivity and predicting possibility to fall into the middle income trap, former Prime Minister (1981-2003) of Malaysia Mahathir Mohamad announced profound the “Look East” policy envisaging new work ethics, labor discipline and

⁶¹ The Worldwide Governance Indicators, <http://info.worldbank.org/governance/wgi/pdf/WGI.pdf> (accessed June 21, 2015).

labor productivity to avert long-lasting productivity declines. But there are some studies that emphasize that in practice middle-income countries don't incur failure because of institutions or labor-related reasons, but more because of unsound innovation systems. Prominent Malaysian economist Mohamed Ariff (2012) also claims that the country has already fallen into a middle-income trap "by adopting an ill-conceived policy of preserving its fading competitiveness through suppressed wages". He also argues that low wages are combining with low productivity lead to huge social cost. Prime Minister of the Malaysia also acknowledged that the country had dilemma either to "remain trapped in a middle-income group or advance to a high-income economy"⁶².

The political landscape and political patronage.

The politics of Malaysia characterized by ethnic division (Malays – Bumiputera, the Chinese community, Indian community) and intra-ethnic divide (rural Malays and urban middle-class Malays). Malaysia has a multiparty parliamentary system, and the country is ruled by multiparty ruling coalition namely Barisan Nasional (BN, National Front) which include the United Malays' National Organization (UMNO) as a hegemonic party. After political reformation ("reformasi") in 1998, almost all anti-government oppositional political forces had been institutionalized shaping multiparty opposition coalition – Barisan Alternatif (Alternative Front) which included 3 main opposition parties – Parti SeIslam Malaysia (Malaysian Islamic Party), Parti Keadilan Nasional (National Justice Party) and Democratic Action Party⁶³.

In early 2000's, BN started to lose its popular support from rural Malays and this trend forced prominent politician, Prime Minister Mahathir Mohamad to step down from office and handing the political leadership to his successor Abdullah Ahmad Badawi. Ruling alliance - Barisan Nasional had won less than two-thirds of the parliamentary seats with difficulty and but also lost five states to the opposition parties (two-thirds supermajority was threshold for the legitimate coalition) during

⁶² Mohamed Ariff. "Development strategy under scrutiny". Preface for the book "Malaysia Development Challenges (Edited by Hill et. al). 2012

⁶³ Edmund Terence Gomez. *Resistance to change: Malay politics in Malaysia*. (Introductory chapter in the "Politics in Malaysia – Malay dimension", edited by E.T.Gomez). Routledge. 2007. p.1

parliamentary elections in March 2008. More precisely, in the 2008 election the ruling coalition won a total of 140 out of 222 seats (50.27%), while opposition party won 82 out of 222 seats (36.94%). Ruling coalition lost two-thirds majority rule for the first time in the Parliament⁶⁴.

Based on election results, Johansson (2014) found out that the companies with political patronage were negatively affected by the results of the elections and the companies associated with ruling alliance's political patronage lost some of their favourable access to long-term debt financing (main driver behind the effect on leverage) after parliamentary election. The companies with close relations to the Barisan Nasional faced substantial negative value effect in comparison with to other companies listed on the Malaysian stock exchange. If business value directly depends on political control this fact indicates relatively poorly developed institutions. Author underlines that "*advances in information technology, as well as economic development and the expanding middle-income class, brings with it the need for changes not only to the political system but also to the domestic economy*"⁶⁵. He also argues that the further focus on selected business leaders and the ethnically divided economic policies need to be changed by policy alternatives and if current political scenario is continued, the dangerous political patronage will trace the country back to the post-colonial period decreasing general value of the political stability in one hand and economic development in another hand. Daron Acemoglu and James Robinson in well-known book titled "Why Nations Fail" explain how to transmit from "extractive institutions" (more exploitation-oriented) to highly "inclusive institutions" (more participation-oriented), but it is more relevant in low income or pre-modern economy.

"*Developmental state*" model. Malaysia's successful industrial and agricultural transformation can be considered as an example of the developmental state in action. Developmental state concept includes the capability of the state to initiate and maintain the development that consists of both relatively higher and stable

⁶⁴ "Encyclopaedia of emerging markets: Malaysia". Gale, Cengage Learning. 2013. p.182

⁶⁵ Anders C. Johansson. *On the Challenge to Competitive Authoritarianism and Political Patronage in Malaysia*. Stockholm School of Economics Asia Working Paper. No.29. February 2014. p. 29-31.

economic growth rate and active structural changes raising productivity. In other words main attributes of developmental state are (i) consistency in development aims; (ii) active-transformative functioning of state, rather than passive observer; (iii) using trade and FDI to change domestic production capacity in long-run. New economic policies, industrial master plans, the transition from “low technology labour-intensive methods to specialized capital-intensive methods” were examples of the relatively successful developmental state model in action⁶⁶.

Institutional framework in Malaysia addressed to harmonize ethnic varieties in the society and during last two decades some developing and least developed countries (e.g. Fiji, South Africa, affirmative action Zimbabwe, and India) approached the “Malaysian model” in a successful case to solve the problems of divided ethnic communities. But it is questionable that what real effects of the affirmative action was in interethnic social cohesion. The key institutional mechanism fulfilled by Dr.Mahathir Mohamad to develop Malay enterprises were the Bumiputera Commercial and Industrial Community (BCIC) policy and broad privatisation, method he used to transfer ownership and control of public enterprises to private enterprises⁶⁷. Also, federalism has been approached as institutional framework for decentralisation in Malaysia as solution for ethnic or central-local power tensions and as a tool for increasing economic benefits⁶⁸. Despite some institutional shortcomings and challenges in Malaysia, quality of government institutions and institutional distortions are not primary detrimental factor for the country in terms of middle-income trap. One of the best examples is a fiscal policy. Rafiq and Zeufack (2012) find that “*fiscal policy in Malaysia has become increasingly procyclical over the last 25 years (one unit government’s investment spending led to maximum output multiplier of around 2.7 during growth recessions, and around 2*

⁶⁶ Richard B. Dadzie. “Economic Development and the Developmental State: Assessing the Development Experiences of Ghana and Malaysia since Independence”. *Journal of Developing Societies* 29, 2 (2013): 123–154 (p.137-38)

⁶⁷ “The new economic policy in Malaysia: affirmative action, ethnic inequalities and social justice”. (Edited by Edmund Terence Gomez, Johan Saravanamuttu). ISEAS, SIRD, NUS Press. 2013 (p.9)

⁶⁸ “50 years of Malaysia: federalism revisited”. Edited by Andrew J. Harding & James Chin. Singapore: Marshall Cavendish Editions, 2014 (p.16)

*in normal times). The returns to government spending in Malaysia are greater when the focus is on public investment, as opposed to consumption*⁶⁹.

But Shin and Aslam (2011) found out that despite the fact that the state budget is the ruling government's exclusive mean to achieve the promises made during the elections, but the government's financial plans (revenue and the spending, taxation and borrowing) are subject to law, legal rules and procedures. It means the ruling party's government "cannot simply utilize economic resources for its political means or interests"⁷⁰. Analysing the results of 2008 elections Johansson (2014) revealed that firms are having the political patronage and close ties with ruling the Barisan Nasional experienced decreasing leverage levels and significant negative value effect⁷¹.

⁶⁹ Sohrab Rafiq, Albert Zeufack. "Fiscal Multipliers over the Growth Cycle Evidence from Malaysia". The World Bank. Policy Research Working Paper 5982. March 2012 (p.2)

⁷⁰ Tan Yee Shin, Mohamed Aslam. "Political Economy of the Budgetary Process in Malaysia". Faculty of Economics and Administration. University of Malay. 2011 (p.2)

⁷¹ Anders C. Johansson. "On the Challenge to Competitive Authoritarianism and Political Patronage in Malaysia". Stockholm School of Economics. Asia Working Paper.No.29. February 2014 (p.2)

Chapter 3. The ways out from “trap” and towards the Vision 2020

3.1. “9 main challenges” of the Vision 2020 of Malaysia

Prime Minister (PM) of Malaysia Dr. Mahathir bin Mohamad announced an ambitious vision for the country - Vision 2020 which has a goal to convert Malaysia as a fully developed country by the year 2020. “Wawasan 2020” or Vision 2020 consists of nine strategic challenges that need to be successfully addressed by 2020⁷²:

C1. Establishing a united Malaysian nation (“Bangsa”)

C2. Creating a psychologically liberated, secure and developed Malaysian society

C3. Fostering and developing a mature democratic society

C4. Establishing a fully moral and ethical society

C5. Establishing a mature, liberal and tolerant society

C6. Establishing a scientific and progressive society

C7. Establishing a fully caring society

C8. Ensuring an economically just society, in which there is fair and equitable distribution of wealth of the nation

C9. Establishing a prosperous society with an economy that is fully competitive, dynamic, robust and resilient

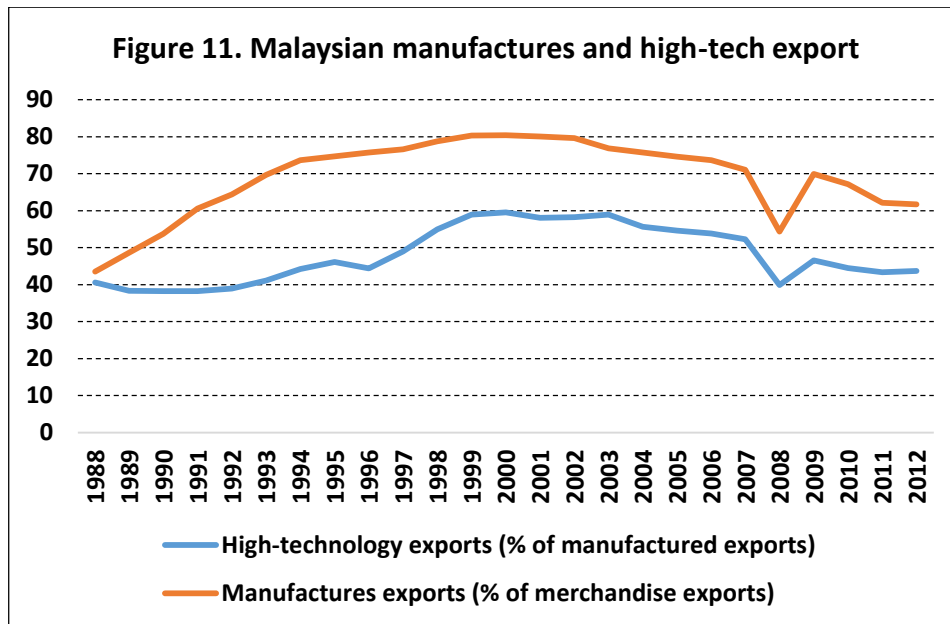
Malaysia has grown more than most other developing countries with a particular contribution of exports of tin (initially), rubber, palm oil, wood, petroleum and the natural gas, gradually increasing value added. Its manufactured exports started from processed primary commodities and then transferred to technology-intensive products.

The manufacturing sector is expected to account for around 40% of output by 2020, compared to its share of 27% in 1990. The service sector will increase its weight of output from 41.8% in 1990 to around 50% by 2020⁷³. But some experts think that

⁷² <http://www.wawasan2020.com/vision/p2.html>. Wawasan 2020 - Wikipedia, the free encyclopedia." Web. 21 Jun. 2015 <http://en.wikipedia.org/wiki/Wawasan_2020>.

⁷³ Rafikul Islam, “Critical success factors of the nine challenges in Malaysia’s vision 2020”, Socio-Economic Planning Sciences, Volume 44, Issue 4, December 2010, Pages 199-211

the “Vision 2020” is merely a state promotion policy rather than anything substantially applicable policy.



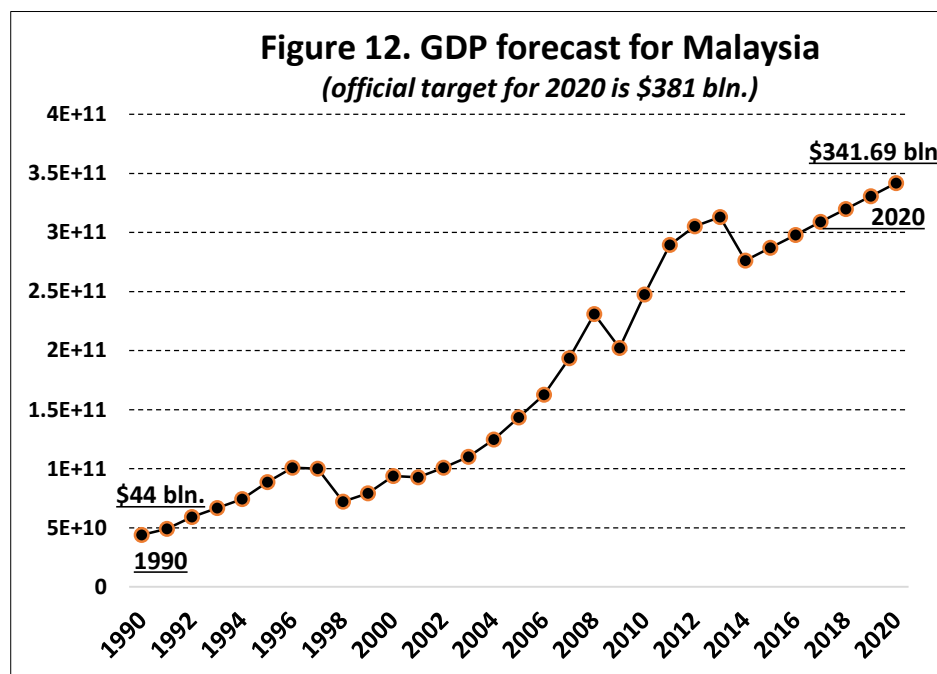
Source: WB Metadata Malaysian statistical profile 2014

Dr. Azlan Tajuddin expressed following opinion on the vision: “Vision 2020 is part of an “economic nationalism” project. Economic nationalism is what the state uses to promote their policy of industrialization to justify its policies and legitimation in the country. In other words, they support the reigning party for its role in "developing Malaysia". More than anything else, it serves to distract the country from the current problems it faces such a widening inequality, ethnic disunity, persisting poverty in the rural sector, and corruption. These projects are expensive and filled with billion dollar infrastructural spending that mostly benefit a few such as the ruling coalition and their cronies who are involved in both state and commerce as well as foreign companies. To date, Malaysia has not shown to be any nearer toward the fully industrialized economy, and there are only five years left to achieve this”⁷⁴. But it is also fact that when Malaysia became independent in 1957, the per capita national income was only 300\$, but to achieve “Vision 2020” it should reach to 26.000\$ by 2020. For that purposes, the country had to maintain average GDP growth rate of 7% for the 30 years period between 1991 and 2020⁷⁵.

⁷⁴ Interview with Dr. Azlan Tajuddin, Associate Professor and Chair, Department of Sociology, La Roche College

⁷⁵ GTP Roadmap Chapter 2: Challenges to Realizing Vision 2020 (p.2)

Also, different estimations and studies indicate that the absolute amount of GDP should be reached at least \$381 billion by 2020. *Our alternative forecasting shows that it will reach \$341 billion till target year*⁷⁶.



Source: author's calculations, World Bank Meta-Data System, www.rsmi.com.my

The Malaysian government announced its goal for the country to become a fully developed nation by the year 2020. In 7th Plan government proclaimed the willingness to shift economic growth from input driven to productivity-driven and implemented policies that would enable Malaysia to be a knowledge-based economy to avert the middle-income trap⁷⁷. The Economic Transformation Programme (ETP) and National Key Economic Areas (NKEAs) are primary tools and key growth areas for Vision 2020. The new performance management initiative in Malaysia is the Government Transformation Programme implemented by the current Prime Minister Najib Tun Razak in 2009. As “the roadmap of change” GTP has identified seven NKRA as core areas: *reducing crime, fighting corruption, improving student outcomes, raising living standards of low-income households,*

⁷⁶“ EXCERPTS OF THE GOVERNMENT TRANSFORMATION PROGRAMME (GTP) & ECONOMIC TRANSFORMATION PROGRAMME (ETP) : KEY THRUSTS TO POWER THE NATION TOWARDS 2020”, RSM Strategic Business Advisors (p.3)

⁷⁷ “The third outline perspective plan, 2001-2010”. Putrajaya, Malaysia: Economic Planning Unit, Prime Minister's Department. 2001. p 120.

tackling the rising cost of living, improving rural basic infrastructure and improving urban public transport⁷⁸.

Table 10. GTP—Achievement (%) of NKRA Targets, 2010–2013

<i>NKRAs</i>	<i>2010</i>	<i>2011</i>	<i>2012</i>	<i>2013</i>
<i>Crime</i>	168	130	102	110
<i>Corruption</i>	121	134	91	78
<i>Education</i>	156	188	118	–
<i>Poverty alleviation</i>	79	103	112	111
<i>Rural development</i>	91	123	116	120
<i>Urban public transport</i>	107	108	109	116
<i>Cost of Living</i>	–	–	110	94
<i>Composite score (%)</i>	121	131	109	104

Source: Siddiquee (2014), p.280

Vision 2020 towards achieving a high income and advanced country status requires GDP grow around 5.5% annually between 2015 and 2020. For Vision 2020, the service sector will lead the economy contributed to 60% of the GDP backing by high productive and knowledge-intensive labour force.

The service sector plays a significant intermediary role in supporting business activities in all sectors of the economy and promotes the development of the manufacturing. Primary industries also will be part of a balanced economic growth. Also, manufacturing will be more dynamic with more knowledge-intensive industries.

3.2. Alternative strategies for the Malaysian economy for averting middle-income trap and achieving sustained growth

There are different policy paths for the Malaysian economy to prevent middle-income trap and achieving sustained growth. Hill (2012) distinguishes 3 strategies: (a) firm-level upgrading to the innovativeness; (b) macroeconomic stability with

⁷⁸ Noore Alam Siddiquee. “The Government Transformation Programme in Malaysia: A Shining Example of Performance Management in the Public Sector?”. *Asian Journal of Political Science*, 2014 Vol. 22, No. 3, 268–288

low inflation, low budget deficit and budget balance; (c) inclusive social policies harmonizing all ethnic and social groups⁷⁹.

Strategy 1. Concentrating on short-cycle technologies

Lee and Lim (2001) has identified three different theoretical approaches or patterns of catch-up for middle income countries including Malaysia: “(a) a path-following catch-up which refers to latecomer firms following the same path taken by forerunners; (b) a stage-skipping catch-up which refers to latecomer firms following the path but skipping some stages thus time; (c) a path creating catch-up which refers to the latecomer firms exploring their own path of technological development”⁸⁰.

Scheme 1. Three patterns of technological catch-up

Path of forerunner: stage A → stage B → stage C → stage D
<p>(1) Path-following catch-up</p> <p style="text-align: center;">stage A → stage B → stage C → stage D</p> <p>(e.g. consumer electronics during the analog era, personal computer, machine tools)</p>
<p>(2) Stage-skipping catch-up (leapfrogging 1)</p> <p style="text-align: center;">stage A →→→ stage C → stage D</p> <p>(e.g. automobile engine development, D-RAM development, digital telephone switch)</p>
<p>(3) Path-creating catch-up</p> <p style="text-align: center;">stage A → stage B → stage C → stage D</p> <p>(e.g. CDMA mobile phone, Digital TV)</p>

Source: Lee, Lim, Song (2005)

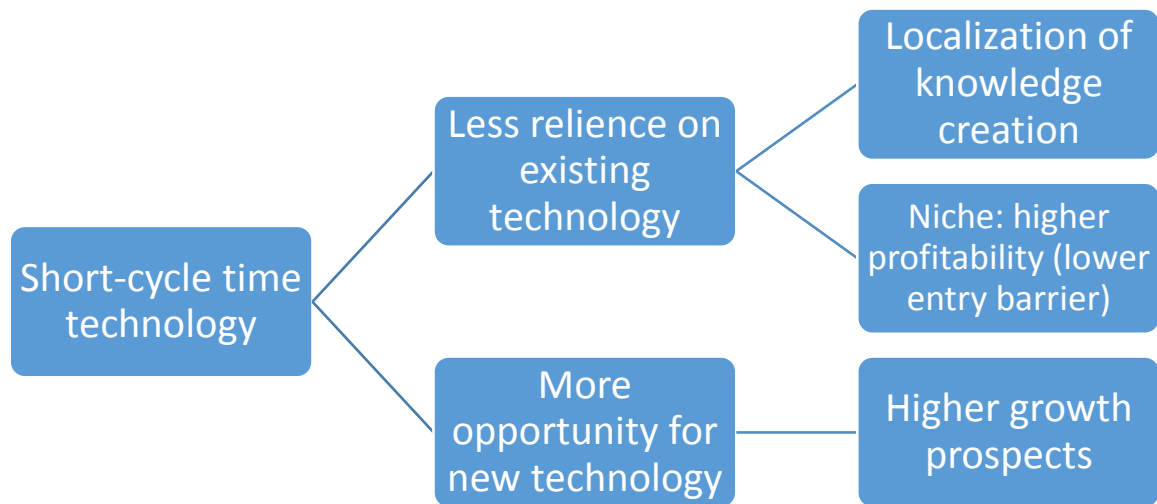
Lee suggests the strategy of technological specialization (versus the trade specialization) in shorter cycle technologies during the catching-up period (“detour” concept). Middle-income developing countries cannot successfully

⁷⁹ Hal Hill. “Malaysian economic development: looking backward and forward”. 1st Chapter for the book “Malaysia’s development challenges”. Routledge. 2012 (p.36-40)

⁸⁰ Lee, K., and C. Lim. “Technological regimes, catching-up and leapfrogging: findings from Korean industries”, Research Policy 30 (3), 2001, (p.459-83)

duplicate long-cycle technologies strategy of the advanced countries without accumulated capacity. Therefore, these countries firstly should move towards new short-cycle technologies (“inter-industry diversification” strategy) and gradually upgrade already existing old sectors into the high value-added segments (“intra-industry diversification” strategy). If the middle-income country (e.g. Malaysia) will not be satisfied to implement these two upgrading strategies the country may fall into the “middle-income trap” syndrome which means stagnating in the upper middle-income level.

Scheme 2. Criterion of technological specialization

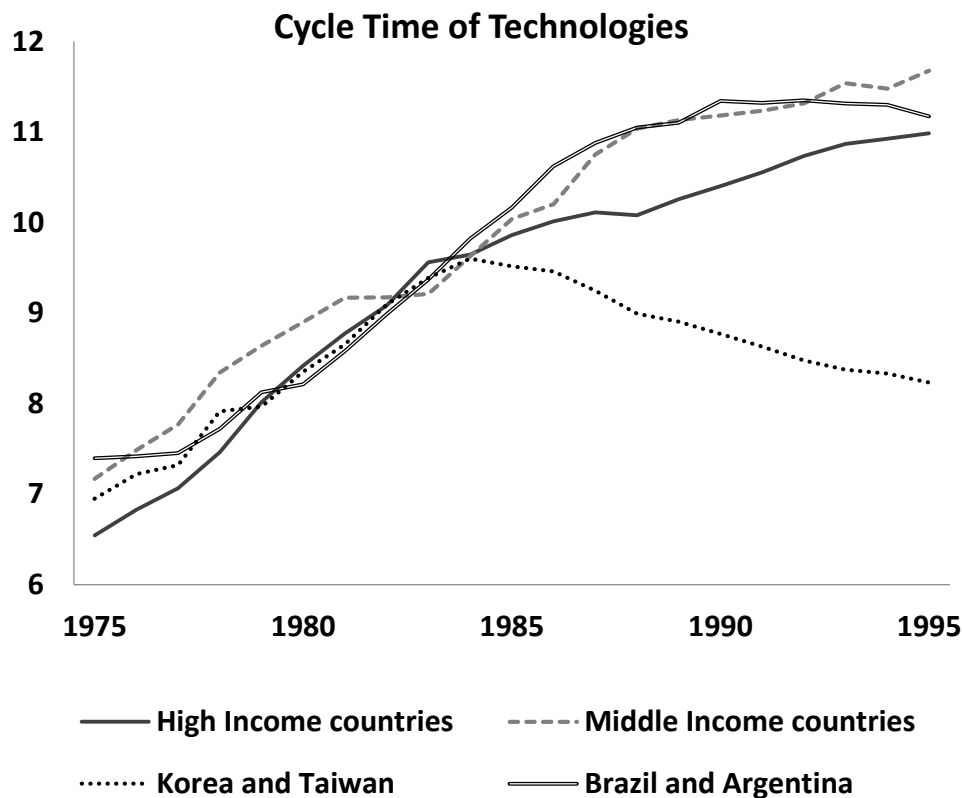


Source: Lee (2013), p.145

Some examples of short-cycle technologies taken from experience of South Korea and Taiwan are semiconductor device manufacturing, television, electrical connectors, active solid-state devices (transistors, solid-state diodes), land vehicles, illumination, static information storage and retrieval, dynamic magnetic information storage or retrieval, exercise devices⁸¹. In mid-1980s, South Korea and Taiwan diverged their technological specialization from other middle-income and also high-income countries concentrating more on short-cycle technologies.

Figure 13. Cycle of technologies

⁸¹ Keun Lee. “Schumpeterian Analysis of Economic Catch-up: Knowledge, Path-creation, & the Middle Income Trap”. Cambridge Univ. Press 2013. www.keunlee.com (slide 25)



Source: Lee (2013), slide 16

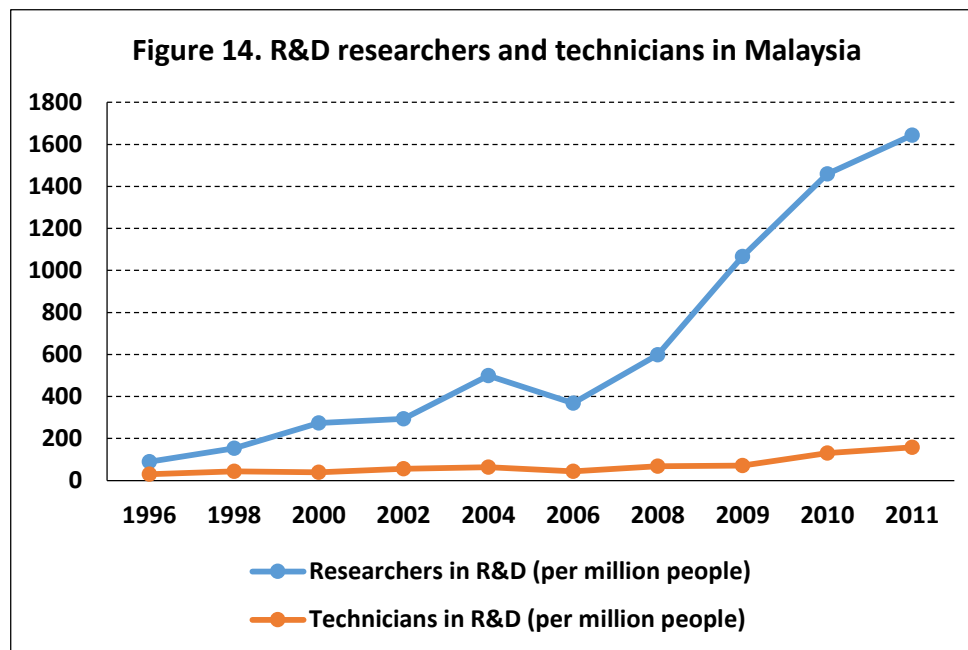
The initial success of these countries in economic growth mostly based on low wage labour industries as a result of comparative advantage approach. In long-run these economies had to move upward to higher value-added segments in same industries or to enter new emerging industries, but preliminarily short-cycle technology sectors that then provided higher wage rates. This transitory movement demands firms of all proper technological capabilities through “learning and in-house R&D effort”⁸².

Schumpeterian aspect is that technological change or transition is more “competence destroying” rather than “competence enhancing” which reflects also well-known “creative destruction” concept, giving more chances for new participants of the new markets. Short-cycle technologies may open up more

⁸² Keun Lee (Seoul National University), “Schumpeterian analysis of economic catch-up: knowledge, path-creation and the middle income trap”, Cambridge University Press, 2013/09 (p.143)

opportunities for Malaysia with frequent application of the new technologies less relying on the existing or prevailing technologies by more advanced countries.

The practice of benchmark catching-up economies indicates that shifting to the technology specialization instead of trade specialization, is escorted by an boosting in R&D spending and researchers/technicians, and the achieving of a technological turning point of moving into short-cycle high value-added technologies. Number of the R&D researchers in Malaysia had rapidly increasing trend while the number of R&D technicians went up very slowly.



Source: author's calculations, World Bank Meta-Data System

But the primary driver of above-mentioned these changes in Malaysia is public sector, not private companies. In middle-income developing countries like Malaysia where private companies have relatively small R&D capacity, a better strategy of doing business is purchasing or renting external production facilities/technologies and to specialize in less sophisticated technical methods doing mostly assembly manufacturing (“capability failure”).

Therefore, effective ways of government’s innovation policies should include not only the provision of R&D funds, but different channels to develop the R&D capacity itself to change the “capability failure”. Alternative forms of state intervention to the “innovation-building process”, may incorporates the transfer of R&D products developed by public research institutes and public-private R&D

joint consortium where private companies can take part for learning and raising capacity. There three stages of technological development where a different level of organizational learning happens: duplicative imitation, creative imitation and innovation⁸³. R&D researchers and technicians improve designing and branding process throughout these three stages of technological development.

Strategy 2. Concentrating on “general purpose technologies.”

Now we will analyze Schumpeterian approach to sustained economic growth or “Lipsey model”. Lipsey et al. (2005) argues that commonly-accepted optimum rate of allocation to R&D activities. Therefore, policies in this field should rely on a combination of “theory, measurement and subjective judgement”⁸⁴. But authors also note that “general purpose technologies” – technologies that transform our social and economic life are essential to convert long-term, extensive economic growth (based on population dynamics) to the intensive economic growth (based on technological progress). Taking into account, also the role of market size and capital accumulation - investment in economic growth, but still technological change is a most crucial determinant of long-run GDP growth (Schumpeterian or structural-evolutionary approach). They point out that main drivers of technological change are gradually evolving general purpose technologies such as materials (e.g. bronze), power (e.g. steam engine), ICT (e.g. computer), transportation (e.g. railroad) and organizational technologies (e.g. the factory management systems)⁸⁵. Theoretically, necessary technological change can be considered as an endogenous factor, but not exogenous condition or factor. This approach is not technological determinism excluding the role of other factors, especially institutions. Because authors believe that exactly same technology applied in different places and times can cause different results because of the political, social, economic, and institutional factors that distinguish these different places and times. Despite the fact that the technological change analysis endogenously in “Lipsey model”, but

⁸³ [Linsu Kim](#), “Imitation to Innovation”, Management of Innovation and Change Series, Harvard Business Review Press, March 1, 1997 (p.11-14)

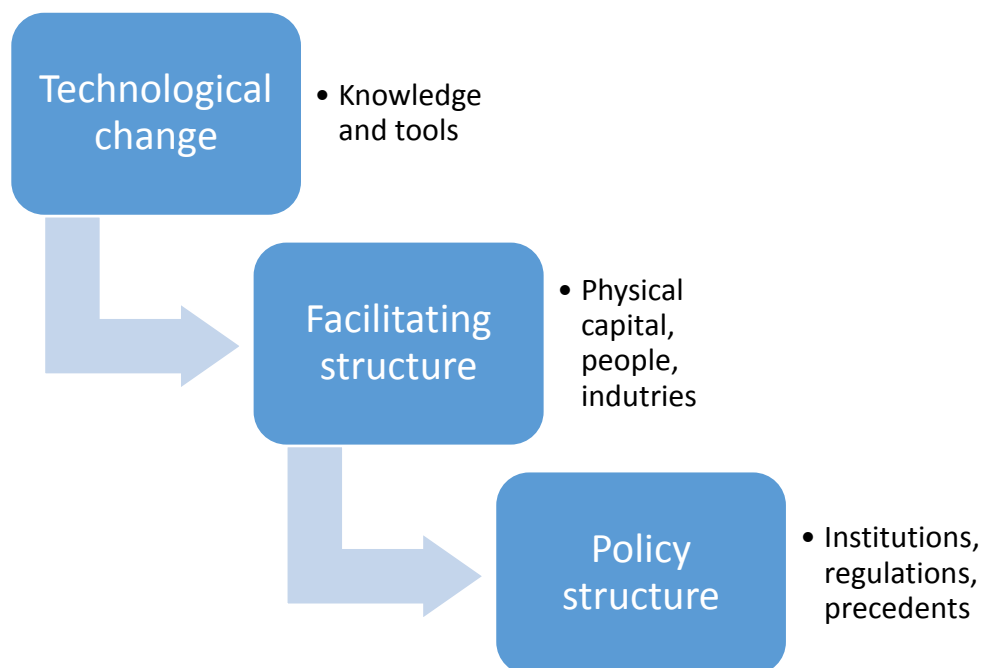
⁸⁴ Richard G. Lipsey, Kenneth I. Carlaw, Clifford Bekar. “*Economic Transformations: General Purpose Technologies and Long Term Growth*”, Oxford University Press, 2005 (p.505)

⁸⁵ Richard G. Lipsey, Kenneth I. Carlaw, Clifford Bekar. “*Economic Transformations: General Purpose Technologies and Long Term Growth*”, Oxford University Press, 2005 (p.13)

technology as a factor of production is considered via its alignment with two additional factors - physical capital and human capital.

Institutions are regarded as progress parallel with technology. Also, this model pays necessary attention to the historical institutionalism underlining that knowledge builds on preceding experience in continues the path-dependent process. Therefore, the emergence of a new technology could not cause inimitable “predetermined results”. In this approach, technological change is an all-important factor for sustained long-run economic growth as way out from “middle-income trap” for Malaysia and economic transformation of the country, but it also defines the inevitable function of human capital, physical capital and institutions.

Scheme 3. Transformative power of technological change in the economy



Source: this is modified version of texts and schemes in the Lipsey et al. (2005, p.55-62)

For “Lipsey model” of structural-evolutionary approach, technological changes (particular changes in the knowledge and tools about how to make things) countenance the changes in the facilitating structure (comprising of physical capital, people and labor practices, infrastructure and industries) where the latter brings about the changes in the policy structure of given economy (public institutions, legislation, laws, rules, regulations, procedures, and precedents). Finally, the

economic performance of middle-income country like Malaysia is identified by the coaction between production factors and the facilitating structure. But the existing facilitating structure is influenced by technological change and the public policy architecture.

In case of Malaysia, main purposes of the public policy should be designing human institutions to encourage innovative behaviors lifting up constraints on innovative activities, and raising rewards and opportunities for innovative human behavior in the society. Otherwise, public institutions may pursue to defend their actual benefits by constraining creative activities. For Malaysia, also lifting up all barriers in front of foreign-owned companies to promote FDI flows, building modern service sectors, also solving “skills crisis” (shortage of highly skilled people) through secondary and tertiary education system are promising ways out of the middle-income trap. Privatization of industries, resource allocation through market mechanisms, government planning and policy-making with relevant timing for a middle-income transition, development of human capital and high technology are essential pre-requisites to avoid the middle-income trap.

3.3. How to achieve to the Vision 2020 being high-income country?

Labour productivity increased in all three sectors of Malaysian economy – agriculture, industry and services after 1991 when the state proclaimed ambitious “Vision 2020”, but changes in total factor productivity varied over the different periods. The major structural change or economic transformation was the shift from the resource-based economy (rubber and tin) to large-scale manufacturing. In the parallel with improvement in the structure of merchandise exports, manufactures raised from 6.6% of total Malaysian exports in 1970 to 70.2% in 2009 (mostly electronics and related products)⁸⁶. Protectionist trade policies, resilient industry-specifics policies and open labour market policies were the sets of domestic policies that determined the transformation. But generally, the structural change has been driven primarily by rapid economic growth and shifting comparative advantage.

Any holistic answer to the question “how to achieve to the Vision 2020 being high-income country?” is partly related to the innovations and technological

⁸⁶ Hal Hill, Tham Siew Yean, Ragayah Haji Mat Zin. “Malaysia’s development challenges: graduating from the middle”. Routledge. 2012 (p.6-10)

transformations. Hill et al. (2012) identified several shortcomings which Malaysia should solve immediately in order to build innovation-based economy and to achieve technological changes: (i) low research culture in the public sector and effectiveness of government's research and development expenditure; (ii) still moderate quality of the university system; (iii) heavy dependence on foreign labour; (iv) large government-linked corporations sector; (v) the questionable effects of state-led development programs; (vi) loss of the highly educated talents; (vii) independent regulatory agency and legal infrastructure⁸⁷.

Intermediate goods are the largest category in the import basket of Malaysia indicating that local industries are highly dependent on imported inputs. Therefore, Malaysia had positive trade balance with some developed countries but faced huge deficit with Japan and South Korea. Malaysia's strength in its external sector (merchandise trade) depends heavily on the quality of its products. To produce high quality and competitive export-oriented products, Malaysia needs foreign direct investments. It is obvious that the country can no longer rely on the natural resources and cheap labour force to attract more FDI. For technological progress and innovations, the overall economic competitiveness will be significant to attract high-quality FDI flows. It demands Malaysia to "leap-frog" from a production-based economy (*p-economy*) to the larger knowledge-based economy (*k-economy*) in medium and long-run. Knowledge Economy Index (KEI) is an aggregated index demonstrating the readiness of the country to establish knowledge economy through new knowledge, innovations and creative entrepreneurship. Malaysia had 48th position out of 146 countries in 2012 ranking getting 6.1 scores out of 10. The country could get relatively higher scores in four sub-indexes - demonstrating great potential for the knowledge-based economy - which are an economic incentive and institutional regime, innovation and technological adoption, education and training, ICT infrastructure⁸⁸. Malaysia's expenditure on R&D was equal to 1.06% of GDP in 2011 which is far from the performance of developed countries which Malaysia wants to approach through "Vision 2020"⁸⁹.

⁸⁷ Ibid (p.36-37)

⁸⁸ The World Bank's Knowledge Assessment Methodology (KAM: www.worldbank.org/kam). Knowledge Economy Index (KEI) 2012 Rankings (p.1-2)

⁸⁹ World Bank Metadata 2014. Malaysia' statistical profile.

In order to achieve Vision 2020 and to respond the challenges of globalized world economy the Malaysian economy should (i) to improve competitiveness and quality in both supply and demand side of national economy; (ii) to diversify export basket and accessible external markets; (iii) to set up advanced service sector; (iv) to develop competitive intermediate and final goods production sectors; (v) to present proper incentives to development of small and medium enterprises; (vi) to improve hiring and reward system in the country's public sector to unlock human potential. Yussof (2009) points out that "*Malaysia must position itself well not only within the global production network but also in a world service distribution web that is increasingly driven by the convergence of ICT with multimedia. Malaysian firms must explore investment opportunities abroad to gain brand-name recognition and reputation for the "Made-in-Malaysia" as quality and in-demand products*"⁹⁰.

Lai and Yap (2004) emphasize that importing entire technological development model from newly industrialising economies is not the optimal route for Malaysia. They think that there is no single strategy that can guarantee successful technological upgrading in Malaysia because each of these economies used different technological development paths to make their way into markets of high technology products. In order to establish local technological capacities and capabilities Malaysia and newly industrialising economies actively used trade and domestic credit policies for impacting allocation of economic resources, improvement of infrastructure, enlarging firm size and cluster formation, technological skill development and FDI attraction. Malaysia tried to use 3 different models, but no one created promising results so far: (i) "*chaebol model of South Korea - large and vertically integrated conglomerates*"; (ii) "*small- and medium-sized enterprise-public research institute innovation network model*" of Singapore; (iii) "*foreign direct investment (FDI)-leveraging model of Taiwan*"⁹¹.

Having the willingness to build its social-economic model, Malaysian government intends to give initiative to the private sector to develop market-led growth

⁹⁰ Ishak Yussof. "Malaysia's Economy: Past, Present & Future". Malaysian Strategic Research Centre, 2009 - Business & Economics (p.266-67)

⁹¹ Mun-Chow Lai, Su-Fei Yap. "Technology development in Malaysia and the newly industrialising economies: a comparative analysis". Asia-Pacific Development Journal Vol. 11, No. 2, December 2004 (p.53-55)

attracting more investments in high-value-added industries. More accountable and performance-based government institutions will enhance the market regulatory framework. Regional integration will enable to join to the production networks, supply chains and larger markets in the local level. Innovative processes and entrepreneurial spirit will drive higher economic growth and efficiency to 2020⁹². Highly capitalized small and medium enterprises are also crucial for “graduation” from middle-income status, but not only public ownership in the federal level. SMEs can contribute to the poverty reduction in regional level. Unemployment which remained quiet since 1997 ranging from around 3.5% while private consumption grew by 3.2% during 1998-2012⁹³.

Eden and Bulman (2014) argue that there are multiple traps not only middle-income countries but for all income groups (“golf analogy”). They found out that relatively higher growth in some middle-income countries is positively associated with the economic transformation from agriculture to industry, structure and openness of exports, low debt, low inflation, and more income equality⁹⁴. Economic performance is severely affected by the suitability of technological change, public policy towards building human and social capital, and the facilitating structure. It means that technological changes can positively impact on economic performance if they implicate in the facilitating structure and if particular sets of facilitating structure will be adjusted to comply with the newly emerged technology. But here there is mutual causal relationship meaning that not only technological changes lead to the changes in the facilitating structure, but changes in the existing facilitating structure and public policy also can change technological settings.

⁹² Mohd Esa Abd Manaf. “Prospective Game-changers for Malaysia: The last leg of Economic Transformation Program”. Undersecretary of Fiscal and Economics Division Ministry of Finance Malaysia. 2 December 2014 (slide 22)

⁹³ Jomo Kwame Sundaram, Wee Chong Hui. “Malaysia 50: economic development, distribution, disparities”. World Scientific. 2014 (p.49)

⁹⁴ Maya Eden, David Bulman. “There is No Middle Income Trap”. The World Bank. Future development blogs. 2/05/2014

<http://blogs.worldbank.org/futuredevelopment/there-no-middle-income-trap>

Conclusion and recommendations

Many countries successfully upgrading from low-income to middle-income status were unsuccessful to graduate into the high-income country status. That is ““middle-income trap” phenomenon. It occurred because low-income countries benefited from low wages labour force migrating from rural low productivity agriculture to the urban high productivity manufacturing. But reaching the middle-income level the labour and capital accumulation have undergone diminishing return effects, and benefits from imitation of high productivity using imported technologies exhausted and wages started to rise making competitive mass production almost impossible.

In this paper, we found out that main contributors to economic growth in Malaysia are labor and capital, not a total factor of productivity which doesn't guarantee sustained growth. The current research analyzed a wide variety of existing literature and previous studies to define “middle-income trap” concept.

The different scholars apply different thresholds of income classification for low income and middle-income countries, also within middle-income group – lower and upper. Notwithstanding that divergent methodologies complicate the identification of the position of middle-income countries in particular income group to claim presence or absence of MIT. But for Malaysian economy there is an almost consensus that the country gets stuck in the middle-income trap. The lower economic growth and stagnant per capita income are ultimate symptoms of MIT in the Malaysian economy. So, *the main conclusion of the paper is that the Malaysian economy gets stuck in the middle-income trap and this fact seriously jeopardize Vision 2020 goals, especially the aim about to be high-income country with at least 15.000\$ national income per capita.* Malaysia can “graduate” from middle-income country group moving up high-income country group increasing current 10.000\$ per capita national income to the 12.000\$ threshold (due to World Bank classification), but main challenge is to meet Vision 2020, especially in terms of per capita national income and absolute level of GDP.

Malaysia sustained high economic growth for 40 years allowing it to switch from low to upper-middle-income country in the relatively short period. But Malaysia

has kept in the upper middle-income country basket for 18 years. Its average GDP per capita growth rate from 2001 to 2010 was less than 3%. Therefore, all relevant studies suggest that Malaysia was stuck in the middle-income trap. Lifting up all barriers in front of foreign-owned companies to promote FDI flows, building modern service sectors, also solving “skills crisis” (shortage of highly skilled people) through secondary and tertiary education system are promising ways out of the middle-income trap. In order to avert the middle income trap and to achieve “fully developed nation by 2020” goal Malaysia should establish knowledge-based economy which requires developed education and training system, research and development system encouraging innovations and having better access to finance, transformation of public-private relations and knowledge management.

For technological progress and innovations, the overall economic competitiveness will be significant to attract high-quality FDI flows. It demands Malaysia to “leap-frog” from a production-based economy (*p-economy*) to larger knowledge-based economy (*k-economy*) in medium and long-run to reach Vision 2020 goals. Sustained industrial and high value-added service policy combining investment and technology components can be significant measure to break out of the “middle-income trap”. These attempts demand well-designed, efficient and coherent interventions by Malaysian central government aiming developmental and redistributive functions simultaneously.

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