The Malaysian Economy after the Global Financial Crisis: International Capital Flows, Exchange Rates, and Policy Responses

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I. Introduction

The exchange rate of the Malaysian ringgit (RM) against the US dollar (USD) after returning to the managed float system in July 2005 was hovering around 3.00-3.50 RM/USD until the middle of 2014. Following the subprime mortgage problem that emerged in the second half of 2007 and the Lehman shock in September 2008, the US introduced a de facto zero interest rate policy and quantitative easing (QE), and other advanced countries have implemented large-scale monetary easing in order to cope with the Global Financial Crisis. As a result, a large amount of money flowed into the stock and bond markets of many emerging countries including Malaysia. This trend reversed completely when Mr. Ben Bernanke, the then chairperson of the Federal Reserve Bank (FRB) of the United States, made remarks suggesting the end of QE at the Joint Economic Committee of the House of Representatives on May 22, 2013. The capital that flowed under QE began flowing out from Malaysia, and the financial account was in deficit for seven consecutive guarters from the third quarter of 2013 to the first quarter of 2015. The RM/USD exchange rate was stable at the beginning of this reversal, but the ringgit depreciated rapidly, 42.1% in the one year from the end of August 2014, when crude oil prices began to fall.¹ In addition to the conversion of the US monetary policy and the decline in crude oil prices, the debt problem and political scandals of One Malaysia Development Bank (1MDB) added depreciation pressure on the ringgit.²

The objective of this study is to investigate the nature and characteristics of international capital flows and the exchange rate, and policy response of the central bank of Malaysia, Bank Negara Malaysia (BNM). The structure of this paper is as follows. In Section II, we will illustrate the structure of the Malaysian economy and the policy responses after the Asian currency crisis in 1997 and 1998 as the foundation of the discussion in this paper. Section III discusses the trends in international capital flows and exchange rates, and BNM's policy responses and their effects.

¹ When comparing the highest value and the lowest price at this time, it depreciated 42.1% from 3.1480 MYR/USD on August 28, 2014 to 4.4725 MYR/USD on September 29, 2015.

 $^{^{2}}$ The Wall Street Journal dated July 2, 2015 reported suspicion that USD 700 million was remitted to Prime Minister Najib's personal account from 1MDB, a state-owned investment company whose debt problem was made public in November 2014. The political intervention of Prime Minister Najib in this investigation also raised criticism not only from the opposition parties but also from inside the ruling party. Finally, it resulted in the first change in power in Malaysia's history in the general election in May 2018.

II. Overview of Malaysian Economy

This section illustrates the structure of the Malaysian economy, recent macroeconomic trends, policy responses to the Asian currency crisis, which is a prerequisite for the discussion in the subsequent section.

While foreign direct investment (FDI)-led industrialization has supported Malaysia's rapid economic growth, the importance of natural resources such as crude oil and natural gas is still high. In addition, during the Asian currency crisis of 1997-98, Malaysia introduced fixed exchange rate system and capital outflow regulation without receiving support from the International Monetary Fund (IMF), unlike Thailand, Indonesia, and the Republic of Korea.

II-1. The Development and Structure of the Malaysian Economy

According to the World Bank's classification, Malaysia is a middle income country with per capita GDP of USD 9,650 in 2017. Malaysia is regarded as a typical successful example of Asian-style economic development, by aggressively attracting FDI and promoting export-oriented manufacturing industry. As a result, the poverty rate, which was 49.3% in 1970, fell to 0.6% in 2014. On the other hand, in the sense that a quarter century has already passed since shifting from a lower middle income country to a middle income country in 1992, Malaysia is often viewed as a country caught in a "middle income trap" (Kumagai 2018: 228).

Figure 1 shows the real GDP growth rate and the inflation rate measured by consumer price index since the 1980s. During this period, Malaysia has experienced three periods of negative growth. The recession in the mid-1980s was due to the failure of the import substitution strategy, focusing on heavy industry, in addition to the global recession. The subsequent economic downturn was due to the Asian currency crisis in the latter half of the 1990s, the dot-com crisis in 2001, and the global financial crisis in 2009, and these recessions were caused mainly by changes in the international economic environment rather than domestic factors. From 1988 to 1996, the average annual economic growth rate reached nearly 10%. Although the average growth rate has declined with every crisis, to around 6% between 2002 and 2007 and then to around 5% from 2009, Malaysia has in general achieved stable economic growth for decades. The inflation rate has been stable in the range of 2-4% since the mid-1980s.

Figure 2 shows the international trade and FDI stocks of Malaysia in terms of the ratio to GDP. Export-oriented industrialization accelerated in the middle of the 1980s, triggered by the Plaza Accord in 1985, followed by the influx of FDI in the subsequent decade. As industrialization at this time was producing export goods using imported capital goods, parts and materials, exports and imports increased in the same way. After the Asian currency crisis, the trade volume in terms of GDP ratio has declined, but exports remain far greater than imports, and thereby contribute to ensuring the current account surplus.



Figure 1. Real GDP growth and inflation rate (%)

Source: Bank Negara Malaysia, Monthly Statistical Bulletin, various issues.



Figure 2. International trade and FDI stocks (Ratio to GDP: %)

[→] Export/GDP → Import/GDP → Inward FDI stock/GDP → Outward FDI stock/GDP Source: World Development Indicators and UNCTADStat.

In the 1980s, inward FDI stocks remained steady at around 20% of GDP, but increased rapidly in the 1990s and increased to 62.4% in 1998. After that the ratio declined but remained around 40%. Malaysia's external FDI stocks have increased rapidly since the mid-2000s when ASEAN embarked on deepening regional economic integration toward the establishment of the ASEAN Economic Community (AEC). External FDI stocks have been on the same scale as inward FDI stocks since 2008.

From the latter half of the 1980s, the industrial structure of Malaysia has undergone substantial transformation. As of 1987, agriculture, forestry and fisheries absorbed 30.9% of the workers and produced 20.0% of GDP.³ This share declined rapidly, reaching 11.3% and 8.7% respectively in 2017. Shares of manufacturing sector in employment and value added rose from 15.5% and 19.8% in 1987, to 23.5% and 30.9% in 2000, but subsequently declined to 17.4% and 22.3% in 2017, respectively. Since 2000, the expansion of the services sector has been significant for both employment and value added. The Malaysian economy is also characterized by abundant natural resources such as natural gas, crude oil and tin. In 2017, the mining sector shares only 0.7% in employment but 8.5% in value added. Such changes in the economic structure of Malaysia are reflected in export structure as well. The share of machinery and transport equipment in total exports was 11.5% in 1980, but rose to 35.7% in 1990, and recorded their highest level, 62.5%, in 2000.⁴

Figure 3 shows the trend of exports of crude oil (HS 2709), petroleum products (HS 2710), liquefied natural gas (HS 2711). These industries are still very important in Malaysia even after the country's successful industrialization, and they have a great influence on exchange rate trends. Export values are divided into real terms and price fluctuation based on 1997 prices. From here you can read the following points. First, the nominal exports of these three items increased sharply from 2003. The share of the three items in total exports rose from around 4% in 2002 to 25% in 2013, with a temporary decline due to the global financial crisis. Second, the bulk of the increase in nominal export values can be explained by rising prices. Third, the linkage of prices of the three items is very high. The fact that the nominal export value of these three items, which accounts for 15% of Malaysian exports in 2017, is strongly influenced by the price exogenously determined in the international market leads to the external vulnerability of Malaysia's trade balance and the current account.

Figure 4 shows the fiscal balance of Malaysia and its finance as the ratios to GDP. In Malaysia, fiscal expenditure is broadly divided into current expenditure and development expenditure.⁵ In the early 1980s, the budget deficit has expanded by more than 15% of GDP, due to the hike in development expenditure to promote import substitution in heavy industry

³ All statistics of this paragraph and the following paragraph are based on Department of Statistics, *Malaysia Economic Statistics: Time Series*, and the BNM, *Monthly Statistical Bulletin*, August 2018.

⁴ The shares of machinery and transport equipment are based on the one-digit classification of SITC4.

⁵ Current expenditure includes expenditures such as personnel expenses, property expenses, interest payment on government debt, and so on. It is exclusive to the Ministry of Finance (the Treasury). Development expenditure reflects the development policy of the Malaysian government, and the budget based on the Malaysia Plans (five-year plans) is allocated to each ministry/project year by year. For this reason, the development expenditure is organized through consultation between the Ministry of Finance and the Economic Planning Unit (EPU), which governs development policy.





Note: Real exports are based on 1997 prices.



Figure 4. Fiscal balance (ratios to GDP, %)

by Prime Minister Hussein Onn, based on the sharp increase in oil-related revenues caused by the second oil crisis. Prime Minister Mahathir Mohamad, who took office in July 1981, started fiscal consolidation. Furthermore, in the 1984 cabinet shuffle, Mahathir appointed Daim Zainnudin as the Minister of Finance from the private sector, and the privatization guidelines were introduced in 1985 to advance fiscal consolidation further. From the latter half of the 1980s, the fiscal balance improved steadily on the back of high economic growth, and in the mid-1990s it began to record a surplus. However, it again fell into deficit after the Asian currency crisis, due to the adoption of aggressive fiscal policy for the economic recovery. Although fiscal consolidation was gradually promoted from the 2000s, temporary deterioration was caused by the Global Financial Crisis. However, because the current expenditure is maintained below revenue while development expenditures are shrinking, by 2017, the budget deficit contracted to 3.0% of GDP.

Focusing on the finance side of the budget deficit, there was great reliance on net foreign borrowing until 1986. After that the repayment came to exceed the new borrowing, and in recent years most of the fiscal deficit has been financed by domestic borrowings such as the issuance of government bonds. However, as will be described later, it can be said that the situation has changed from borrowing to holding of government bonds, rather than not having lost external dependence on the financial side, as the holding of government bonds by foreigners is increasing.

In summary, Malaysia has managed its macro economy well among emerging economies although it remains externally vulnerable due to its high openness. Since the Asian currency crisis, both the trade balance and the current account have maintained a surplus, and FDI stocks as a result of long-term capital flows are stable at around 40% of GDP both inward and outward. From the latter half of the 1980s, FDI-led and export-oriented manufacturing industries grew, but since the beginning of the 2000s the services sector has grown more rapidly. On the other hand, the contribution of natural resources to the economy remains high, especially the impact of fluctuations in crude oil prices on exports and the current accounts is significant.

II-2. Policy Responses to the Asian Currency Crises

The Central Bank of Thailand, which had not been able to withstand repeated speculative attacks on the Thai baht, announced the transition from the de facto dollar-peg system to a managed float system on July 2, 1997. The subsequent crash of the Thai baht triggered the Asian currency crisis. Thailand, the epicenter of the shock, soon came under the support of the IMF on August 14, followed by Indonesia on October 31 and the Republic of Korea on December 3 of the same year.

In Malaysia, the outflow of portfolio investment had already begun in June 1997, and speculative selling of the ringgit intensified after the Thai baht crashed in July. Meanwhile, Prime Minister Mahathir repeatedly claimed that Malaysia's fiscal condition was sound unlike the neighboring countries exposed to currency speculation, and that most of the current account deficit financed by long-term capital such as FDI, trying to mitigate the speculative pressure on the ringgit. In addition, under the initiative of Finance Minister and Deputy Prime Minister Anwar Ibrahim, a tight fiscal and monetary policy aimed at restoring market confidence, the so-called "IMF policy without the IMF," was implemented. However, their efforts did not bear fruit. The Malaysian economy entered a severe recession and there remains little room to raise the interest rate further to suppress capital outflow as it had already risen to 11%.

In September 1998, the Malaysian government turned a major policy. On September 1, the BNM introduced a series of measures to enhance capital controls; (1) prohibiting the transfer of funds between non-resident accounts, (2) prohibiting foreign currency exchange and remittance of shares to be sold for less than one year after acquisition, (3) prohibiting offshore trading of the ringgit, and (4) restricting the bringing in and taking out of currency to RM 1,000.⁶

On the next day, September 2, a fixed exchange rate system with 3.8000 RM/USD was introduced. Mahathir dismissed Anwar from the posts of Finance Minister and Deputy Prime Minister, due to differences in policy measures to cope with the currency crisis. Furthermore, the three-month interbank market intervention interest rate was lowered from 9.5% to 8.0% on September 3, and the statutory reserve ratio was lowered from 6% to 4% on September 16 (Nakamura 1999). By regulating the outflow of capital and fixing the ring-git's exchange rate, the BNM created room for autonomous monetary policy and implemented monetary easing in order to recover the domestic economy from the recession.

On February 15, 1999, the above-mentioned restriction on short-term capital outflow was changed to a stepwise remittance taxation method. A gradual exit from capital controls was considered desirable in order to avoid large-scale capital outflow on September 1, 1999, when all the short-term capital that had flowed in before the introduction of capital controls on September 1, 1998 would be excluded from the outflow restriction. After all, such concern was pointless, because the majority of foreign capital had already flowed out before the introduction of capital controls. In addition, the remittance tax was re-changed uniformly to 10% on September 21, 1999 and finally lifted on May 2, 2001.

On April 1, 2005, the BNM relaxed controls on ringgit financing by nonresidents, opening foreign currency accounts and possession of foreign currency funds by residents.

July 21, 2005, the Chinese government announced the transition of the renminbi (RMB) exchange rate to a managed float system, as well as the slight appreciation of the RMB against the USD (about 2%). Shortly afterwards, the BNM also announced the shift to a managed float system. The BNM seemed to prepare for the transition to the managed float system and to have been awaiting the timing when the attention of the global market was fo-

⁶ Meanwhile, the BNM repeatedly announced that current account transactions, remittances of profits, interests, and dividends, and direct investment are out of the scope of capital controls. Malaysia's Foreign Exchange Control Regulation clearly states that "selective exchange control measures are policy options to be used on a temporary basis to mitigate the adverse impact of short-term flows on domestic economy," and the capital controls after the Asian currency crisis were introduced within that framework (BNM 1999: 276-277). A temporary short-term capital inflow control was once introduced in 1993-94. See Umezaki (2003) for details.

cusing on the abandonment of a fixed exchange rate system in China.

The managed float system introduced by Malaysia fixed the ringgit against a basket of currencies weighted by major trading partners, effectively returning to the exchange rate system before the introduction of fixed exchange rate system in 1998. As a result, neither the ringgit nor the RMB experienced major fluctuations, and it can be said that the exit from a fixed exchange rate system was successful (Nakamura and Umezaki 2006: 353-354).

At this point, the ban on ringgit offshore trading was the only measure left among the measures introduced as a policy response to the Asian currency crisis.

III. Impacts on Malaysia and Policy Responses

Monetary easing and its termination in the United States had a major influence indeed on Malaysia's balance of payments and exchange rates, but it was not the only affecting factor. For example, Shafiq and Ariff (2018) pointed out that Malaysia's unique factors include (1) supply and demand imbalance in the domestic foreign exchange market due to maintaining a trade surplus for more than 20 years, (2) the increase in offshore non-deliverable forward (NDF) trading had magnified speculative pressures on the ringgit, (3) the persistent misunderstanding on Malaysian economy that it is still highly dependent on commodity exports actually caused negative impacts when the commodity prices decline in the global market. Also, reflecting the expansion of the Chinese economy and the closer economic relations between the two countries, devaluation of the Chinese renminbi on August 11, 2015 spurred the ringgit, which was on the way down due to the fall in crude oil prices. On the domestic front, the Alliance of Hope (Pakatan Harapan: PH) led by former Prime Minister Mahathir won the general election on May 9, 2018, partly as a result of the 1MDB scandal in which then incumbent Prime Minister Najib Razak lost public trust.

On the other hand, the BNM's intervention in the foreign exchange market and other measures have contributed to the stabilization of the ringgit. As described above, there have been various factors affecting international capital flows and the exchange rate, and the channels through which the influence spreads is also very complicated.

In this section, we begin with a review of changes in the global economy since the Lehman shock and macroeconomic trends in Malaysia, mainly by referring to changes in the exchange rate. In the subsequent sections, we will analyze the changes in international capital flows and the exchange rates according to the time periods classified below.

III-1. Malaysian Economy in Changing Global Economy

Figure 5 shows the macroeconomic performance of Malaysia after the Lehman shock. The inflation rate in the third quarter of 2008 exceeded 8%, due to the increase in domestic petroleum product prices on June 4, 2008, in order to reduce the subsidy expenditure due to the surge in international crude oil price. Subsequent to the fall in crude oil prices, the price of petroleum products was lowered several times after August 23, and on November 18 the



Figure 5. Macroeconomic performance

subsidy for petroleum products other than diesel for public transport was terminated.⁷ Aside from the inflationary pressure at this time and the negative inflation at the same time next year as a reaction, inflation rates are largely stable.

The real GDP growth rate in the second quarter of 2008 before the Lehman shock was 5.1%, and the current account balance was also high at 19.5% of GDP. The real GDP growth rate from the third quarter of 2008 was stagnant, -0.3%, -5.8%, -3.7%, and -1.1%, but the economic growth rate subsequently recovered to around 5%. Although the current account remained in surplus, this trended down to 0.4% in the second quarter of 2013 when Bernanke indicated the end of monetary easing in the United States, and it has been around 2-4% of GDP since 2014.

The exchange rate was on an appreciating trend after the Lehman shock and remained within a high price range, but depreciated slightly in response to Bernanke's remarks and depreciated sharply from October 2014 to September 2015 when QE3 ended. Nonetheless, this depreciation was not brought about only by the reflux of mitigation money in anticipation of the US monetary easing. In fact, during this period, other factors causing ringgit selling, such as (1) a sharp fall in crude oil prices, which continued soaring for years, (2) the 1MDB scandal, (3) the devaluation of the RMB on August 11, 2015. Meanwhile, the BNM undertook a large foreign exchange market intervention, and the plunge in the ringgit stopped in October 2015.

⁷ Brent crude oil price, which was 51.70 dollars per barrel on January 15, 2007, recorded the historical high of \$146.08 on July 3, 2008. It then fell sharply to \$36.61 on December 24, 2008. See Nakamura (2009) for more details on the changes in subsidies relating to petroleum products.

When Donald Trump won the US presidential election in November 2016, capital outflow started in response to the expected interest rate hike in the US. While the BNM intervened in the foreign exchange market, it also strengthened the effective control on offshore NDF transactions and implemented a series of reforms in the onshore foreign exchange market. As a result, the ringgit entered an appreciation trend. From the second quarter of 2018, the ringgit started to depreciate against the backdrop of the regime change after the general election, rising crude oil prices, destabilizing international economic situations, and so on. The real GDP growth rate is declining and the current account surplus shrinking.

In the following, we will analyze the relationship between international capital flows and the exchange rate, with reference to five distinct periods defined by: (1) the Global Financial Crisis and capital inflows after the Lehman shock, from the third quarter of 2008; (2) the taper tantrum triggered by Bernanke's remarks, from the second quarter of 2013; (3) the capital reflux from the end of monetary easing in the United States, from the third quarter of 2014; (4) the stabilization under the BNM measures, from the fourth quarter of 2016; and (5) the adjustment under the new regime, from the second quarter of 2018 (Table 1).

Phase	Periods	Characteristics	Exchange rate	Current accout	Oil price
1	2008Q3-13Q2	Global Financial Crisis and capital inflow	Appreciation → Stabilization	Reduction in surplus	Sharp drop → Rise
2	2013Q2-14Q3	Taper tantrum	Slight depreciation	Stable	Stablly high
3	2014Q3-16Q4	Capital reflux	Sharp depreciation	Stable	Sharp drop
4	2016Q4-18Q2	Restoring stability	Appreciation	Stable	Rise
5	2018Q2-	Regime change and adjustment	Depreciation	Stable	Drop

Table 1. Time periods

Source: Author.

III-2. Figures

Figures in this section will be repeatedly referred to in the subsequent analysis.

Figure 6 shows the forward positions in the foreign exchange market. Positive values mean long positions held by market players, indicating that the market expects the ringgit to appreciate. Negative values mean short positions, implying that the market expectation on the ringgit is to depreciate.⁸ Indeed, there is a strong correlation between the fluctuation of the exchange rate and forward positions. The correlation coefficient between July 2005 to

⁸ As mentioned earlier, the fixed exchange rate system of 3.80 RM/USD was introduced on September 2, 1998, followed by the reversal to the managed floating system on July 21, 2005. As shown in Figure 6, long positions are observed since the end of 2003, when the exchange rate of the ringgit was still fixed to the US dollar, indicating that the market viewed the fixed exchange rate as undervalued and unsustainable.

September 2018 is -0.79. The forward positions are initially built in the short-term less than a month and then longer-term positions are built as the expectation for appreciation or depreciation becomes stronger.

Figure 7 shows the policy interest rates in Malaysia and the US. Malaysia's Overnight Policy Rate (OPR) affects the market via the Kuala Lumpur Interbank Offered Rate (KLI-BOR). Similarly, in the US, the target value of the federal fund rate (Target Federal Fund Rate/Range: TFFR) set by the FRB will influence the interbank market rates.

The figure also shows the Effective Federal Fund Rate (EFFR), which is the weighted average of actual market transactions.

Figure 8 shows the Brent crude oil price and the exchange rate. As Malaysia is an oil producing country, crude oil prices, especially the Brent crude oil price, has significant impacts on its currency. According to one estimate, oil-related revenues would increase by RM 300 million if the price of crude oil rises by 1 dollar, while generating a pressure on the ringgit to appreciate.⁹ In fact, using the daily data from January 2007 shown in Figure 8, the correlation coefficient reaches -0.81.



Figure 6. Forward positions in the foreign exchange market (Millions RM)

⁹ Nikkei Quick News, June 20, 2018.



Figure 7. Policy interest rates: Malaysia and the United States (%)

Source: Bank Negara Malaysia, Monthly Statistical Bulletin, August 2018, and the website of the Federal Reserve Bank of New York.



Figure 8. Crude oil price (Brent) and exchange rate

Source: Oil price is based on the website of the United States Energy Information Administration (EIA), and the daily exchange rate is taken from the BNM website.

Figures 9 to 13 show Malaysia's balance of payments and its breakdown based on Balance of Payment Manual (BOP 6).¹⁰ Figures 14 and 15 show the stock market statistics, and Figures 16 and 17 show the bond market statistics. Figures 18 and 19 show trends in foreign exchange reserves. Figure 20 illustrates the deviation of the NDF rate determined in the offshore market from the forward exchange rate calculated based on the interest differential.



Figure 9. Balance of payment (Millions RM)

Source: Same as Figure 5.

¹⁰ In Figure 8, the overall balance is defined as the sum of current account, financial account, and errors and omissions, and changes in reserves. Until the fourth quarter of 2015, the overall balance is exactly same as the changes in the foreign exchange reserves. The deviation that arises after 2016 will be resolved in the direction of adjusting foreign exchange reserves during the process of revising balance of payments statistics.



Figure 10. Current account (Millions RM)



Figure 12. Portfolio investment (Millions RM)

Source: Same as Figure 5.



Figure 13. Direct investment (Millions RM)

Source: Same as Figure 5.





Note: Foreign holding ratios are those at the end of year (end of June for 2018).



Figure 15. Domestic and foreign investors in the KLSE



Figure 16. Federal government debt by holders (Million RM)

Figure 17. Ringgit denominated bonds held by non-residents (Million RM)





Figure 18. Foreign exchange reserves and exchange rate

Figure 19. Reserve adequacy



Short-term external borrowing/Foerign researves —O—Foreign reserves/Import (month: RHS) Source: Same as Figure 5.

Note: Short-term foreign borrowing is external debts with maturity of less than one year. Reserve/import ratio is divided by the sum of imports (SNA) of four quarters up to each quarter and then multiplied by 12 to convert to the number of months.



Figure 20. Difference between NDF and forward exchange rates (1 month)



III-3. Global Financial Crisis and Capital Inflow: 2008Q3-2013Q2

The first phase, from the Lehman Shock to Bernanke's remarks, is characterized by large-scale monetary easing in the United States. Although capital outflow from Malaysia was observed in the beginning, this was basically a period when mitigation money generated by global monetary easing flowed into Malaysia.

As discussed in the previous section, one of the features of Phase 1 was the reduction in the current account surplus. The current account surplus, which was RM 39.98 billion in the third quarter of 2008, shrunk to RM 978 million in the second quarter of 2013 (Figure 10). Around 87.5% of the reduced current account surplus is attributable to the shrinkage of the balance of trade in goods, 7.0% is due to the primary income balance, and 5.5% is due to the service account. Regarding the trade balance in goods, although both exports and imports

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increased, the rate of increase in imports was higher than that in exports. The primary income balance is the difference between the interest/dividend obtained from the outward investment minus the interest/dividend paid for the inward investment. In Malaysia, this item has been in deficit and the amount tends to increase. The service balance has changed from surplus to deficit during this period, mainly because of the increase in service imports in the transport and construction sectors. As economic integration progresses and the connectivity with neighboring countries is strengthened, transport services supporting logistics and human flows tend to become relatively dependent on foreign countries. Foreign developers also play a major role in infrastructure development. The secondary income balance has hardly changed during this period.

The Fed's first response to housing price declines in the middle of 2007 was the reduction of the policy interest rate (TFFR) from 5.25% to 4.75% on September 18, 2007 by 50 points. The TFFR as of September 2008, when Lehman Brothers broke down, was 2.00%, but it was lowered by 50 points on October 8 and 29, and finally the target range was set to 0.00–0.25% on December 16. This is the beginning of the de facto zero interest rate policy. The TFFR in January 2007 was 5.25%, 175 points higher than 3.50% of the policy interest rate (OPR) in Malaysia. The rapid rate cuts of the Fed brought about a reversal of both the TFFR and the OPR. During the period from August 2007 to April 2008, the ringgit appreciated by approximately 10% from 3.50 to 3.16. Upon the sudden capital inflows during this period, the BNM intervened in the foreign exchange market. As a result, the foreign exchange reserves increased rapidly by 50.9% from USD 79.5 billion at the end of January 2007 to USD 120 billion by the end of June 2008 (Figure 18 and Aziz 2013, p. 217).

By the time when the subprime mortgage problem became apparent in the US, the ringgit long position had been rapidly accumulating, indicating that the demand for ringgit was rising against the backdrop of large scale capital inflows to Malaysia (Figure 6). It is also important to note that this capital inflow started before the interest rate cuts in the US (Figure 7). Until the first half of 2008, "emerging market assets became popular based on growth expectation and high interest rates, and their currencies were on upward trend" (Tanase 2015, p. 202), and Malaysia was one of them.

When entering the second half of 2008, the international economic environment changed dramatically such as the downspin of the oil price in July (Figure 8), the Lehman shock in September, and the de facto zero interest rate policy in the United States in December. Amid the rise of uncertainty, the ringgit fell as the long position was eliminated quickly from the end of 2008 to the beginning of 2009. However, in accordance with the V-shaped recovery of the Malaysian economy, a large amount of capital started to return to Malaysia, the long position was accumulated again (Figure 6), and the ringgit the regained its appreciation trend.

In response to TFFR cut in October 2008, the BNM lowered the OPR to 3.25% the next month. Moreover, in response to the de facto zero interest rate policy by FRB in December 2008, the BNM further lowered the OPR to 2.50% in January 2009 and to 2.00% in February 2009 (Figure 7). As a result of consecutive OPR cuts, the selling pressure on the ringgit

intensified. Therefore, the BNM expanded its foreign exchange intervention to sustain the value of the ringgit, at the cost of the rapid decrease in foreign exchange reserves by 31.8% from USD 120 billion at the end of June 2008 to USD 81.9 billion in April 2009 (Aziz 2013, p. 217). In addition to this intervention, as KLIBOR exceeded EFFR by 180 points (Figure 7), the ringgit appreciated by 20.0% by July 2011 (Figure 6). Meanwhile, the Malaysian economy showed a V-shaped recovery from the negative growth in 2009 due to the global financial crisis, and domestic prices started to rise (Figure 5). The BNM raised OPR in March 2010 by 25 points, and gradually to 3.00% by May 2011.¹¹ As a result, the spread with the US interest rate widened to around 280 points (Figure 7).

A rapid and significant capital outflow occurred in the second half of 2008 (Figure 11). In the second quarter of 2008, the debt item of portfolio investment, i.e., inward portfolio investment, turned to decline (Figure 12), implying that capital outflowed from Malaysian stock and bond markets. As of the end of 2007, the market capitalization of the Kuala Lumpur Stock Exchange (KLSE) was RM 1,106.2 billion, out of which RM 225.4 billion (20.4%) was held by foreigners according to the International Investment Position (IIP) statistics (Figure 14). As a result of the global financial crisis, KLSE market capitalization sharply declined to RM 663.8 billion by the end of 2008, and the foreign ownership ratio also declined to 14.4%. Also, as of the end of the first quarter of 2008, the outstanding balance of government bonds was RM 2,568.82 billion, 17.9% of which are held by foreigners in the forms of Malaysia Government Securities (MGS), Treasury Bill (TB), or Malaysia Government Investment Issues (MGII) (Figure 16).¹² This ratio also declined from the third quarter of 2008 to 9.0% by the end of the second quarter of 2009. During this period, RM 129.5 billion flowed out from the stock market and RM 17.2 billion flowed out from the bond market. The sum of these capital outflows is roughly equivalent to the decrease (RM 113.4 billion) in the debt item in portfolio investment from the second quarter of 2008 to the second quarter of 2009.

From mid-2009, portfolio investment turned into an inflow, and the ringgit returned to an appreciation trend (Figures 12 and 6). However, in the 12 months to the middle of 2010, there was no major movement in foreign exchange reserves, and it seems that the intervention in the foreign exchange market during this period was limited (Figure 18). In the beginning of July 2010, the ringgit still exceeded the highs of 2008 and continued to appreciate. At this stage, the BNM once again intervened in the foreign exchange market to halt further appreciation by selling the ringgit vis-à-vis foreign currencies. As a result, foreign exchange reserves increased rapidly from USD 85.1 billion at the end of August 2010 to USD 120.6 billion by the end of May 2011 (Figure 18). This increase in foreign exchange reserves can be explained mainly by the movement of the financial balance (Figure 9), in particular, the balance in portfolio investment (Figure 11). Moreover, looking at the breakdown of portfolio investment, it can be seen that an increase in liabilities, that is, the increase in inward

¹¹ BNM, Monetary Policy Statement, March 4, 2010.

¹² MGS is an ordinary government bond and MGII is a government bond issued as an Islamic bond. For the definition of MGII, similarities and differences with MGS, see BNM (2012).

portfolio investment was the main factor driving the increase of foreign exchange reserves during this period (Figure 12). Although there was a temporary outflow in the second half of 2011, the inflow trend of portfolio investment continued and the cumulative inflow amounted to RM 261.417 billion from the fourth quarter of 2009 to the second quarter of 2013 (Figure 12).

Where in Malaysia did this large capital flow in? Although it has not recovered to the level before the Lehman shock, the shareholding ratio of foreigners in the stock market increased after 2010 (Figure 14). On the other hand, the shareholding ratio of foreigners in broadly-defined government bonds rose sharply from 9.0% at the end of the second quarter of 2009 to 28.5% by the end of the first quarter of 2013 (Figure 16). Increases in foreigners' holdings of stocks and broadly-defined government bonds from the lowest level after the Lehman shock to just before Bernanke's remarks were RM 152.1 billion at the end of 2012 and RM 116.18 billion at the end of the first quarter of 2013, respectively (Figure 14 and 17). Considering that the stock price, the Kuala Lumpur Composite Index (KLCI) rose by 92.6% from the end of 2008 to the end of 2102, the new inflow to the stock market can be estimated to be around RM 70-80 billion. That is, the capital outflow after the Lehman shock was mainly from the stock market, and the returned capital inflow from 2009 went largely to the bond market probably reflecting the preference for lower risk.

III-4. Taper Tantrum: 2013Q2-2014Q3

The second phase is the period from Bernanke's remarks suggesting the end of quantitative monetary easing, until October 2014 when QE 3 actually ended. The trend in the ringgit exchange rate has clearly changed from May 2013 when Bernanke suggested the end of QE. The exchange rate, with a historical high of 2.9643 MYR/USD on May 8, 2013, was 3.0221 MYR/USD on May 22 (Malaysia time) just before Bernanke's remarks. The ringgit started to depreciate on the next day and fell to 3.0991 MYR/USD by the end of May (2.5% depreciation from May 22), and further to 3.3343 MYR/USD by August 28 (10.3% depreciation from May 22). The sudden drop of crude oil prices in August 2014 had additional impacts on Malaysia. Actually, the ringgit depreciated from a high of 3.157 MYR/USD at the end of August 2014 (Figure 8). In other words, the drop of crude oil prices in August 2014 had larger impacts on the ringgit than the end of QE 3, because the exit strategy had already been factored into the market since Bernanke's remarks in May 2013.

After Bernanke's remarks, capital outflow from Malaysia actually expanded. The financial account recorded a net inflow of RM 4.397 billion in the second quarter of 2013, followed by a net outflow of RM 15.685 billion in the next quarter. The capital outflow further expanded to RM 38.038 billion in the first quarter of 2014 (Figure 9). The capital outflow during this period was characterized not only by a net outflow of portfolio investment but also by net outflows of direct investment and other investment comprised mainly of cross-border bank loans (Figure 11). The net outflow of direct investment during this period was due mainly to an increase in outward FDI from Malaysia, instead of the withdrawal of inward FDI (Figure 13).

In the stock market, foreign investors sold RM 17.2376 billion more than they bought, during the seven month from the middle of August 2013 to the middle of March 2014 (Figure 15). These shares were purchased mainly by domestic institutional investors, and the stock prices rather than dropping rose gradually.

III-5. The reversal of overflown mitigation money: 2014Q3-2016Q4

In the third phase, the external economic environment changed drastically, such as the sharp drop in crude oil prices and the end of QE 3 in the US. The mitigation money that flowed in before started to flow out. Furthermore, Malaysia's domestic issues accelerated the outflow of capital. The massive debt and the deficit settlement of 1MDB were unveiled in November 2014, and the corrupt amassing of a fortune by then Prime Minister Najib was reported publicly in July 2015.

From the second half of 2014, the ringgit declined significantly. The rate of depreciation amounted to 40.8% from 3.157 MYR/USD at the end of August 2014 to 4.4455 MYR/USD at the end of September 2015. This sharp depreciation was brought about mainly by the drop in crude oil prices rather than the changes in US monetary policy (Figure 8). During this period, in response to the severe selling pressure on the ringgit as a result of the sharp drop in Brent crude oil price, the BNM strengthened its intervention in the foreign exchange market by buying the ringgit.¹³ The foreign exchange reserves, which amounted to USD 115.1 billion in mid-December 2014, decreased sharply to USD 85.9 billion by the middle of August 2015 (Figure 18). As a result, the ratio of short-term borrowing to foreign exchange reserves rose significantly, and the number of months of imports that can be covered by foreign exchange reserves declined by about two months (Figure 19).

The net outflow of portfolio investment further expanded to full scale from late 2014 to 2015 (Figure 12). Looking at the debt item of portfolio investment, RM 50.675 billion ran out during five quarters from the first quarter of 2014 (Figure 12). The cumulative net outflow of foreign capital from the stock market from September 5, 2014 to January 22, 2016 amounted to RM 26.922 billion. Meanwhile, the stock price (KLCI) also declined by 13.0% (Figure 15). However, with respect to government bonds, foreigners' holdings were rising in terms of both value and rate. At the end of the second quarter of 2014, the value of government bonds held by foreigners was RM 154.889 billion and the holding ratio was 28.0%. By the end of the third quarter of 2016, these figures increased to RM 211.759 billion and 34.0%, respectively (Figure 16).

During this period, the BNM significantly reduced the volume of short-term central bank bonds in circulation as they were suspected to be used for speculative transactions of the ringgit in the offshore NDF market. The BNM judged that the holding of central bank bonds

¹³ Muhammad bin Ibrahim, "Financial markets and the ringgit: Our Journey Forward," BIS Central Bankers' Speech, 18 November 2016.

for speculative purpose was spreading based on the observation that 96% of short-term central bank bonds were held by non-resident financial institutions (NRFI) for a while and that the yield had continued to fall below the policy interest rate.¹⁴ At the end of November 2014, the outstanding balance of Bank Negara Bills and Bonds amounted to RM 121.02 billion, accounting for 27.8% of the total debt of the BNM. Those figures reduced to RM 24.10 billion (5.5%) by the end of 2015, and further to RM 8.62 billion (1.9%) by the end of 2016.¹⁵

In other words, although capital outflow from the stock market was observed during this period, capital was flowing into the bond market, although the holdings of the central bank bonds shrunk rapidly as a result of the reduction of those in circulation by the BNM.

III-6. Restoring stability: 2016Q4-2018Q2

However, in the fourth quarter of 2016, foreign capital started to flow out of the government bond market as well. Donald Trump's victory in the US presidential election in November 2016 also had considerable impacts on the ringgit market. Based on Trump's remarks during the election campaign, it was expected that an expansionary fiscal policy, such as accelerating infrastructure development and tax cuts, would be implemented after he took office as president. The subsequent rise in inflation expected to drive the FRB to raise the interest rate, which in turn could cause capital outflow from Malaysia. These concerns themselves actually caused capital outflow from Malaysia together with the selling of the ringgit (Figure 6). In order to cope with this trend, the BNM intervened in the foreign exchange market and bought the ringgit to support its value.¹⁶

On November 18, 2016, Mr. Muhammad Ibrahim, the Governor of the BNM, gave a lecture entitled "Financial markets and the ringgit: Our Journey Forward." In the lecture, he announced that the BNM had intervened in the foreign exchange market due to the deterioration of the international economic environment since 2015, such as the decline in crude oil prices, unstable domestic situation due mainly to 1MDB problem, and so on. As a result of intervention, the ringgit recovered stability despite at a depreciated level, at the cost of a decrease in reserves, a decline in the liquidity and a rise of volatility in the foreign exchange market.

In addition, during the process, the BNM found that the foreign exchange market in Malaysia was strongly influenced by NDF trading in the offshore market. According to the observations of the BNM, participants in the onshore foreign exchange market referred too much to the trends in the NDF market in determining the spot rate in the onshore market. In addition, an extraordinary rise in volatility just before the time of fixing was regarded as evidence of the excessive influence of NDF transactions on the onshore foreign exchange market.

The BNM considered that deviations from economic fundamentals would become seri-

¹⁴ Ibid.

¹⁵ BNM, *Monthly Statistical Bulletin*, August 2018. This figure includes medium and long term BNM bonds and securities.

¹⁶ "Bank Negara confirms intervention to halt ringgit fall," New Straits Times, 18 November 2016.

ous if the NDF rate, which was originally less backed by real transactions, would influence the spot rate determined in the onshore foreign exchange market. In addition, offshore trading of ringgit, a non-international currency, was not compatible with Malaysia's Foreign Exchange Control Rules. As a result, the BNM decided to raise the effectiveness of this existing regulation. It should be noted that this rule itself remained without being abolished since it was introduced as a response to the Asian currency crisis in the late 1990s.

In addition to a drastic reduction in the BNM bonds in circulation from 2014, in 2015, the BNM prohibited quoting of fixing orders to NRFI that do not have firm underlying trade transactions in order to more effectively cut off the pricing linkage between the onshore and offshore markets. "As NDF is settled offshore based on ringgit fixing rate, the prohibition ultimately raised the basis risk, and financial cost, of hedging NDF transactions in the on-shore market,"¹⁷ and as a result the capital flows related to NDF transactions were substantially reduced. In the middle of 2016, the BNM introduced a USD/MYR reference rate, which is determined based on actual transaction data, to improve the fixing of the ringgit in the onshore foreign exchange market.

In addition, several measures to reform the foreign exchange market were officially introduced by the FMC statement on December 2, 2016. Reflecting Malaysia's experience of introducing capital controls and fixed exchange rate amid the Asian currency crisis, some of the measures were unorthodox. Specifically, the BNM enhanced the effectiveness of limiting ringgit trading in the offshore market, and obliged 75% of export revenue to be exchanged for the ringgit. In response to these measures, the IMF Article IV Report urged the BNM to monitor the impacts of these unorthodox measures on a cost-benefit basis (IMF 2017, pp. 2–3).

Figure 20 shows the difference between the one-month interbank interest rate in Malaysia and the US and the difference between the NDF and the forward exchange rate. The NDF rate of the ringgit against the US dollar remained lower than the forward exchange rate since the reversal of interest rates caused by the monetary easing in the US. The difference between the NDF and the forward exchange rate has expanded together with higher volatility since the reversal of mitigation money started around the third quarter of 2014. From the end of 2016 when the BNM embarked on strengthening the effectiveness of regulations of NDF transactions in the offshore market, the difference between the NDF and the forward exchange rate started to decrease and the volatility declined. In this respect, the BNM measures seemed to be successful and effective. However, given this trend reversed again in 2018, it seems to be too early to make a final evaluation.

The BNM continued to reform the foreign exchange and bond markets in 2017, including liberalization and flexibility measures, which were welcome by the IMF (IMF 2018). As Shafiq and Ariff (2018) is an article published in *The BNM Quarterly Bulletin* and therefore can be regarded as reflecting the BNM's position or assertion to some extent. There, Shafiq

¹⁷ Muhammad bin Ibrahim, "Financial markets and the ringgit: Our Journey Forward," BIS Central Bankers' Speech, 18 November 2016.

and Ariff (2018) acknowledge that a series of FMC measures were initially recognized as "anti-market forces and disruptive" but the BNM's efforts to communicate closely with citizens and financial market participants made those measures effective in contributing to the stabilization of the Malaysian financial markets.¹⁸

However, the response of the market to strengthening NDF regulations and stricter measures for foreign exchange management appeared to be a sharp capital outflow. The debt item of portfolio investment decreased by RM 46.25 billion from the fourth quarter of 2016 to the first quarter of 2017 (Figure 12). The outflow of foreign capital from the government bond market was remarkable. The amount and ratio of government bonds held by foreigners decreased from RM 211.759 billion (34.0%) at the end of the third quarter of 2016 to RM 156.719 billion (24.4%) at the end of the first quarter of 2017. However, this capital outflow did not last long. Beginning in the second quarter of 2017, the holding of government bonds by foreigners started to increase, and by the end of the first quarter of 2018 the amount reached RM 189.660 billion, with the holding rate recovered to 27.7% (Figure 16). According to the debt item of portfolio investment in one year from the second quarter of 2017 the amount of capital inflow was RM 35.368 billion, which suggests that the majority of the capital that flew out (RM 46.25 billion) during the previous half year came back to Malaysia (Figure 12).

Foreign investors' reactions in the stock market were more moderate than in the bond market. There was no major change in the amount of transactions between the fourth quarter of 2016 and the first quarter of 2017, and foreign investors were taking a square position on average with no excessive selling or buying. Rather, foreign investors purchased more than they sold for 18 consecutive weeks from mid-February 2017 and the total of the net purchasing amount during that period reached RM 10.0752 billion (Figure 15). Given that foreign ownership in the government bond market has not returned to its original level, it can be seen that some of the capital that flowed out of the bond market has flowed into the stock market.

Although there was no significant capital outflows from Malaysia during this period, the ringgit has been under depreciation pressure. The ringgit was already at a low price range of 4.2015 MYR/USD on November 8, 2016 (Malaysian time) just before the presidential election in the US. The ringgit continued to depreciate with the speech by the Governor of BNM on November 18 and the introduction of FMC measures on December 2, and recorded a historical low of 4.4985 MYR/USD on January 4, 2017. Although the exchange rate began to appreciate afterwards, the short position in the forward market continued to expand rapidly from USD 2.818 billion at the end of October 2016 to USD 19.18 billion at the end of April 2017, indicating a prolonged pressure to sell, and hence to depreciate further.

On April 13, 2017, the BNM announced a policy document titled "Regulated Short-Selling of Securities in the Wholesale Money Market."¹⁹ In the past, short-selling was admitted

¹⁸ Shafiq and Ariff (2018) further claim that "[i]t is imperative to recognise that every emerging economy faces its own unique circumstances and policy challenges. Hence, policy autonomy is critical to tailor unique policy responses. The international community should not judge policy measures based on pre-subscribed narrow definitions, categorisation and concepts."

only for Malaysian Government Securities (MGS) with a face value balance of more than RM 2 billion. The new measure was to allow short-selling of Malaysian Government Investment Bonds (MGII) under the same condition. Comparing the yields of the same remaining maturity, MGII has always exceeded MGS, indicating that the arbitrage between the two bonds has not worked. The objective of this amendment is to reduce the yield gap and to revitalize the secondary market of government bonds. The possession of MGII by foreigners has been increased little by little (Figure 16), and it is also important to adopt measures like this to enhance the efficiency of capital markets.

III-7. Regime change and adjustment: 2018Q2-

In May 9, 2018, the Alliance of Hope (Pakatan Harapan: PH), led by former Prime Minister Mahathir, won the general elections, resulting in the first change of government in Malaysian history. With the change of government, the investigation of the 1MDB scandal has proceeded significantly. As a result, ex-Prime Minister Najib was arrested on July 3, 2018, on charges of a criminal offense such as breach of trust and abuse of power.

Capital started to flow out both from the stock and the government bond markets. The short position in the future and forward exchange markets also expanded, and the spot exchange rate of the ringgit continued to depreciate. Based on the commitment during the election campaign, the Goods and Services Tax (GST) was abolished on June 1, 2018, but soon after that the Sales and Service Tax (SST) was introduced on September 1. Prime Minister Mahathir is making full efforts to advance fiscal reforms and has cancelled or postponed some of the infrastructure investment projects that were considered to have problems in profitability. For example, the East Coast Rail Link (ECRL) project, which was promoted under ex-Prime Minister Najib with strong support from China under the Bridge and Road Initiative (BRI), was canceled because it was regarded as incompatible with national interests. It is important to keep an eye on these new policy directions under Prime Minister Mahathir.

IV. Concluding Remarks

In the United States, where the Global Financial Crisis started, massive monetary easing such as a de facto zero interest rate policy and quantitative easing was implemented. The trend of monetary easing has spread to other developed countries. As a consequence, large amounts of capital flew into emerging countries including Malaysia. And the subsequent end of monetary easing in the United States triggered capital outflows from Malaysia and the depreciation of the ringgit. The drop in crude oil prices since 2014, the 1MDB scandal unveiled in the middle of 2015, and the resulting change in power in Malaysia also spurred the

¹⁹ "Regulated Short-Selling of Securities in the Wholesale Money Market," Bank Negara Malaysia, 13 April 2017, BNM/RH/ PD 028-42. Effective May 2, 2017.

depreciation of the ringgit.

Klyuev and Dao (2016), who analyzed exchange rates of selected ASEAN countries using the model of Frankel and Wei (2008), found that the exchange rate of the ringgit, which withdrew from pegging to the US dollar in July 2005, is far from a floating exchange rate, especially after the Global Financial Crisis, although the linkage with the US dollar has been declining. The Malaysian exchange rate system continued to be a managed float system officially (*de jure* arrangement), but on September 26, 2016, the IMF changed the classification to a floating system (IMF 2018) in view of the gradually weakening intervention in the foreign exchange market.

From a longer-term perspective, Malaysia has steadily accumulated foreign exchange reserves backed by a consistent current account surplus since the structural change after the Asian currency crisis. Malaysia's foreign exchange reserve increased continuously and rapidly from USD 57.8789 billion in August 1998, just before the introduction of the fixed exchange rate, to USD 410.8720 billion by the end of June 2008. According to reserve adequacy measures, the foreign exchange reserves corresponded to about 8 months of imports by the end of 2013. But the ratio started to decline and fell to less than 6 months by the end of 2017 as a result of BNM's intervention in the foreign exchange market (Figure 19). In addition, the ratio of short-term borrowings to foreign currency reserves was 21.6% at the end of 2012, but it subsequently rose rapidly, reaching to 69.1% by the end of the second quarter of 2018. The current account still maintains a surplus and the foreign exchange reserve is still substantial. But if the recent trend under the new government continues, the macroeconomic stability could be damaged in the near future.

The share of government bonds held by foreigners declined from 17.9% to 9.0% during 15 months from the end of March 2008 to the end of June 2009 (Figure 16). After having bottomed out, the ratio climbed up to 28.5% by the end of March 2013. The ratio largely maintained an upward trend, with a temporary decline in response to the Bernanke shock, until it reached a high of 34.0% at the end of September 2016. A major reversal in this ratio was triggered by the FMC measures introduced in December 2016, rather than capital outflows caused by the end of monetary easing in the US. The value and share of government bonds held by foreigners declined by 26.0% and to 24.4%, respectively during a half year to March 2017. Looking at the breakdown, foreigners' holding of MGS decreased from RM 181.393 billion to RM 135.856 billion (25.1% decline), MGII from RM 26.867 billion to RM 19.814 billion (26.8% decline), and TB from RM 3.5 billion to RM 1.049 billion (70.0%). Since then, the share of government bolds held by foreigners rose again to 28.0% by the end of 2017, but it decreased to 23.8% at the end of the second quarter of 2018 after the change of government (Figure 16).²⁰

Following the Turkish lira shock on August 10, 2018, the BNM announced revisions of foreign exchange regulations on August 17 aimed at facilitating operational efficiencies and

²⁰ Regarding the actual impacts of FMC measures on foreign investors, see for example, "Malaysia slowly winning battle against FX speculators," *Reuters*, 1 June 2017, which reported that the measures were successful. See also "Malaysia's Currency Crackdown is Hitting Speculators," *MIST News*, 29 March 2017.

risk management by businesses and financial institutions. The measures included (1) greater flexibility in the management of export proceeds, (2) flexible hedging of foreign currency obligations, and (3) wider access for non-residents to the onshore market financial market.²¹ Amid the trend of international capital flows in and out of emerging countries remaining unstable, Malaysia has been trying to reduce the necessity of direct intervention in the foreign exchange market by progressing institutional reforms aimed at stabilizing and increasing the efficiency of the onshore financial market.

The BNM has responded to a series of events through ordinary monetary policy such as changing the policy interest rate and the deposit reserve ratio and at the same time intervened in the foreign exchange market to mitigate the fluctuation of the ringgit. At the end of 2016, the BNM put pressure on the market to effectively control the ringgit trading in the offshore market, and implemented financial system reforms including additional capital controls aimed at stabilizing and increasing the efficiency of the onshore market. As a result, although capital outflow has been observed under the new government, there are signs of stabilization of international capital flows and exchange rate.

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²¹ BNM, "Enhancement of Foreign Exchange Administration Policies," Press Release, Ref No: 08/18/06/, 17 Aug 2018.

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