BANK NEGARA MALAYSIA
CENTRAL BANK OF MALAYSIA

Statutory Requirements

In accordance with section 13 of the Central Bank of Malaysia Act 2009, Bank Negara Malaysia hereby publishes and has transmitted to the Minister of Finance a copy of this Annual Report 2017 together with a copy of its Financial Statements for the year ended 31 December 2017, which have been examined and certified by the Auditor General. The Financial Statements will also be published in the Gazette.

For the purposes of section 115 of the Development Financial Institutions Act 2002, the annual report on the administration of the Development Financial Institutions Act 2002 and other related matters for the year ended 31 December 2017 is incorporated in Bank Negara Malaysia's Financial Stability and Payment Systems Report 2017 which forms an integral part of this Annual Report 2017.

Governor Muhammad bin Ibrahim, *FCB*
Chairman
Board of Directors
28 March 2018

Contents

Contents

Governor's Statement

2017 was a year of resurgence. The improvements in the global and domestic economy far exceeded earlier expectations, with growth being broad-based, entrenched, and synchronised. This was despite ongoing political and policy uncertainties in the major economies, threats from geopolitical and financial market developments, and commodity price volatility. The global economy recorded its highest growth since 2011, underpinned by stronger investment activity in most economies, and strong export performance, particularly in Asia. The environment today is an immense improvement from the outlook envisioned at the end of 2016.

As the recovery in the major advanced economies gains traction, the prolonged period of easy monetary conditions will continue to be normalised. While the impact of the normalisation process has thus far been contained within the financial markets, risks of destabilising capital flows and growth disruptions arising from premature tightening of monetary accommodation remain. In tandem with the upswing, emerging market economies have continued to record respectable growth and will continue to benefit from the ongoing global recovery.

For Malaysia, the economy performed strongly in 2017. The diversified structure of the Malaysian economy has not only enhanced its resilience, but has placed Malaysia in a position to benefit from the global growth upturn. The external sectors benefited significantly from the global upswing, with gross exports growing at its fastest pace since 2004, reflecting the greater demand from Malaysia's key trading partners and the improvement in commodity prices. Domestic demand remained the key contributor to the overall solid performance of the economy during the year, grounded on healthy fundamentals and backed by improving business and household sentiments.

This renewed growth impetus offers a good cause for optimism, but it must not cause complacency. We must learn from past crises and guard against excesses that could induce economic and financial stresses. While notable progress and reforms have been made over the decades to strengthen our resilience, improve our economic fundamentals, and deepen our financial markets, challenges remain. Continued vigilance, together with the ability and will to act pre-emptively to address the build-up of vulnerabilities, risks and imbalances, are critical to secure our growth prospects. It is during the good times that reforms should be accelerated. The present strength of the economy should not lull us into policy inactions. We should capitalise on this upswing to build policy space, fortify the financial system, bolster domestic reforms, tackle long-term growth obstacles, and nurture our people.

Given the positive performance and robust macroeconomic outlook, the Monetary Policy Committee (MPC) decided to normalise the degree of monetary accommodation at the January 2018 MPC meeting. The decision ensures that the monetary policy stance continues to be accommodative and is appropriate for sustainable growth prospects while mitigating risks that could arise from a prolonged period of low interest rates.

The Bank also initiated a series of pre-emptive measures to future-proof the economy. The Financial Markets Committee (FMC) measures were introduced to develop, strengthen and further liberalise the domestic financial markets. Specifically, the measures were focused on improving liquidity in the domestic bond market and providing additional hedging flexibilities. The FMC also announced initiatives to promote a financial market that is trusted, competitive, and resilient through the adoption of guiding principles for a fair and effective financial market, and a new code of conduct for the wholesale financial markets. This will continue to be supported by firm action on the part of the Bank to preserve financial market stability. Irrational speculation and behaviour require firm and rational regulation. There are clear signs that the measures implemented have achieved their intended outcomes. By the end of the year, volatility in the ringgit exchange rate had declined significantly, and speculative position-taking on the ringgit, particularly in the offshore market, had subsided. With non-resident holdings of Government bonds improving to a more sustainable level and trade flows more aligned with Malaysia's trade surplus, the demand and supply of the ringgit and foreign exchange in the market became more reflective of Malaysia's underlying economic activity.

Beyond monetary and financial stability, sufficient resources will be allocated to address various impediments in the economy. Quality investments continue to be advocated to ensure that Malaysia reaps maximum economic and financial benefits from these investments. The reassessment of investment incentive frameworks serves as one of the initiatives to promote higher quality domestic and foreign investments. More broadly, investment policies need to take into account ongoing shifts in the global value chain and advances in technology, and encourage the economy's progress towards greater levels of complexity. In the labour market, there has been a concerted effort to upskill the workforce, notably in the financial sector, to meet the growing demands of an evolving economy. More importantly, this needs to be matched with the creation of quality jobs. The Bank's active participation and collaboration with the various key stakeholders to establish the Malaysian Bureau of Labour Statistics underscore our commitment to address the gaps in labour market statistics, including on job creation, wages and hours worked, labour turnover and hiring. The development of these high-frequency and reliable indicators would facilitate more informed data-driven policymaking on labour-related issues. Collectively, these efforts envision a more advanced economic architecture that will support the nation's aspirations to reach a high-income and developed nation status.

Beyond aiming for robust, sustainable growth, the Bank is conscious of the gravity in delivering growth that is equitable and inclusive. The Bank continues to direct significant efforts to promote financial inclusion that enables greater participation in financial services by the underserved segment of society. In addition, measures continue to be pursued in collaboration with other agencies to broaden financing solutions for SMEs, in particular, to support innovation and automation to enhance their competitiveness.

The Bank is mindful of the divergence between the strong headline numbers and anecdotal on-the-ground sentiments. The attainment of one without the other may reduce the effectiveness of policies. Greater focus therefore has been given to improve communication and engagements with the public to better inform and complement policy. Equally important is the need for a continued evaluation of policies.

These have been crucial to ensure that policies achieve the intended outcomes. For one, policies involving cost of living issues should not only focus on cost-related solutions, but also encompass more income-enhancing measures. The provision of a living wage that is commensurate with productivity can be a step towards attaining a higher and quality living standard. A coordinated response to issues of affordable housing and escalating costs of healthcare would contribute to enhanced welfare. As with any deep-rooted changes, there is no quick fix. The Bank will continue to actively contribute to and support multifaceted solutions to these issues to serve the overarching aim of growth that benefits all segments of society.

Policy flexibility and pragmatism are pivotal. As the economy and financial markets evolve, too rigid a policy framework can be constraining and inflexible. In this competitive and rapidly changing environment, the Bank will continuously re-assess, re-calibrate and refine policies to ensure that policies remain relevant. We will continue to be receptive to ideas that may not conform to conventional thinking; be willing to innovate; and be ready to act decisively to remedy policy weaknesses for the benefit of the economy.

While the right policies are paramount to provide the enabling environment for the economy to prosper, it is the private sector that should drive change and lead the economy towards greater sophistication with higher value-added activities and higher overall productivity. In this respect, buffers, capacity, and capabilities need to be strengthened to ride the next wave of economic development. Strategic investments, both in skilled human capital and cutting-edge infrastructure, should be prioritised to increase competitiveness as the nation continues its pursuit towards innovation-led growth.

The Bank as an institution requires constant renewal to remain relevant and effective. Strong emphasis is placed on continuous professional development and investment in our staff. In navigating the uncertainties ahead, the Bank is embarking on a new three-year business plan. The business plan articulates a comprehensive series of high-impact strategies to deliver measurable results and elevate the Bank's capability to support sustainable economic growth, financial services digitalisation, and socioeconomic development. Whilst improving the Bank's accountability to deliver, there will also be an increased emphasis on inculcating a culture of innovation, creativity and agility. These behavioural attributes encourage diversity and elevate productivity in the work environment by allowing teams to ideate and innovate, leveraging on new platforms such as innovation labs.

On the international front, the Bank remains committed to strengthen regional and international collaboration. The Bank continues to engage in key platforms such as ASEAN, ASEAN+3, the Executives' Meeting of East Asia-Pacific Central Banks (EMEAP) and the South East Asia Central Banks (SEACEN) Research and Training Centre. The Bank has undertaken the necessary steps to further deepen the economic interlinkages and financial integration within the region. The enhancement to the ringgit-baht and the operationalisation of the ringgit-rupiah settlement frameworks, for example, serve as testaments to our regional cooperation. The frameworks are critical as they enable the settlement of trade and investment in the respective local currencies, providing greater options for businesses in settling their transactions. Capitalising on the intellectual cluster of Sasana Kijang, its status as the international and regional centre of excellence for financial services was enhanced with the hosting of several high-impact and high profile discourses, including the Bank Negara Malaysia (BNM) - International Monetary Fund (IMF) - IMF Economic Review Summer Conference — the first in Southeast Asia, the BNM Monetary Policy Conference, the Global Symposium on Development Financial Institutions, and the 3rd Counter-Terrorism Financing Summit. These events, held in collaboration with the international financial institutions and global standard-setting bodies such as the IMF and the World Bank Group, are consistent with our policy to collaborate at the international level. Malaysia's leadership in Islamic finance was further cemented with the issuance of the world's first green sukuk in partnership with the World Bank Group and the Securities Commission.

As we move forward, there are three key risks that could disrupt our robust economic growth. First is the risk of a premature or over-tightening of global monetary accommodation. While much has been accomplished since the Global Financial Crisis to put the global economy back on track, finding the balance between premature tightening and prolonged easing will continue to be a challenge for policymakers. The second major risk is a sharp correction in global financial markets that may reignite extreme market volatility and derail the global growth momentum. Amidst the extremely low volatility environment in 2017, global financial markets performed strongly and reached historical highs in some key markets. However, low volatility does not equate to low risks. A third risk is the escalating trade tension, whereby an economic fallout from protectionist policies may undermine the sustainability of global growth.

While these risks may seem daunting, the future holds many promises. Technology will continue to be a key catalyst for growth. Embracing digitalisation is no longer an option but an imperative. The present policy debates have rightly been focusing on maximising the economic benefits while confronting the threats that may arise from this trend. This must include avoiding a digital divide and ensuring that the benefits of the digital economy reach all segments of society. Our nation has proven its agility to flourish in an environment of rapid change. I am confident in our collective strength to thrive in the ever competitive environment to the ultimate benefit of our country and people.

As challenging as the year has been, I remain encouraged by what we have achieved. These achievements would not have been possible without the outstanding dedication and professionalism of the Bank's staff. For this, I am truly grateful. I would also like to extend my appreciation to the Board of Directors for their unwavering support and guidance. As an institution, the Bank is entrusted with responsibilities that are challenging but enormously rewarding in our efforts for the betterment of society. We shall continue to deliver with the highest standards of excellence, transparency and integrity.

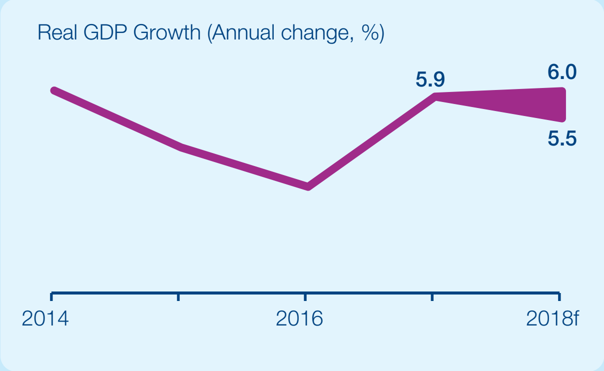
Governor Muhammad bin Ibrahim, *FCB*

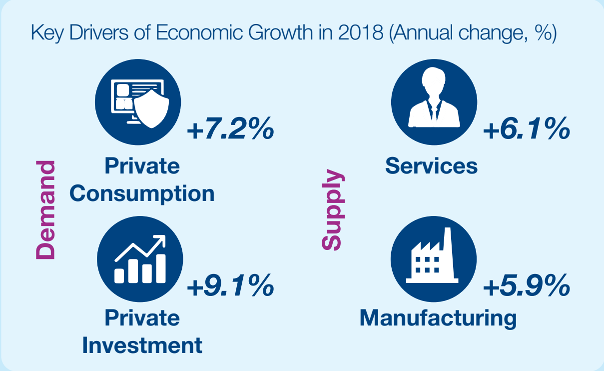
28 March 2018

Key Highlights on
Economic Developments and Outlook

Sustained GDP growth in 2018

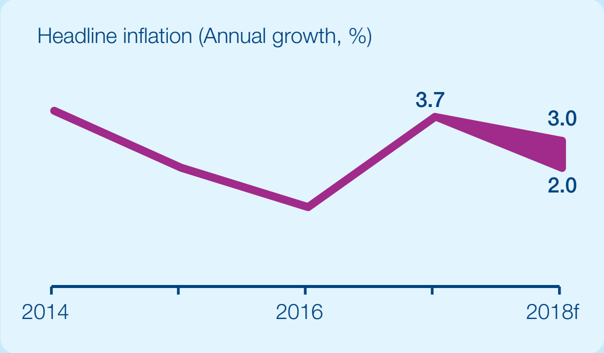
Continued expansion in domestic demand and in major economic sectors



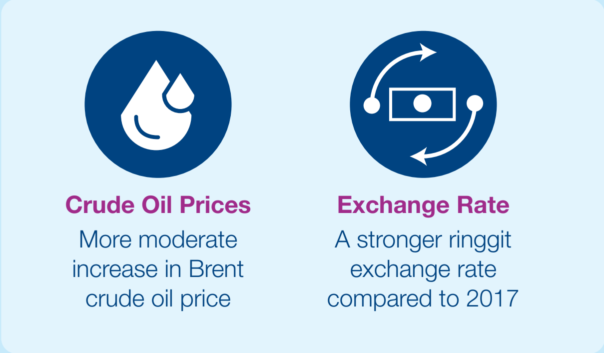


Headline inflation expected to moderate in 2018

Smaller contribution from global cost factors

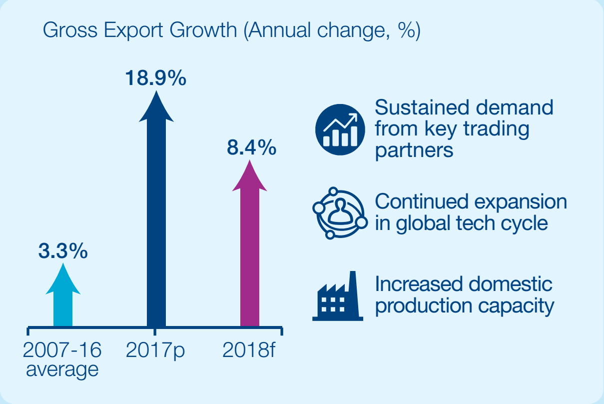


Mainly contingent on:

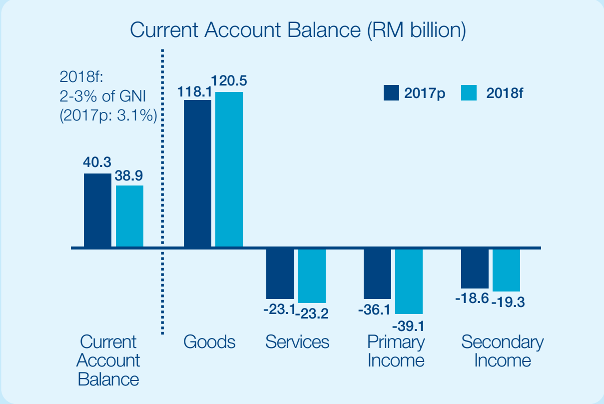


Exports and current account surplus to remain firm in 2018

Exports to grow above long-term average trends



Sustained current account surplus, driven by goods surplus



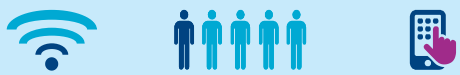
Key Highlights on Box Articles

Unlocking Malaysia's Digital Future: Opportunities, Challenges and Policy Responses

Digital transformation could boost USD100-136 billion in GDP by 2025

3 key fundamentals that must be addressed

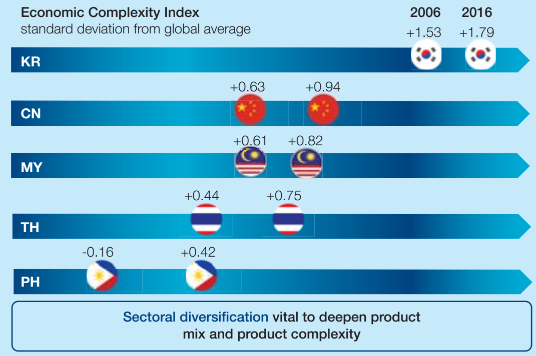
Fast affordable broadband	Talent tailored for digital progress	High digital adoption
Broadband speed is 3 times slower than frontrunners	Only 1 in 5 graduates are in STEM	< 40% of the population use internet banking and e-commerce



Modernising regulations, empowering talent and universal access to infrastructure will accelerate Malaysia's digitalisation

Complexity and Growth: Malaysia's Position and Policy Implications

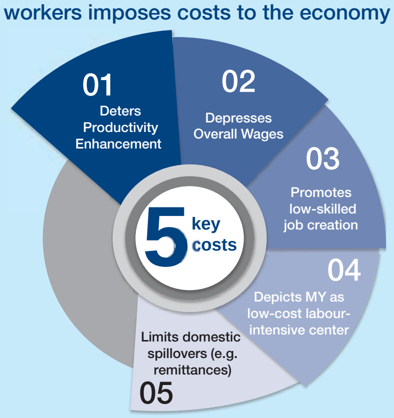
Malaysia's economic complexity has improved, but others are fast catching up



Source: The Atlas of Economic Complexity

Low-Skilled Foreign Workers' Distortions to the Economy

Indiscriminate reliance on low-skilled foreign workers imposes costs to the economy



The Living Wage: Beyond Making Ends Meet

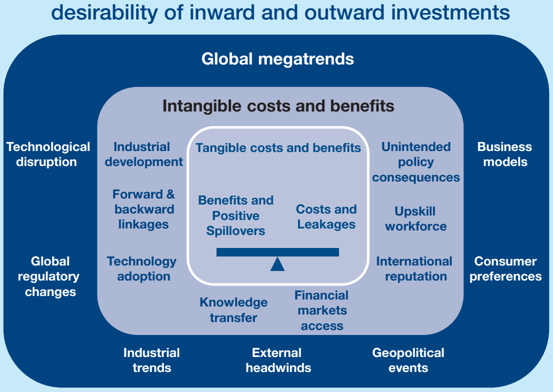
The living wage enables households to afford a 'minimum acceptable' living standard, which include:

- Ability to meaningfully participate in society
- Opportunity for personal & family development
- Freedom from severe financial stress

Provisional Living Wage Estimates in Kuala Lumpur in 2016 (RM per month)

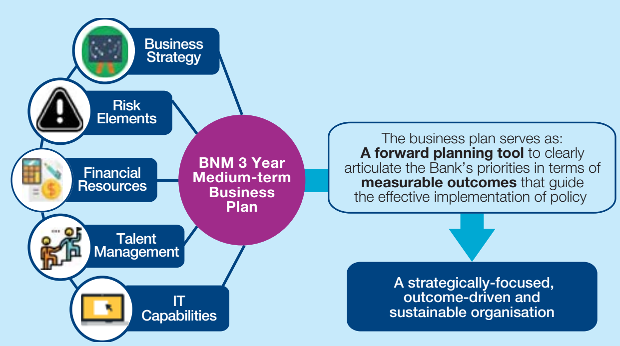
A Critical Assessment on Direct Investment Abroad (DIA) and the Changing Nature of Foreign Direct Investment (FDI)

Malaysia needs a fresh approach to assess desirability of inward and outward investments



The Bank's Business Plan 2018 - 2020: Framing the Future with Talent and Technology

Business plan as a forward planning tool



Executive Summary

Executive Summary

2017 marked a year of strong economic rebound, with the global economy recording its highest growth rate since 2011. Growth in world trade exceeded that of global GDP for the first time in three years. The pickup in economic growth was broad-based across the advanced and emerging market economies. In the advanced economies, economic growth was driven mainly by robust investment activity amid stronger domestic demand, while political uncertainties that had lingered throughout the year had little impact on the growth trajectory. In Asia, the growth momentum was supported by the recovery in global trade and was anchored by strong domestic demand. Reflecting the resurgence in global growth, international financial markets performed strongly, while market volatility remained low despite uncertainties surrounding geopolitical tensions. While global headline inflation rates edged up during the year, reflecting improved global demand conditions and the recovery in commodity prices, underlying inflation remained muted in many countries.

Despite the synchronised nature of the global growth recovery, the stance of monetary policies globally diverged. In the advanced economies, monetary policy was generally tilted towards gradual normalisation, permitted by the climate of strong economic growth. The US Federal Reserve and the Bank of England raised their respective policy rates while the European Central Bank announced a reduction in its asset purchases. Contrary to the advanced economies, several Asian economies, such as Indonesia and India, turned to a more accommodative stance amid waning inflation. Alongside monetary policy, some advanced economies also deployed fiscal policies to bolster macroeconomic fundamentals. In Asia, policymakers continued to pursue structural reforms to strengthen resilience and fortify sustainable growth prospects.

Against a background of broad-based global recovery and the relatively low volatility in the international financial markets, the Malaysian economy performed strongly in 2017. The Annual Report provides an analysis of the developments in the Malaysian economy and outlines the future challenges. The report also sheds light on the Bank's continuous efforts to strengthen its governance, organisational development and communications.

The Malaysian Economy in 2017

In 2017, the Malaysian economy recorded a robust growth of 5.9% (2016: 4.2%), supported by faster expansion in both private and public sector spending. A key highlight for the year was the rebound in gross exports growth as global demand strengthened. This was due mainly to higher demand from major trading partners following the upswing in the global technology cycle, investment expansion in the advanced economies and the turnaround in commodity prices. Altogether, the global technology upturn translated into robust demand for electronics and electrical (E&E) products while the stronger regional demand and the revival in investment activity in the advanced economies lifted exports of non-E&E products. Commodity exports also turned around in 2017, supported largely by the recovery in major commodity prices.

While real GDP growth was boosted by the external sector, domestic demand continued to anchor growth. In particular, private consumption growth strengthened to 7.0% in 2017 (2016: 6.0%), supported mainly by continued wage and employment growth, with additional impetus from Government measures. Public consumption grew by 5.4% (2016: 0.9%) due to higher spending on supplies and services by the Federal Government amid sustained growth of emoluments. Gross fixed capital formation (GFCF) grew at a faster pace of 6.2% (2016: 2.7%), driven by improvements in both public and private investments. Public investment recovered to grow at 0.1% (2016: -0.5%), supported by continued spending by the General Government and public corporations. Private investment growth accelerated to 9.3% (2016: 4.3%), as firms benefited from the conducive external and domestic operating environment.

On the supply side, most sectors registered higher growth in 2017. The performance of the two largest sectors, services and manufacturing, benefited from marked improvements in domestic and external conditions, growing at 6.2% and 6.0%, respectively (2016: 5.6% and 4.4%). The construction sector recorded a moderate growth of 6.7% (2016: 7.4%), while growth in agriculture production rebounded to 7.2% (2016: -5.1%). Growth in the mining sector, however, moderated to 1.1% (2016: 2.2%), reflecting the voluntary crude oil supply adjustments by PETRONAS, in line with the Organization of the Petroleum Exporting Countries (OPEC) agreement to limit oil production until end-2018.

Labour market conditions improved with stronger employment gains keeping pace with labour force expansion. The labour force expanded by 303,000 people, while net employment gains amounted to 295,000 jobs, mostly driven by high- and mid-skilled workers. The unemployment rate during the year remained stable at 3.4% (2016: 3.4%). The labour force participation rate edged higher to 67.8% (2016: 67.7%) and employment growth tripled to 2.1% (2016: 0.7%), as employers were optimistic about the business outlook and thus continued to expand their workforce accordingly. The number of documented unskilled and semi-skilled foreign workers in Malaysia decreased during the year, with its share of the labour force correspondingly declining to 12.0% from 12.7% at end-2016. Aggregate nominal wages in the private and public sectors grew by 6.4% and 6.2%, respectively in 2017 (2016: 4.3% and 6.4%).

Headline inflation increased to 3.7% in 2017 (2016: 2.1%). Inflation remained volatile during the year and was primarily driven by higher domestic fuel prices. Higher global commodity prices and disruptions in domestic food supplies also contributed to the higher inflation. This, however, was mitigated by the stronger ringgit exchange rate since April 2017, which helped contain the rise in production costs for domestic goods. Core inflation was also higher in 2017, averaging at 2.3% for the year (2016: 2.1%). Nevertheless, demand-driven inflationary pressures remained largely stable given the lack of persistent tightness in capital stock and the absence of significant wage pressures.

Malaysia's external position improved considerably in 2017, benefiting from the favourable global economic landscape and relatively lower volatility in the international financial markets. Malaysia recorded a higher current account surplus, largely due to a higher goods surplus following the strong export performance, which more than offset widening deficits in the services and primary income accounts. Gross exports rebounded to grow strongly by 18.9% (2016: 1.2%), driven mainly by export volumes, particularly in manufactured exports. Gross imports also registered double-digit growth of 19.9% (2016: 1.9%), mainly reflecting higher imports of intermediate goods, capital goods, and goods for re-exports. The increase in imports was in line with the robust manufacturing exports, more rapid investment in the manufacturing and services sectors, and robust global demand.

During the year, the financial account of the balance of payments registered a net inflow of RM2.3 billion (2016: net outflow of RM1.1 billion). These inflows were driven mainly by continued foreign direct investment (FDI) inflows, and a resumption of portfolio investments by non-residents, amid continued acquisitions of financial assets abroad and long-term investments by resident banks, institutional investors, and fund managers. These developments reflected significant cross-border capital flows driven by robust domestic growth, improvement in global growth prospects and lower volatility in the financial markets during the year.

The international reserves of Bank Negara Malaysia amounted to USD102.4 billion as at end-2017 compared to USD94.5 billion as at end-2016. As at 15 March 2018, international reserves amounted to USD103.9 billion. The international reserves remained adequate to facilitate international transactions and sufficient to finance 7.3 months of retained imports and is 1.1 times the short-term external debt. Of note, the wide range of monetary policy instruments, exchange rate flexibility and resilient financial markets have enabled the economy to reduce its reliance on the Bank's international reserves in managing external pressures.

Malaysia's external debt declined to RM883.4 billion as at end-2017, equivalent to USD215.5 billion or 65.3% of GDP (2016: RM 916.1 billion, equivalent to USD202.3 billion or 74.5% of GDP). The decline was mainly attributed to valuation effects following the strengthening of the ringgit against most currencies during the year. Excluding valuation effects, Malaysia's external debt increased by 1.4% of GDP, mainly on account of increases in interbank borrowing and non-resident deposits. Risks arising from external debt remained manageable, mitigated by its currency and maturity profiles. More than a third of external debt is denominated in ringgit (34.3%), mainly in the form of non-resident holdings of domestic ringgit debt securities and ringgit deposits in domestic banking institutions. These liabilities are not subject to valuation changes from the fluctuations in the exchange rate. The remaining portion of total external debt of RM580.7 billion (65.7% share) is denominated in foreign currency, and is subject to prudential and hedging requirements on banking institutions and corporations. In terms of maturity, more than half of the total external debt is skewed towards medium- to long-term tenures (57.3% of total external debt), indicating limited rollover risks. Additionally, not all short-term external debt poses a claim on reserves.

Overall, the fundamentals of the Malaysian economy continued to strengthen. Structural policies carried out over the decades have resulted in a highly open and diversified economy with multiple sources of growth. Improving labour market conditions amid faster wage growth continued to support household spending. Healthy financial institutions and sufficient domestic liquidity also ensured orderly financial intermediation. Furthermore, Malaysia's external position remained strong and well-protected from a sharper depreciation, supported by sufficient international reserves and manageable levels of external debt.

Despite the strong growth in 2017, structural reforms remained a priority to strengthen economic fundamentals and to safeguard the sustainability of the growth momentum. These include efforts to enhance domestic value-added in production and exports, promote higher quality domestic and foreign investments, raise productivity and cultivate a future-ready quality labour force.

Economic and Monetary Management in 2017

The Monetary Policy Committee (MPC) kept the Overnight Policy Rate (OPR) unchanged at 3.00% throughout 2017, with the focus on ensuring that the growth of the Malaysian economy remained entrenched amid contained inflation. During the year, the MPC actively assessed the stance of monetary policy to ensure it remained consistent with the evolving prospects of growth and inflation. In particular, the downside risks to domestic growth from the external environment that was prevalent in the beginning of the year receded over time amid a more broad-based and synchronised upturn in global growth. This resulted in a stronger domestic economic growth compared to the initial forecast. Inflation remained contained as the robust domestic demand was mitigated by some degree of spare capacity in the labour market and capital stock.

The MPC was also vigilant against a build-up of risks that could arise from a prolonged period of low interest rates. During the course of the year, it became increasingly evident that economic conditions that warranted the previous OPR reduction in 2016 had vastly improved. Consequently, in November, the MPC communicated in the Monetary Policy Statement its consideration for a potential review of the degree of monetary accommodation, which would reflect a normalisation from the previous monetary accommodation in July 2016, rather than a tightening of monetary conditions.

The ringgit, along with most major and regional currencies, strengthened against the US dollar in 2017. The ringgit appreciated by 10.4% to end the year at RM4.0620 against the US dollar after experiencing four consecutive years of depreciation. The ringgit was also one of the best-performing regional currencies despite intermittent depreciation due to "risk-off" events during the year. The strength of the ringgit reflected the better-than-expected GDP growth performance, positive investor sentiments following further liberalisation of the Malaysian financial markets, and positive global developments. In the first quarter of 2017, the appreciation of the ringgit was limited due to lingering investor concerns over the prospects of the Malaysian financial markets. The uncertainties mainly reflected the misperceptions regarding the liberalisation measures introduced by the Financial Markets Committee (FMC) in December 2016, and the lack of understanding of the onshore hedging facilities by foreign investors. In the subsequent periods, sentiments on the ringgit and the Malaysian financial markets improved significantly, driven mainly by positive domestic developments. The ringgit appreciated 9.0% against the US dollar from the second quarter onwards.

In addition, the ringgit was one of the least volatile regional currencies despite intermittent periods of depreciation pressure due to the occasional prevalence of "risk-off" sentiments in the global financial markets. The stability of the ringgit was a manifestation of the effectiveness of the financial market development measures introduced by the FMC in late 2016 and 2017. These measures resulted in improved liquidity in the domestic foreign exchange market and the decline in the volatility of the ringgit against the US dollar. The ringgit also experienced more balanced demand and supply after the introduction of the export conversion measure. The Bank also took steps to address some of the misperceptions and concerns about Malaysia that have resulted in excessive movements of the ringgit, in particular regarding its oil-dependency, adequacy of international reserves, and the Government's fiscal position.

In 2017, Malaysian Government Securities (MGS) yields declined amid sustained non-resident inflows and strong support from domestic institutional investors, underpinned by Malaysia's strong economic performance during the year. During the first quarter of 2017, the bond market experienced large non-resident outflows due mainly to the unwinding of short-term speculative positions held by non-resident financial institutions and short-term asset managers following the introduction of the FMC measures and the US presidential election in late 2016. The subsequent quarters saw a resumption of non-resident inflows to the domestic bond market amid improved investor sentiments following Malaysia's strong economic performance as the year progressed. The second series of FMC initiatives introduced in April 2017 to improve market accessibility and hedging flexibilities, coupled with active engagements by the Bank with market participants to reduce misperceptions on earlier measures, also supported the bond market. This resulted in a downward trend in MGS yields during the period.

Monetary operations in 2017 remained focused on maintaining stability in the interbank market. In the first quarter, the slight moderation in domestic liquidity arising from capital outflows was offset by liquidity injection operations through the reverse repo and foreign exchange swap facilities. Following the resumption of capital inflows from the second quarter onwards, the Bank was able to reduce its liquidity injection operations. Overall banking system liquidity remained sufficient to support the financial intermediation process.

Net financing to the private sector expanded by a faster pace of 6.4% in 2017 (2016: 5.5%), driven by financing through the corporate bond market, which recorded the strongest growth since 2012. However, growth of outstanding loans to both households and businesses moderated during the year. The lower business loan growth was broad-based, reflecting a larger increase in loan repayments relative to the increase in disbursements. Growth in household debt continued its moderating trend.

Outlook for the Malaysian Economy in 2018

The global economy is projected to expand at a faster pace in 2018, driven largely by private consumption and boosted by investment activity in the advanced economies. In Asia, trade activity will continue to expand, albeit at a more moderate pace. Financing conditions are likely to remain accommodative despite the ongoing normalisation of global monetary policy. In the advanced economies, the strength of investments is likely to persist through 2018 and Asian economies will continue to benefit from positive spillovers from the external sector. Other emerging market economies are also likely to see a pickup in growth, while commodity exporters will observe a rebound in domestic demand due to higher global crude oil prices. Overall, risks to the global outlook are poised to become more broadly balanced. Nevertheless, several downside risks stemming from 2017 linger. These include uncertainties surrounding the effects of a synchronised monetary policy normalisation across major economies, the inward-looking trade policies that threaten international trade, in addition to geopolitical risks that could adversely affect sentiments in global financial markets.

Amid the stronger global economic conditions, the Malaysian economy is projected to grow by 5.5% - 6.0% in 2018. Domestic demand will continue to be the anchor of growth, underpinned by private sector activity. Private consumption growth is expected to remain sustained, supported by continued growth in employment and income, lower inflation and improving sentiments. Income growth will be supported by a robust export performance and continued Government measures, such as the continuation of *Bantuan Rakyat 1Malaysia* cash transfers, individual income tax reduction, and the special payment to all civil servants and retirees. Private investment growth will also be sustained, underpinned by ongoing and new capital spending in both the manufacturing and services sectors, and strengthened by continued positive business sentiments. Public sector expenditure is projected to decline due to the contraction in public investment amid more moderate growth in public consumption.

Apart from domestic demand, GDP growth will also be supported by the favourable external demand conditions. Both gross exports and imports are forecasted to grow at above-average trends in 2018. Exports will be lifted by favourable demand from major trading partners, the continued expansion in the global technology upcycle, increase in domestic productive capacity and broadly sustained global commodity prices. Despite the projected higher goods surplus of the current account, deficits in the services and income accounts will continue to weigh on the current account balance. Overall, the current account balance is expected to record a surplus of between 2.0% – 3.0% of GNI in 2018.

Labour market conditions are expected to remain favourable and supportive of growth, driven by continued robust economic activity and better hiring sentiments. Employment will continue to expand while the growth in job creation will be sufficiently robust to accommodate new entrants into the workforce. As such, the unemployment rate is expected to be relatively unchanged. Looking ahead, several reforms undertaken such as the implementation of the Employment Insurance System and the Employers Undertaking, and an impending review of the minimum wage, will position the nation's labour market on a more competitive and resilient path, and improve the overall well-being of Malaysia's workforce.

On the supply side, all economic sectors are forecasted to expand in 2018. The services and manufacturing sectors will continue to be the key drivers of overall growth. The construction sector is expected to register a stronger expansion, driven by large new and existing multi-year civil engineering projects. Growth in the mining sector is also projected to be higher, reflecting the continued pickup in natural gas production. The agriculture sector is expected to register a more moderate growth, following the exceptional post-El Niño crude palm oil production recovery in 2017.

Headline inflation is projected to moderate in 2018, averaging between 2.0% – 3.0%. The lower inflation compared to 2017 is due mainly to an expected smaller contribution from global energy and commodity prices. A stronger ringgit exchange rate compared to 2017 would also mitigate import costs. Inflationary pressure from domestic demand factors will be contained by improving labour productivity and ongoing investments for capacity expansion. The inflation outlook, however, depends on the trajectory of global oil prices, which remains highly uncertain.

Overall, the economic outlook is marked by several upside risks to growth. This includes stronger-than-expected global demand, which in turn would improve the prospects for export-oriented industries. The potential increase in minimum wage and a faster-than-expected pickup of existing and new production facilities in various industries would also support a more favourable growth outlook. Nevertheless, several downside risks to growth remain. The strength of Malaysia's exports to major trading partners could be impacted by unfavourable effects arising from monetary and regulatory policy shifts in the advanced economies, rising trade protectionism by major trading partners and a sharper-than-expected growth moderation in PR China. In addition, a re-emergence of volatile global commodity prices or abrupt corrections in the global financial markets could weigh down sentiments, which in turn could dampen the strength of domestic economic activity.

Malaysia is, however, well-positioned to withstand these headwinds should these downside risks materialise. The structural reforms that were undertaken over the years have endowed the Malaysian economy with multiple sources of growth, ample buffers and robust policy frameworks. Going forward, the positive economic environment will provide policymakers with ample policy space to continue with the necessary reforms. The domestic financial markets are resilient and well-positioned to intermediate large swings of capital flows in the event of heightened financial market volatility. Fundamentally, policymakers have the tools, capacity and flexibility to undertake the necessary measures to steer the economy along a steady growth path.

Economic and Monetary Management in 2018

Monetary policy in 2018 will focus on ensuring the sustainable growth of the Malaysian economy with price stability. Given the continuing positive macroeconomic outlook and firm growth path, the MPC decided to normalise the degree of monetary accommodation at the January 2018 MPC meeting. The MPC raised the OPR by 25 basis points to 3.25%. The MPC also recognises the need to prevent the build-up of risks that could arise from a prolonged period of low interest rates, even as the risks of financial imbalances currently remain contained. The MPC will monitor closely the evolving economic outlook, including the impact of the OPR adjustment in January 2018. The Bank's monetary operations will continue to ensure that domestic liquidity in the financial system will remain sufficient to support the orderly functioning of the domestic financial markets.

Fiscal policy in 2018 will continue to focus on strengthening the Government's fiscal position while ensuring sustainable and more inclusive economic growth. The Federal Government's fiscal deficit is expected to narrow further, supported by initiatives to optimise expenditures and enhance revenues. As delineated in the 2018 Budget, fiscal spending will prioritise high-impact infrastructure projects and initiatives that build capacity and raise productivity. Consistent with the efforts to ensure an inclusive economic growth, welfare enhancement programmes and fiscal transfers will provide support to the lower- and middle-income segments to cope with the higher cost of living.

Governance, Organisational Development and Communications

Socio-economic challenges, advancements in technology, geopolitical risks, and uncertainties surrounding global economic growth continued to influence the planning and investment decisions of the Bank. During the year, the governance, organisational development and communications roles of the Bank continued to evolve to incorporate new capabilities to face these challenges.

The Bank's Board of Directors (the Board), supported by the three Board committees, was actively involved in providing strong oversight of the management, operations and performance aspects of the Bank. In 2017, the size and composition of the Board remained at 11 members. The Board currently comprises four ex-officio directors, namely Governor as the Chairman, two Deputy Governors and the Secretary General of Treasury. The remaining members comprise seven independent non-executive directors. The appointment of Chew Cheng Lian (Jessica), *CB* as Deputy Governor took place on 1 January 2018 following the retirement of Dr. Sukudhew Singh as Deputy Governor on 31 December 2017.

The Bank is proactive in reviewing its risk management practices to nurture a vibrant risk culture attuned to emerging risks throughout the organisation. During the year, a new initiative introduced was the appointment of Departmental Risk Officers, tasked with spearheading risk management practices at the operational level. The Bank also included risk awareness sessions in its onboarding programmes for new recruits, and broadcasted periodic updates Bank-wide to reinforce policies and guidelines. Furthermore, the Bank conducted simulation exercises, including robust crisis scenarios to test the organisation's readiness in handling crises, and continuously reviewed business continuity management plans to reflect emerging risk factors and strategies. The Internal Audit Department undertook a rigorous review of cybersecurity management to identify potential vulnerabilities and threats to the Bank's IT systems, and took action to tighten controls and mitigate cybersecurity risks within the Bank.

The Bank's medium-term business planning integrates strategies with the elements of risk, financial resources, talent management, IT capabilities and sound operations management. The formulation of the 2018-2020 Business Plan will focus on addressing pressing domestic concerns and regional opportunities, with an emphasis on achieving high-impact outcomes to deliver measurable results. These medium-term strategies provide an outline plan that will ensure a conducive environment for sustainable macroeconomic growth and monetary stability, increase the state of readiness to manage future uncertainties, and develop capabilities through sustained investments in people and development of new systems.

In anticipation of evolving risks and work demands, the Bank's IT transformation initiatives in 2017 were focused on building internal IT capabilities and strengthening cybersecurity management standards and tools. Other organisational development efforts included improvements to shared support services and project management, which resulted in a reduction in project delays and better utilisation of planned budgets for the year. The Bank has taken immediate steps to focus on re-skilling and developing a sustainable talent pipeline for mission critical positions and the sourcing of critical skills, such as in IT and data sciences. The Bank's targeted investments in learning and development focusing on growing technical and leadership competencies will ensure that high-potential talents continue to be of the right calibre for the various roles and positions across the Bank.

During the year, the Bank continued to improve its communication strategy to better engage with its diverse stakeholders, to obtain a better understanding of the sentiment on the ground, and to identify sources of misinformation. The Bank continued to use mainstream media channels, along with new communication channels, such as social and alternative media that have recently transformed the pattern of media consumption of certain population segments. The wide use of social media platforms among the public necessitated the dissemination of quick information, and rapid responses to situations and developments that arose from events outside of the Bank's control. The timely provision of requisite data and facts was important in correcting misperceptions or misinterpretations, before they could evolve into entrenched misunderstanding, negative perceptions or excessive speculation.

Significantly in 2017, the Bank's new strategies in outreach programmes made major breakthroughs in pursuing closer engagements with the public. These programmes contributed towards creating a more inclusive financial system and elevating financial literacy. Notable outreach and engagement initiatives included Karnival Kewangan events to enhance financial knowledge and literacy, the Financial Consumer Alert website to raise awareness on financial crime, and "Train-the-Trainers" programmes to provide advisory services on SME financing.

Bank Negara Malaysia's Audited Financial Statements for 2017

As audited and certified by the Auditor General, the financial position of Bank Negara Malaysia remained strong in 2017. Bank Negara Malaysia's total assets amounted to RM449.8 billion, with a net profit of RM7.5 billion for the financial year ending 31 December 2017. Bank Negara Malaysia declared a dividend of RM2.5 billion to the Government for the year 2017.

Economic Developments in 2017

Economic Developments in 2017

THE INTERNATIONAL ECONOMIC ENVIRONMENT

World economy recorded a broad-based and synchronised improvement

The year 2017 witnessed a strong rebound in economic activity, propelling the global economy to record its highest growth rate since 2011. World trade growth exceeded global GDP growth for the first time since 2014. The improvement in economic activity was broad-based across the advanced and emerging market economies, leading to a series of upward revisions in growth forecasts by international organisations and national authorities throughout the year. The renewed strength in GDP growth was driven mainly by robust investments in the advanced economies, which in turn fostered favourable external demand, particularly for Asia. Amid improving demand, several major central banks raised their key policy rates as part of their policy normalisation. While headline inflation edged higher, the core inflation remained low in many advanced economies, reflecting the softness in wage growth amid subdued productivity growth. Global financial markets recorded strong performance, in line with the upswing in global growth. Market volatility, surprisingly, remained low despite uncertainties due to geopolitical tensions. The rise in scepticism over globalisation in the previous year showed signs of diminishing as key election results in the EU suggested lower risk of upheaval from the populist movement. In this environment, policymakers continued to undertake various policy actions, including monetary, fiscal and structural reforms, to achieve country-specific objectives such as strengthening macroeconomic fundamentals and ensuring more sustainable growth in the medium term.

Stronger world growth

The global economy recorded its fastest growth since 2011. The International Monetary Fund (IMF)'s global growth projection for 2017 was revised upwards from 3.4% to 3.7% between October 2016 and January 2018, reversing a long streak of eleven downward revisions since 2010.

Advanced economies experienced robust economic growth, supported by stronger domestic demand. In the US, rising GDP growth was driven by the pick up in consumer spending amid tighter labour market conditions and more positive consumer sentiments. The increased participation in the labour workforce was met with strong job creation and solid employment growth, driving the unemployment rate to the lowest level since 2001. In the euro area, GDP growth expanded at a faster pace. This was supported by improvements in business and consumer confidence, and favourable financing conditions, which in turn boosted income and spending. Of significance, uncertainties surrounding several key elections in the euro area and the outcome of the Brexit negotiations that persisted throughout the year had limited impact on the upward growth trajectory.

Amid stronger consumer demand, investment in the US and euro area also increased. This was supported by buoyant business sentiment, rising profits and the need to upgrade existing capital stock across major economies. The resumption of investment activity in the advanced economies was an important development given weakness in the previous year, particularly in machinery and equipment investments in the US. More importantly, the broad-based improvements in investment played a bigger role in driving global trade (Constantinescu et al., 2015). As such, global trade recorded its fastest growth since 2011 (2017: 4.2%; 2011: 7.1%). The remarkable trade resurgence in 2017 was broad-based across product categories and markets. The upswing in the technology sector also helped to support the strong rebound in trade volumes.

Such recovery in global trade provided further impetus to growth in many major Asian economies. Stronger demand for electronics & electrical (E&E) products, particularly semiconductors used in memory chips for smartphones and personal computers (PCs) was a key factor in driving the trade upswing in Asia, given the exposure of some countries to the global technology cycle. As a result, GDP growth in the Asian economies was predicated on strong double-digit export performance.

Besides the favourable external environment, domestic demand continued to be the main anchor for most countries in Asia. In PR China, growth was resilient despite ongoing structural reforms to rebalance the economy towards a consumption-led growth model. Rising household incomes, in particular in the rural areas, and high job creation raised consumption growth. Overall investment remained strong, supported by improvements in manufacturing and infrastructure spending. Capital expenditure by manufacturers was driven by better external demand. Residential investment moderated amid measures targeted at cooling the property market. In the ASEAN region, higher infrastructure spending by both the public and private sectors was a key growth driver as countries enhanced rural and urban mobility through transportation connectivity for further economic development. Coupled with sizeable government measures to support economic activity for lower income households, fiscal support also lent further impetus to domestic demand in Asia.

Table 1.1

World Economy: Key Economic Indicators

	Real GDP Growth (Annual change, %)		Inflation (Annual change, %)	
	2016	2017*e*	2016	2017*e*
World Growth	**3.2**	**3.7**	**-**	**-**
World Trade	**2.5**	**4.7**	**-**	**-**
Advanced Economies				
United States	1.5	2.3	1.3	2.1
Japan	0.9	1.7	-0.1	0.4
Euro area	1.8	2.3	0.2	1.5
United Kingdom	1.9	1.7	0.7	2.6
Other Advanced Asian Economies				
Korea	2.8	3.1	1.0	1.9
Chinese Taipei	1.4	2.9	1.4	0.6
Singapore	2.0	3.6	-0.5	0.6
Hong Kong SAR	2.1	3.8	2.4	1.5
The People's Republic of China	**6.7**	**6.9**	**2.0**	**1.6**
ASEAN-4				
Malaysia	4.2	5.9	2.1	3.7
Thailand	3.3	3.9	0.2	0.7
Indonesia	5.0	5.1	3.5	3.8
Philippines	6.9	6.7	1.8	3.0
India[1]	**7.1**	**6.6**	**5.0**	**3.3**

[1] For India, GDP data is presented on a fiscal year basis
e Estimate

Source: International Monetary Fund (IMF) and National Authorities

Higher global headline inflation but muted core inflation

Global inflation rates edged higher during the year as global demand conditions improved and commodity prices recovered in the second half of 2017. Core inflation remained modest in many of the countries.

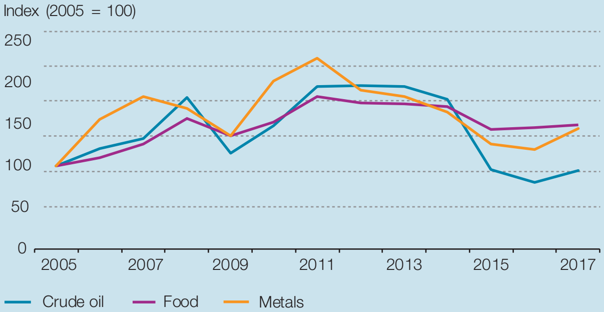
In the first half of 2017, the IMF's commodity price indices trended downward, attributable mainly to higher-than-expected US shale production and rising agricultural food output which led to lower commodity prices. The indices returned to an upward trend in the second half of the year. The index for crude oil was lifted mainly by the announcement of Organization of the Petroleum Exporting Countries (OPEC) and some non-OPEC oil exporters to extend their oil output cuts until the end of 2018. Brent crude oil prices breached USD60 per barrel, the highest in two years. Similarly, metal prices such as copper, iron and zinc improved, supported by strong global demand and PR China's efforts to reduce surplus capacity by targeting inefficient and illegal production of minerals. Agricultural commodity prices, including food, also improved during the year reflecting stronger global demand amid supply shortages.

The recovery in commodity prices in 2017 contributed to higher headline inflation in the advanced economies, averaging 1.9% in 2017 (2016: 0.8%). Similar trends were observed in some Asian economies for example, the Philippines and Thailand experienced higher inflation due to rising costs of transportation and utilities.

Despite the uptick in headline inflation, underlying inflation remained subdued. Several explanations have been put

Chart 1.1: Indices of Primary Commodity Prices

Major commodity price indices resumed their upward trends in the second half of 2017



Source: International Monetary Fund (IMF)

forth to describe the muted inflation environment. These include the rising influence of more integrated global product, labour and capital markets; subdued labour productivity growth weighing on wages; and the role of technology in increasing efficiencies while lowering the cost of goods. The disconnect between strong growth and muted inflationary pressure remained a conundrum for major central banks during the year. In the advanced economies, the UK was an exception to this trend. The sharp depreciation of the sterling pound was translated into higher prices.

Mixed policy actions

Despite the synchronised nature of the global growth recovery, monetary policy in the advanced and Asian economies diverged. Policy actions taken were tailored to factors specific to the individual economies. Broadly, the monetary policy stance among the advanced economies was skewed towards gradual normalisation. The US Federal Reserve continued to normalise its monetary policy by hiking the federal funds rate target three times in 2017 by a total of 75 basis points to end the year with a range of 1.25%-1.50%. The Bank of England raised its benchmark interest rate by 25 basis points for the first time in a decade as inflation began to accelerate. The European Central Bank announced a reduction of asset purchases by halving its monthly purchase rate to EUR30 billion until September 2018. The environment of robust economic growth allowed for monetary policy normalisation in the advanced economies to take place in an orderly manner. In contrast to the advanced economies, waning inflation in some Asian economies, such as Indonesia and India, had prompted central banks to lower their benchmark interest rates. Similarly, the Bank of Japan (BoJ) maintained its massive stimulus programme in an effort to induce higher inflation which has fallen short of the BoJ's official target of 2% since the first quarter of 2015.

Besides monetary policy, several advanced economies also adopted fiscal and structural policies during the year to bolster macroeconomic fundamentals. In the US, the Tax Cuts and Jobs Act passed both chambers of Congress on 20 December 2017, ushering in major changes to personal and corporate tax rates, and international business taxation. In the euro area, efforts were aimed at maximising the impact of labour and product market reforms. For example, changes in legislation in France that decentralised collective bargaining led to faster labour market adjustment through greater flexibilities in hiring, wage-setting and labour mobility.

To strengthen macroeconomic fundamentals and enhance the sustainability of medium-term growth prospects, Asian policymakers undertook further structural reforms. In PR China, efforts were focused on policy reforms to reduce overcapacity and debt, while maintaining the gradual shift towards a more sustainable consumption-driven growth model. The Chinese government also intensified promotion of investment under the Belt and Road Initiative particularly for infrastructure networks. Further, ASEAN economies in particular announced measures to accelerate infrastructure investment, prioritising both physical and soft infrastructures. Measures included upgrading transportation networks, enhancing existing public-private partnership (PPP) frameworks, and increasing broadband penetration.

The cyclical upturn after seven years of muted growth following the Global Financial Crisis provided an avenue for many economies to remain steadfast in undertaking various policies to achieve more inclusive and sustainable growth. Despite the strong growth recorded during the year, policymakers continue to face various challenges including an aging population, increasing global leverage, technological disruption and growing income inequality. Active and consistent recalibration of policies are critical for the implementation of structural reforms, to strengthen economic fundamentals and to sustain the current growth momentum.

THE MALAYSIAN ECONOMY

Overview

The Malaysian economy performed strongly in 2017, registering a growth of 5.9% (2016: 4.2%). Growth was anchored by domestic demand, reflecting faster expansion in both private and public sector spending. Similar to the region, Malaysia benefited from the broad-based global recovery, with gross exports increasing at its fastest pace since 2004. The materialisation of positive spillovers from the external sector further reinforced domestic demand.

The Malaysian economy recorded a higher growth of 5.9% in 2017, as the strength in domestic demand was further boosted by a rebound in exports

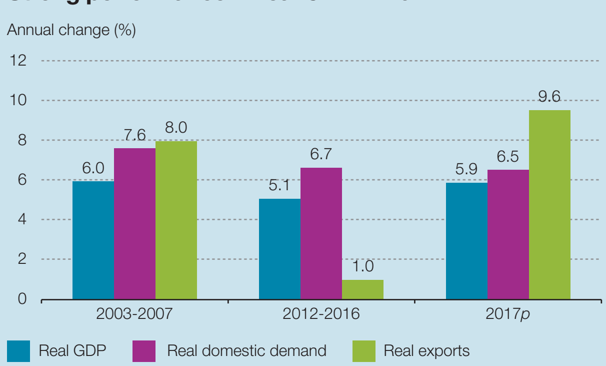
A key highlight for the year was the rebound in gross exports, which advanced by 18.9% (2016: 1.2%). The stronger performance was due mainly to higher demand by major trading partners such as PR China, ASEAN, the EU, US and Japan, following the upswing in the global technology cycle, investment expansion in the advanced economies and the turnaround in commodity prices.

The global technology upswing was supported by a number of launches of popular flagship smart devices in 2017, which triggered a wave of new orders for firms along the supply chain of these products. In the case of Malaysia, which is the world's seventh largest semiconductor exporter with extensive linkages in the global value chain (GVC), the technology upcycle translated into robust demand for E&E products from regional and advanced economies. As a result, exports of semiconductor devices accelerated by 23.1% during the year (2016: 5.2%). The favourable environment of stronger demand, particularly from the regional economies, and a revival in investment activity in the advanced economies also lifted exports of non-E&E products (18.6%; 2016: 3.0%), such as petroleum, chemical, rubber and iron & steel products. After declining for two consecutive years, commodity exports turned around in 2017 to register a strong positive growth, supported largely by the recovery in major commodity prices, in particular for crude oil and liquefied natural gas (LNG).

Although real GDP growth was lifted by the external demand, domestic demand continued to anchor growth in 2017, underpinned by strong fundamentals, better labour market conditions and improving sentiments. Positive spillovers from the external sector to domestic demand began to materialise in the first half of 2017. The stronger external demand benefited private investment in particular, as firms in both export- and domestic-oriented industries embarked upon capacity expansions, including replacement and acquisitions of machinery and equipment to meet the higher demand. These developments directly benefited the labour market with faster employment and wage growth. These factors, together with Government measures to increase disposable income, further raised household spending. Public sector expenditure remained supportive of growth, as spending was prioritised towards critical infrastructure and essential public services.

Chart 1.2: Real GDP Growth

Strong performance in real GDP in 2017



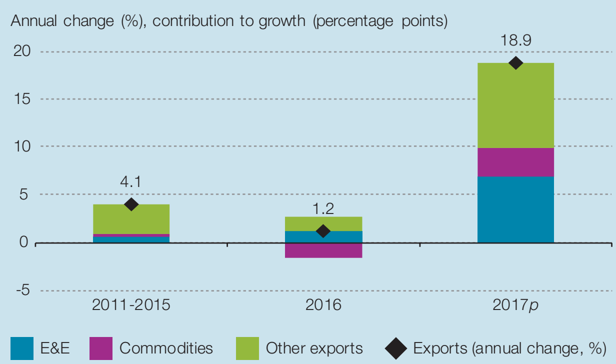
p Preliminary

Note: Excluding real GDP growth during the period of the Global Financial Crisis

Source: Department of Statistics, Malaysia

Chart 1.3: Gross Export Performance by Products

Robust demand for E&E products boosted export performance

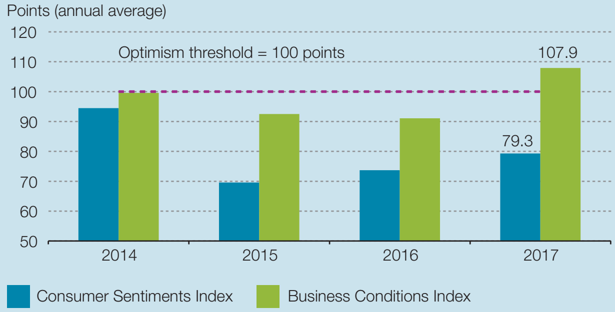


p Preliminary

Source: Department of Statistics, Malaysia

Chart 1.4: MIER Consumer Sentiments and Business Conditions Index

Consumer and business sentiments improved during the year



Source: Malaysian Institute of Economic Research (MIER)

Following the expansion in both domestic and external demand, gross imports registered a double-digit growth of 19.9% (2016: 1.9%). Higher imports were attributable to intermediate and capital goods, in line with robust manufacturing exports and the more rapid investment activity in the manufacturing and services sectors, respectively. Overall, the trade surplus expanded to RM97.2 billion (2016: RM88.1 billion), supported by rapid export growth. The current account of the balance of payments registered a higher surplus, arising mainly from the larger goods surplus. Malaysia also continued to experience significant two-way movement of capital flows. In line with the improvement in international investor sentiments, non-resident portfolio inflows resumed in the second quarter of 2017, while foreign direct investment (FDI) inflows exceeded direct investment abroad (DIA) outflows over the year.

The strong performance of the external sector in 2017 reflects the outcome of structural policies undertaken over the decades that has resulted in the economy being highly open, diversified and served by multiple sources of growth. Malaysian producers, for instance, are deeply integrated in the GVC. Consequently, this enabled Malaysia to benefit from the broad-based upturn in the global economy. Critical investments undertaken in the manufacturing sector, including in the E&E sub-sector, and the enabling infrastructure such as transport, logistics and communication services, also allowed firms to leverage swiftly on the uptick in global demand. Another critical factor is the presence of backward and forward linkages from exports to various industries in the manufacturing and services sectors. The close linkages within the Malaysian economy amplified the positive spillovers of the higher export orders, which together with improving business sentiments, gave rise to more business activity, investment spending, hiring in the labour market and income growth.

The positive economic environment of robust growth and vibrant trade has provided a valuable window of opportunity to pursue pre-emptive critical reforms and structural adjustments within the Malaysian economy. Fiscal consolidation efforts were on track, while monetary policy remained accommodative. Quality investments that ensure Malaysia's future-readiness, such as in the high-technology manufacturing and advanced services sectors, continued to be prioritised, leveraging on the established regional economic corridors and their respective focus areas.

Initiatives were also undertaken to raise productive capacity and remove constraints to growth, including encouraging the use of the sharing economy and ongoing investments in upskilling and training of the workforce. In 2017, employment gains kept pace with labour force expansion, with stronger employment driven by high-and mid-skilled workers. Productivity growth also picked up during the year, mainly driven by the manufacturing and services sectors. Going forward, the pursuit of productivity-driven growth highlights the importance of measuring and monitoring relevant metrics and indicators to aid policy making. To this end, the Malaysian Bureau of Labour Statistics[1] (MBLS) was established to integrate information collection on the labour market, including data on labour productivity and skills gaps. Collectively, these measures aim to maximise new sources of growth for the economy through lifting productivity and efficiency of existing assets.

Domestic Demand Anchored Growth in 2017

The Malaysian economy registered a robust growth of 5.9% in 2017 (2016: 4.2%). Domestic demand continued to anchor growth during the year, supported by faster expansion in both private and public sector spending. On the external front, real exports registered the strongest growth rate since 2010, underpinned by strong global expansion, particularly in the case of Malaysia's key trading partners, and higher global commodity prices.

[1] For further details, please refer to the White Box on 'The Malaysian Bureau of Labour Statistics'.

Table 1.2

Malaysia - Key Economic Indicators

	2015	2016	2017*p*	2018*f*
Population (million persons)	31.2	31.6	32.1	32.9
Labour force (million persons)	14.5	14.7	15.0	15.3
Employment (million persons)	14.1	14.2	14.5	14.8
Unemployment (as % of labour force)	3.1	3.4	3.4	3.2 ~ 3.5
Per Capita Income (RM)	36,093	37,792	41,072	42,834
(USD)	9,242	9,110	9,551	10,885[3]
NATIONAL PRODUCT (% change)				
Real GDP at 2010 prices	5.0	4.2	5.9	5.5 ~ 6.0
(RM billion)	1,063.4	1,108.2	1,173.6	1,240.1
Agriculture, forestry and fishery	1.3	-5.1	7.2	3.6
Mining and quarrying	5.3	2.2	1.1	1.8
Manufacturing	4.9	4.4	6.0	5.9
Construction	8.2	7.4	6.7	7.3
Services	5.1	5.6	6.2	6.1
Nominal GNI	5.2	6.2	10.1	6.9
(RM billion)	1,125.6	1,195.5	1,316.3	1,407.6
Real GNI	6.8	4.4	6.1	5.6
(RM billion)	1,039.0	1,084.9	1,150.8	1,215.0
Real aggregate domestic demand[1]	5.1	4.3	6.5	5.7
Private expenditure	6.1	5.6	7.5	7.6
Consumption	6.0	6.0	7.0	7.2
Investment	6.3	4.3	9.3	9.1
Public expenditure	2.1	0.4	3.3	-0.9
Consumption	4.4	0.9	5.4	0.6
Investment	-1.1	-0.5	0.1	-3.2
Gross national savings (as % of GNI)	29.0	29.1	29.2	28.8
BALANCE OF PAYMENTS (RM billion)				
Goods balance	109.2	101.4	118.1	120.5
Exports	681.3	686.1	808.9	865.9
Imports	572.1	584.7	690.8	745.3
Services balance	-20.6	-19.1	-23.1	-23.2
Primary income, net	-32.1	-34.6	-36.1	-39.1
Secondary income, net	-21.3	-18.6	-18.6	-19.3
Current account balance	35.2	29.0	40.3	38.9
(as % of GNI)	3.1	2.4	3.1	2.0 ~ 3.0
Bank Negara Malaysia international reserves, net[2]	409.1	423.9	414.6	-
(in months of retained imports)	8.4	8.7	7.2	-
PRICES (% change)				
CPI (2010=100)	2.1	2.1	3.7	2.0 ~ 3.0
PPI (2010=100)	-7.4	-1.1	6.7	-
Real wage per employee in the manufacturing sector	3.7	4.1	2.2	-

[1] Exclude stocks
[2] All assets and liabilities in foreign currencies have been revalued into ringgit at rates of exchange ruling on the balance sheet date and the gain/loss has been reflected accordingly in the Bank's account
[3] Based on average USD exchange rate for the period of January-February 2018
p Preliminary
f Forecast

Note: Figures may not necessarily add up due to rounding

Source: Department of Statistics, Malaysia, Ministry of Finance, Malaysia and Bank Negara Malaysia

Table 1.3

Malaysia - Financial and Monetary Indicators

FEDERAL GOVERNMENT FINANCE (RM billion)	2015		2016		2017*p*	
Revenue	219.1		212.4		220.4	
Operating expenditure	217.0		210.2		217.7	
Net development expenditure	39.3		40.6		43.0	
Overall balance	-37.2		-38.4		-40.3	
Overall balance (% of GDP)	-3.2		-3.1		-3.0	
Public sector net development expenditure	140.4		158.1		146.7	
Public sector overall balance (% of GDP)	-7.7		-7.3		-4.7	
EXTERNAL DEBT						
Total debt (RM billion)	837.0		916.1		883.4	
Medium- and long-term debt	485.1		539.1		506.3	
Short-term debt	351.9		377.0		377.1	
Debt service ratio[1] (% of exports of goods and services)						
Total debt	22.7		24.8		22.1	
Medium- and long-term debt	22.5		24.6		21.9	
MONEY AND BANKING	**Change in 2015**		**Change in 2016**		**Change in 2017**	
	RM billion	**%**	**RM billion**	**%**	**RM billion**	**%**
Money supply M1	14.0	4.1	20.4	5.7	41.9	11.0
M3	41.3	2.7	49.3	3.1	76.7	4.7
Banking system deposits	28.8	1.8	26.5	1.6	67.8	4.0
Banking system loans[2]	105.4	7.9	76.4	5.3	62.9	4.1
Loan to fund ratio (%, end of year)[3&4]	83.0		84.3		84.0	
Loan to fund and equity ratio (%, end of year)[3,4&5]	74.6		75.3		73.7	
INTEREST RATES (%, AS AT END-YEAR)	**2015**		**2016**		**2017**	
Overnight Policy Rate (OPR)	3.25		3.00		3.00	
Interbank rates (1-month)	3.45		3.10		3.08	
Commercial banks						
Fixed deposit 3-month	3.13		2.92		2.94	
12-month	3.31		3.06		3.10	
Savings deposit	1.04		0.99		0.97	
Weighted average base rate (BR)	3.77		3.62		3.64	
Base lending rate (BLR)	6.79		6.65		6.68	
Treasury bill (3-month)	2.74		3.06		2.86	
Malaysian Government Securities (1-year)[6]	2.59		3.26		2.89	
Malaysian Government Securities (5-year)[6]	3.47		3.70		3.56	
EXCHANGE RATES (AS AT END-YEAR)	**2015**		**2016**		**2017**	
Movement of Ringgit (%)						
Change against SDR	-15.1		-0.8		5.2	
Change against USD	-18.6		-4.3		10.4	

[1] Includes prepayment of medium- and long-term debt
[2] Includes loans sold to Cagamas
[3] Deposits exclude deposits accepted from banking institutions. Loans exclude loans sold to Cagamas and loans extended to banking institutions. Beginning July 2015, loans exclude financing funded by Islamic Investment accounts
[4] Funds comprise deposits and all debt instruments (including subordinated debt, debt certificates/sukuk issued, commercial paper and structured notes)
[5] Equities comprise ordinary and preferred shares, share premium and retained earnings
[6] Refers to data from Fully Automated System for Issuing/Tender (FAST), Bank Negara Malaysia

p Preliminary

Source: Ministry of Finance, Malaysia and Bank Negara Malaysia

Table 1

Real GDP by Expenditure (2010=100)

	2017*p*	2016	2017*p*	2016	2017*p*
	% of GDP	Annual change (%)		Contribution to growth (ppt)	
Domestic Demand[1]	**92.2**	**4.3**	**6.5**	**3.9**	**6.0**
Private sector expenditure	71.2	5.6	7.5	3.8	5.3
Consumption	*53.7*	*6.0*	*7.0*	*3.1*	*3.7*
Investment	*17.4*	*4.3*	*9.3*	*0.7*	*1.6*
Public sector expenditure	21.0	0.4	3.3	0.1	0.7
Consumption	*13.0*	*0.9*	*5.4*	*0.1*	*0.7*
Investment	*8.0*	*-0.5*	*0.1*	*0.0*	*0.0*
Gross Fixed Capital Formation	*25.4*	*2.7*	*6.2*	*0.7*	*1.6*
Change in stocks	**0.0**			**0.2**	**0.0**
Net Exports of Goods and Services	**7.8**	**1.5**	**-1.1**	**0.1**	**-0.1**
Exports	72.9	1.1	9.6	0.8	6.7
Imports	65.1	1.1	11.0	0.7	6.8
Real Gross Domestic Product (GDP)	**100.0**	**4.2**	**5.9**	**4.2**	**5.9**

[1] Excluding stocks
p Preliminary

Note: Figures may not necessarily add up due to rounding

Source: Department of Statistics, Malaysia

Private consumption growth improved to 7.0% in 2017 (2016: 6.0%), supported mainly by continued wage and employment growth, with additional impetus from Government measures. Aggregate nominal wages[1] in the private and public sectors grew by 6.4% and 6.2%, respectively in 2017 (2016: 4.3% and 6.4%, respectively). Civil servants continued to benefit from the upward revision in their salaries that took place in July 2016. Consumer spending was further supported by Government measures to increase household disposable income, such as the reduction in employees' contribution to the Employees Provident Fund (EPF) by three percentage points (11% to 8%) and higher *Bantuan Rakyat 1Malaysia* (BR1M) payouts. Some of these measures were enacted to support the economy in March 2016 on account of the more challenging outlook. The recovery in consumer sentiments from its lowest level in 2015 also contributed to the stronger private consumption growth in 2017.

Public consumption growth expanded by 5.4% (2016: 0.9%) due to higher spending on supplies and services by the Federal Government amid sustained growth in the emoluments. The increased expenditure on supplies and services was mainly attributable to spending on maintenance and minor repair works.

Gross fixed capital formation (GFCF) grew at a faster pace of 6.2% in 2017 (2016: 2.7%), driven by improvements in both public and private investments.

Public investment recovered to register a marginal growth of 0.1% in 2017 (2016: -0.5%). This was supported by continued spending by both the General Government and public corporations, mainly in the downstream oil and gas (O&G) and transport & utilities sub-sectors. The continued capital outlays were also to accelerate urban and rural development.

Private investment growth accelerated to 9.3% (2016: 4.3%), as firms benefited from the conducive external and domestic operating environment. The strong growth in exports led to positive spillovers to the domestic economy, as firms embarked upon capacity expansion to cater to higher orders. Financing conditions, profitability and business sentiments also improved during the year. On a sectoral basis, private investment growth continued to be underpinned by the implementation of new and ongoing projects in the manufacturing and services sectors.

[1] For further details, please refer to the White Box on 'Improved Labour Market Conditions'.

In terms of assets, investment in machinery and equipment grew by 11.3% (2016: 1.1%), due in part to the production and capacity enhancements by firms in response to stronger demand. Growth of investment in structures, which accounts for 54.7% of total GFCF, remained moderate at 4.0% (2016: 4.9%), mainly reflecting a slowdown in residential investment. Growth of investment in other assets remained in contraction at -0.8% (2016: -4.3%) due to lower capital expenditure in the development of intellectual property products, particularly mineral exploration.

During the year, gross national savings (GNS) grew by 10.8% (2016: 6.6%), to increase slightly to 29.2% of gross national income (GNI, 2016: 29.1% of GNI) on account of more rapid growth in private savings (11.5%; 2016: -1.9%) and normalisation of growth in public savings (8.1%; 2016: 52.2%). Gross capital formation expanded by 8.2% (2016: 9.5%), resulting in a wider savings-investment gap of 3.1% of GNI (2016: 2.4% of GNI).

Improved Labour Market Conditions

The unemployment rate was steady at 3.4% in 2017 (2016: 3.4%, average 2011-2016: 3.1%) as stronger employment gains kept pace with labour force expansion. The labour force expanded by 303,000 people, while net employment gains amounted to 295,000 jobs. As a result, the labour force participation rate edged higher to 67.8% (2016: 67.7%) and employment growth tripled to 2.1% (2016: 0.7%). Industrial engagements[1] throughout the year corroborated the improving business sentiments. Employers were optimistic about the business outlook and thus continued to expand their workforce accordingly.

Table 1

Selected Labour Market Indicators

	2013	2014	2015	2016*r*	2017*p*
Employment ('000 persons)	13,545	13,853	14,068	14,164	14,459
Labour force ('000 persons)	13,981	14,264	14,518	14,668	14,971
Unemployment rate (% of labour force)	3.1	2.9	3.1	3.4	3.4
Layoffs[1] (persons)	33,086	25,917	38,499	37,699	35,097
Foreign workers ('000 persons)	2,250	2,073	2,135	1,866	1,797

p Preliminary
r Figures have been revised to reflect latest population estimates
[1] Constitutes workers affected by retrenchments and voluntary separation scheme (VSS) offerings

Source: Department of Statistics, Malaysia, Ministry of Human Resources, Ministry of Home Affairs and Bank Negara Malaysia estimates

At the macro-level, employment gains were mostly driven by high- and mid-skilled workers, as both increased by 121,100 and 150,700 persons, respectively. High-skilled workers as a share of total employed persons increased marginally to 27.6% (2016: 27.3%), while mid-skilled workers still command the largest share of 59.5%. The share of low-skilled workers is unchanged at 13.0%. Latest data[2] suggest that high-skilled workers faced the lowest median wage growth at 3.1% to RM3,994 as compared to that of mid-skilled (5%, RM1,447) and low-skilled (10%, RM1,100) workers. The number of documented unskilled and semi-skilled foreign workers in Malaysia has declined to 1.8 million in 2017 (2016: 1.9 million). Correspondingly, its share to the labour force also declined to 12.0% from 12.7% at end-2016, below the 15% threshold set in the 11th Malaysia Plan.

[1] As part of assessments of the Malaysian economy, the Bank undertakes regional economic and industry surveillance through its offices in Penang, Johor Bahru, Kota Kinabalu, Kuching and Kuala Terengganu. For more information, see Box Article on 'Broadening Economic Surveillance through Bank Negara Malaysia's Regional Offices' in Bank Negara Malaysia's Annual Report 2013.
[2] Based on the 2016 Salaries and Wages Survey by the Department of Statistics, Malaysia (DOSM).

Reported layoffs in 2017 continued on a decreasing trend (35,097 persons; 2016: 37,699 persons), approaching the long-run average[3] of 30,000 persons per annum. These layoffs were concentrated within the manufacturing sector, reflecting industry-specific restructuring exercises, as multinational firms reconfigure their global value chains to reflect changing business needs. The stronger performance of the sector has, however, led to a net employment gain of 23,709 persons within the same period. Of significance, layoffs were highly context-specific, and partly reflects the flexibility of the labour market to adapt to changes in the operating environment, such as increases in efficiency and greater adoption of technology. As such, the implementation of the Employment Insurance System (EIS) on 1 January 2018 is crucial to mitigate the impact of involuntary separations to employees, by protecting workers' welfare and ensuring training and upskilling during periods of job transitions.

Chart 1: Net Employment Gains by Skill Level, 2013-2017

Net employment gains[1] driven by mid- and high-skilled job creation

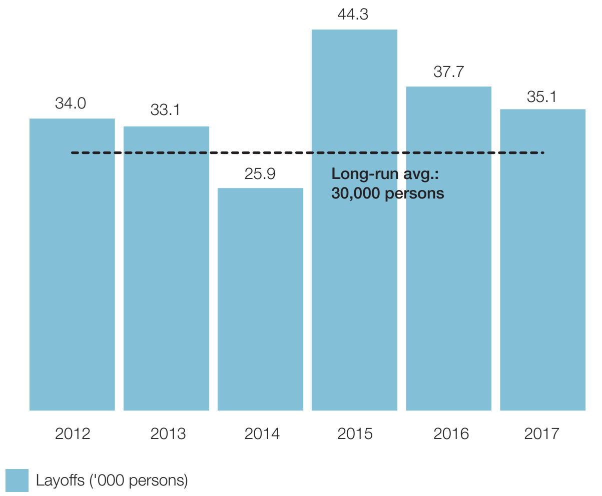
p Preliminary

[1] Refers to the difference between employment level in a given year compared to the previous year

Source: Department of Statistics, Malaysia, Ministry of Human Resources and Bank Negara Malaysia estimates

Chart 2: Layoffs, 2012-2017

Reported layoffs continued its downward trend since 2015



Source: Department of Statistics, Malaysia, Ministry of Human Resources and Bank Negara Malaysia estimates

Aggregate nominal wages in the private[4] and public sectors grew by 6.4% and 6.2% respectively in 2017 (2016: 4.3% and 6.4%, respectively). Wage growth in the private sector was driven mainly by the services sector. In particular, the stronger wage growth in major services sub-sectors[5] (5.4%; 2016: 3.6%) was attributable to the *wholesale and retail trade* and *professional services* sub-sectors. In the manufacturing sector, higher wage growth (8.6%; 2016: 6.2%) was in line with the strong production in both export- and domestic-oriented sub-sectors. The continued positive impact of the salary increment for civil servants in July 2016 also contributed to overall wage growth.

Labour productivity, as measured by real value-added per worker, rose by 3.6% in 2017 (2016: 3.5%) driven mainly by productivity gains in the manufacturing and services sectors (4.7% and 4.2%, respectively; 2016: 4.1% and 3.6%, respectively). The better performance in these sectors was attributable to productivity gains in the retail trade, and manufacturing of transport equipment sub-sectors.

[3] The long run average is the average annual layoffs from 2000-2016, excluding the crisis period of 2008-2009.

[4] Private sector wages is derived from the salaries and wages data published in the Monthly Manufacturing Statistics and Quarterly Services Statistics by the Department of Statistics, Malaysia. It covers 62% of total employment.

[5] 'Major services sub-sectors' includes *wholesale and retail trade, accommodation and food and beverage, information and communication, transportation and storage, health, education, arts, entertainment and recreation, and professional and real estate services* sub-sectors.

The Malaysian Bureau of Labour Statistics

Post 2008-2009 financial crisis, there has been an increasing focus on issues surrounding the quality of economic growth and its impact on the people and communities. Discussions on jobs, inequality, social mobility and cost of living have all led to a growing demand from both policymakers and the research community for more high-frequency and granular set of labour statistics. The intent is that greater visibility on these issues will enrich public discourse and better inform policy deliberations and formulation.

Over the last decade, Malaysia has enhanced the labour statistics landscape. The publication of the annual GDP by income approach and wage conditions of key services industries has improved surveillance of both structural and cyclical policies. While progress has been made, there remain areas for improvement. The economic landscape has evolved rapidly with data flows increasing voluminously. Approaches to capture, manage and analyse data have also been revolutionised.

Recognising these challenges, the Government decided to establish the Malaysian Bureau of Labour Statistics (MBLS) as one of the major programmes within the Department of Statistics, Malaysia (DOSM). The MBLS is tasked with producing quality, timely and comprehensive labour market data. It is envisaged that highly-demanded information, such as wages, job creation and labour costs by industry will be accessible to policymakers and the public at a higher frequency (e.g. monthly, quarterly series) and with sufficient granularity (e.g. breakdown by key sectors and industries).

Among the critical gaps (Chart 1) in current official statistics that MBLS aims to address include the lack of available insights on “total hours worked” by key economic sectors. This will be an important enhancement to the existing labour productivity statistics, which is measured as the real value-added per employed persons. While the latter is quite useful, it runs the risk of overstating productivity gains, particularly if greater output is obtained from longer working hours. These nuances cannot be gleaned from the headline employment figures alone. Through the collection of data on total hours worked, MBLS will be able to measure labour productivity with greater accuracy. Also, greater insights into labour costs scaled to output by key industries would allow for more granular monitoring of wage pressures in the economy. This can help policymakers better discern if wage pressures are broad based or contained in specific industries. Such information is important to inform the choice of policy responses, if any, be it through monetary policy adjustments or targeted industry interventions.

Chart 1: Current Gaps in Selected Labour Market Statistics

MBLS is tasked to address current gaps in labour statistics landscape

Selected Labour Indicators by Key Economic Sectors	Monthly	Quarterly	Annually
Salary and wages	Some indicators available	Some indicators available	Available
Layoffs, vacancies, quits by occupations	Not available	Not available	Not available
Hours worked[1]	Not available	Not available	Some indicators available
Hiring sentiments	Not available	Available	Available
Long-term unemployment (total economy)	Not available	Not available	Available

Not available · Available · Some indicators available

[1] Available on an annual basis in the Labour Force Survey (breakdown by gender). Industry breakdowns are unavailable.

Source: Bank Negara Malaysia’s assessment

Incorporating the latest concepts and methodologies to account for employment developments in new growth areas such as the sharing economy (e.g. Airbnb, Uber) and the digital economy (e-commerce) would allow further customisation and recalibration of related policies such that they better deliver the intended outcomes. Indicators such as long-term employment by various durations and underemployment could offer much richer analysis on existing slack in the economy. In the period following the Global Financial Crisis (GFC), those indicators were heavily used by policymakers in the advanced economies to gauge the underlying health of the labour market and the risks of skills deterioration arising from being unemployed for long durations. In regards to the supply of labour, job retraining program design and its implementation could be adjusted for better delivery and results.

There is a clear need to further enhance labour market information through modernisation of data collection and management. Greater adoption of e-surveys and use of administrative data in various agencies are imperative. This could also be further advanced through the leveraging of Big Data analytics, in arriving at the needed statistics. For example, data scraping on salary and wages from job postings and portals could provide deeper understanding on wage developments by location or by position. All things considered, this will require greater collaboration, data standardisation and sharing among various stakeholders.

Acknowledging the need for more data sharing and adoption of more modern statistical practices, the Labour Statistics Planning Group (LSPG) was established to oversee the inception and operationalisation of the MBLS. The LSPG, chaired by the Director General of the Economic Planning Unit (EPU), is a critical nucleus and platform for future inter-agency data collaboration through the leveraging of administrative data from the five core members[1] and ten satellite members[2]. Readily-available administrative data (e.g. registration, transaction and record keeping) by various ministries and agencies, if integrated and utilised effectively with advanced statistical methods could potentially transform data analysis for policy formulation through more focused and evidence-based approaches. This includes contributors' records from the Employees Provident Fund (EPF) which can be used to better augment the monthly employment statistics. Similarly, information collected from the recently implemented Employment Insurance System (EIS) can offer high-frequency updates on unemployment conditions in the economy.

While it is still early days, the MBLS has already published data on labour productivity, employment, and salaries and wages based on the 2016 Economic Census, with longer-term goals that include statistics on the informal sector and labour costs. It is envisaged that it will also spur greater in-depth research by academia, think tanks and analysts, while contributing towards identifying better policy design and interventions (e.g., enhancing training and talent development programmes, reforming education).

The MBLS is building on the previous efforts made to strengthen the statistics landscape to meet the increasing demands for more varied, high-frequency, and granular data. It is important to note that this is by no means an isolated endeavor. It runs in tandem with a larger statistical review across the public sector to strengthen current governance and institutional arrangements. This is to ensure that Malaysia's overall statistical system remains relevant, progressive and effective in rapidly changing times.

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1 Economic Planning Unit (EPU), Ministry of Finance (MOF), Department of Statistics, Malaysia (DOSM), Bank Negara Malaysia (BNM), and Ministry of Human Resources (MOHR).

2 Institute of Labour Market Information and Analysis (ILMIA), Employees Provident Fund (EPF), Public Service Department (JPA), Social Security Organisation (SOCSO), Inland Revenue Board of Malaysia (LHDN), Ministry of Home Affairs (MOHA), Ministry of Education (MOE), Ministry of Higher Education (MOHE) and Accountant General's Department of Malaysia (AGD).

Most Economic Sectors Recorded Higher Growth

On the supply side, most sectors registered higher growth in 2017. Malaysia's growth performance remained principally driven by the services and manufacturing sectors, which benefited from marked improvements in domestic and external conditions.

Growth in the services sector expanded at a faster pace of 6.2% (2016: 5.6%) amid broad-based improvements across most sub-sectors. On the consumer front, better labour market conditions and improving consumer sentiments lifted growth in the *retail, food and beverages and accommodation* and *motor vehicles* sub-sectors. The *finance and insurance* sub-sector registered higher growth, benefitting from the strong pick-up in capital market activity, particularly from initial public offerings. In the *transport and storage* sub-sector, growth was supported by stronger trade and air passenger traffic growth. Growth in the *information and communication* sub-sector was also higher, reflecting higher demand for data communication and computer services.

The manufacturing sector expanded further in 2017 (6.0%; 2016: 4.4%), driven by higher growth in the domestic-oriented industries, and continued expansion in the export-oriented industries. In the domestic-oriented industries, production of both commercial and consumer transport equipment turned around, reversing a

Table 1

Real GDP by Kind of Economic Activity (2010=100)

	2017*p*	2016	2017*p*	2016	2017*p*
	% of GDP	Annual change (%)		Contribution to growth (ppt)[1]	
Services	54.4	5.6	6.2	3.0	3.4
Manufacturing	23.0	4.4	6.0	1.0	1.4
Mining and quarrying	8.4	2.2	1.1	0.2	0.1
Agriculture	8.2	-5.1	7.2	-0.4	0.6
Construction	4.6	7.4	6.7	0.3	0.3
Real Gross Domestic Product (GDP)	**100.0[1]**	**4.2**	**5.9**	**4.2**	**5.9**

[1] Figures may not necessarily add up due to rounding and exclusion of the import duties component

p Preliminary

Source: Department of Statistics, Malaysia

decline in the output of motor vehicles in the previous year. Growth in the domestic-oriented industries was further supported by stable demand for food-related products and construction-related materials. Growth in the export-oriented industries was in tandem with the broad-based recovery in global demand, which supported the increased production of E&E and resource-based products such as palm oil-related and petroleum-related products.

The construction sector registered a moderate growth of 6.7% (2016: 7.4%). Growth was supported mainly by the *civil engineering* sub-sector, due to steady progress of large petrochemical, transportation, and utility projects. The *special trade* sub-sector benefited from increased activity from projects in the early stages of construction, such as land clearing, piling and land reclamation work. Growth in the *residential* sub-sector moderated, consistent with the record-high number of unsold residential properties. In the *non-residential* sub-sector, growth was sustained by higher activity from mixed developments, industrial and social projects such as theme parks and sports complexes, which was offset by the ongoing weakness in the commercial segment due to an oversupply of office space and shopping complexes.

Agriculture production growth rebounded to 7.2% (2016: -5.1%), driven mainly by a turnaround in crude palm oil (CPO) production, as yields recovered from the negative impact of El Niño in 2016.

In the mining sector, growth moderated to 1.1% (2016: 2.2%), reflecting the voluntary crude oil supply adjustments by PETRONAS, in line with the OPEC agreement to restrain oil production until end-2018. Growth remained supported by higher production in the natural gas sub-sector, reflecting the increased capacity of natural gas facilities.

EXTERNAL SECTOR

Strong external sector performance, supported by the significant upturn in global growth and trade activity, and improvement in international investor sentiments

Malaysia's external position improved significantly in 2017, amid broad-based improvement in the global economy and relatively lower volatility in the international financial markets. As an economy with a high degree of openness to trade and investment flows, Malaysia was well-positioned to benefit from these favourable conditions. This, in turn, contributed to a buoyant export performance, higher current account surplus, continued inflows of FDI and resumption of portfolio investment inflows by international investors. Malaysia's external debt declined, with risks mitigated by favourable currency and maturity profiles. Sufficient international reserves continued to serve as a buffer against potential external shocks and volatility.

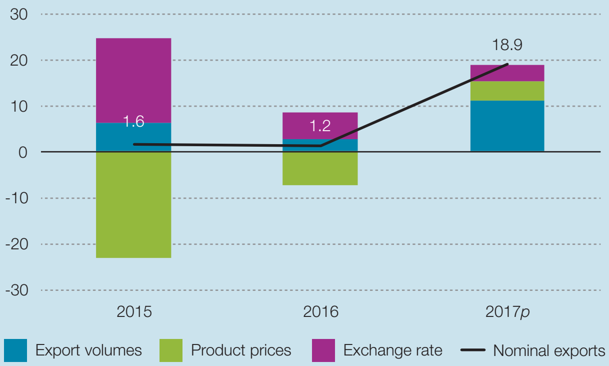
Robust exports, driven by double-digit growth in export volumes and turnaround in export prices

Against the synchronous and more entrenched expansion in the advanced and emerging economies,

Chart 1.5: Contribution of Export Volumes, Product Prices and Exchange Rate to Gross Export Growth

Robust gross export growth driven by export volumes

Annual change (%), contribution to growth (percentage points)



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Source: Department of Statistics, Malaysia

Chart 1.6: Regional Export Performance in US Dollar Terms

Stronger gross export growth (in US dollar terms) in line with regional countries

Annual change (%)

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*Non-oil domestic exports

Source: Department of Statistics, Malaysia and Bloomberg

global trade activity rebounded, particularly in the Asian region. Malaysia benefited significantly from the resurgent external demand from trade partners, facilitated by the economy's deep integration into GVCs, and a highly-diversified composition of export products and markets.

The acceleration in gross exports during the year was mainly driven by export volumes (Chart 1.5), which registered double-digit growth for the first time since 2004 (11.1%; 2016: 2.6%). The faster growth in export volumes was led by manufactured exports, in response to higher export-weighted global demand (3.6%; 2016: 3.1%). The revival in global consumer and business spending, in tandem with the launches of popular flagship smart devices, and investments in machinery and equipment, spurred an upswing in the global technology cycle. This induced stronger demand for E&E products, with E&E export volumes advancing by 16.8% during 2017 (2016: 3.4%), driven mainly by semiconductor exports. As a result, Malaysia's share of the global market for semiconductor exports increased to 5.9%[2] (2016: 5.7%).

Export volumes for non-E&E manufactured products also rebounded sharply (11.4%; 2016: -0.9%), driven by robust demand for petroleum, chemical, rubber and iron & steel products. For commodities however, export volumes moderated to 2.2% (2016: 9.5%) as higher LNG output from new production facilities in Sarawak was partially offset by lower crude petroleum exports amid the OPEC agreement to restrain oil production.

The turnaround in overall export product prices (4.3%; 2016: -7.4%) provided further impetus to gross export growth. This is particularly evident for commodity exports, which benefited from the recovery in prices for crude oil (+21.7%) and LNG (+13.6%) during the year (2016: -16.1% and -26.9%, respectively). Prices of manufactured exports was broadly sustained after declining for three consecutive years (2014-2016: -9.2%), partly supported by higher average selling prices for electronic components such as semiconductors and memory chips to fulfil rising global demand and tighter supply conditions. This was evidenced by very high capacity utilisation rates in the manufacturing sector, which rose to its highest post-GFC levels in many of the major economies such as the EU, US and PR China.

Removing the impact of exchange rate movements, in US dollar terms, Malaysia emerged as the third-best export performer in the region after Indonesia and Korea, with gross exports improving by 14.9% (2016: -4.8%, Chart 1.6). This shows that the exchange rate was not the main driver of the strong performance of gross export growth.

Gross imports registered double-digit growth of 19.9% (2016: 1.9%), mainly reflecting higher imports of intermediate goods, capital goods, and goods for re-exports. Stronger intermediate and capital goods imports (20.0% and 15.3%, respectively), was in line

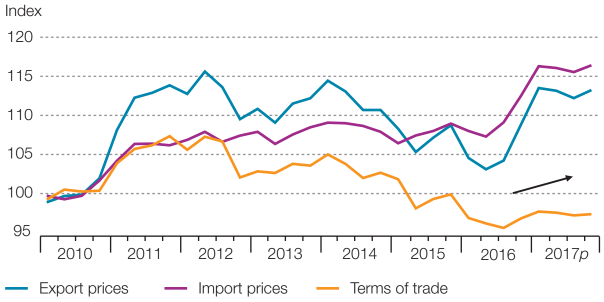
[2] January-November 2017 figures, as published by Global Trade Atlas.

Developments in Malaysia's Terms of Trade

Terms of trade refers to a country's export prices in relation to its import prices. It can be interpreted as the amount of imported goods a country can purchase per unit of exported goods. The terms of trade is represented by an index, which is calculated by dividing the price index of exports by the price index of imports and multiplying by 100. Improving terms of trade indicates that for every unit of exports sold, more units of imported goods could be purchased. In comparison, when the terms of trade worsens, the country needs to export more units for the same level of imports.

Chart 1: Malaysia's Terms of Trade

Improving terms of trade in 2017



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Source: Department of Statistics, Malaysia

Malaysia's terms of trade improved in 2017, but it had been on a declining trend since 2011. This was attributed mainly to:

- The slump in commodity prices; and
- Sluggish manufacturing export prices due to higher competition and industry consolidation, particularly in the E&E sector.

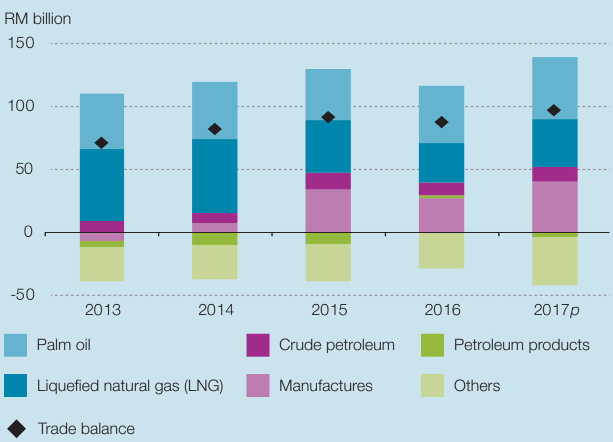
On a year-on-year basis, Malaysia's terms of trade strengthened in 2017. Since its trough in March 2016 of 96.0 points, the terms of trade improved amid a recovery in commodity prices and higher prices for manufactured exports. The terms of trade peaked at 98.0 points in February 2017 before moderating slightly to 97.7 points in December 2017.

The improvement in the terms of trade generated positive spillovers to the domestic economy. Firstly, higher demand for Malaysia's export products induced greater demand for labour and increased wages. This trend was particularly apparent in the manufacturing sector, which recorded robust employment and wage growth. Insights from surveillance conducted by the Bank's regional offices also indicated that firms in the export-oriented manufacturing sector reported a higher amount of overtime work to raise production and fulfil orders. The improvement in labour market conditions, in turn, resulted in higher household incomes and consumer spending. Secondly, the increased export orders and higher capacity utilisation rates[1] (82.6%; 2016: 77.5%) resulted in more firms embarking upon investment activity. Greater revenue and profits were also generated as firms benefited from both higher average selling prices and increased sales volume.

[1] Source: Malaysian Institute of Economic Research's capacity utilisation rates.

Chart 1.7: Trade Balance by Commodities

Higher trade balance supported by larger surplus in E&E and commodities



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Source: Department of Statistics, Malaysia

with the robust manufacturing exports and more rapid investment in the manufacturing and services sectors. Imports of high-value items, including a floating structure, oil & gas vessels and aircrafts provided further impetus to capital imports, particularly during the first quarter of the year. Better re-export activity was driven mainly by petroleum and E&E products, catering primarily to regional demand.

Overall, Malaysia's trade balance improved to RM97.2 billion (2016: RM88.1 billion), supported by higher surplus in E&E and commodities, that offset the continued deficit in non-E&E manufactured goods, such as machinery, equipment & parts, transport equipment and iron & steel products.

The current account balance improved to RM40.3 billion, or 3.1% of GNI, compared to the previous year (2016: RM29.0 billion or 2.4% of GNI).

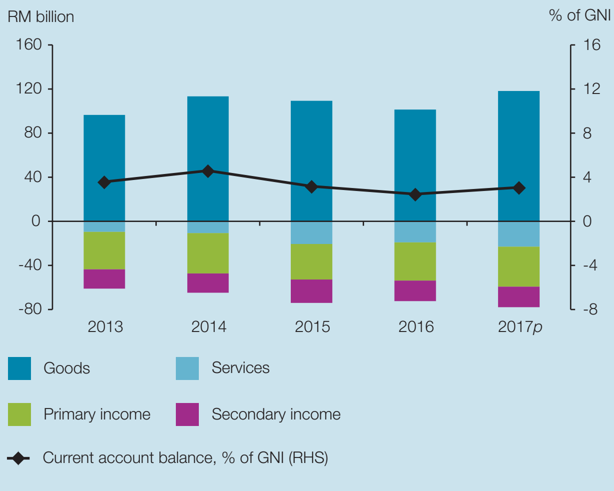
The current account registered a higher surplus, largely due to a higher goods surplus[3] following the strong export performance, which more than offset widening deficits in the services and primary income accounts.

In tandem with robust trade and higher domestic investment activity, the services account registered a wider deficit, due mainly to larger deficits in transportation and insurance services (-RM29.7 billion and -RM8.9 billion, respectively). The transportation deficit reflected heavy reliance on foreign service providers particularly in the sea and air freight segments. Air passenger and port segments nevertheless continued to register net surplus balances. In the travel account, a higher surplus was recorded (RM33.0 billion; 2016: RM31.5 billion), driven mainly by greater per capita spending by tourists in Malaysia. This offset the lower number of tourist arrivals (25.9 million tourists; 2016: 26.8 million tourists), reflecting mainly fewer tourists from ASEAN, India, the UK and Australia.

In the income account, the primary income deficit widened to RM36.1 billion (2016: -RM34.6 billion), due to larger investment income accrued to FDI in Malaysia, particularly in the manufacturing sector following the strong performance of export-oriented multinational companies. This was partially offset

Chart 1.8: Current Account Balance

Higher current account surplus in 2017 attributable mainly to a larger goods surplus



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Source: Department of Statistics, Malaysia

[3] A difference between the goods surplus and trade surplus may arise from the exclusion of goods for processing, storage and distribution in the goods accounts as per the 6th Edition of the Balance of Payments and International Investment Position Manual (BPM6) by the IMF.

by higher income from DIA by Malaysian companies mainly in the finance & insurance and manufacturing sectors, supported by a more favourable global economic climate. FDI returns continued to outpace DIA returns, registering 10.6% and 5.1%, respectively (2016: 9.3% and 3.7%, respectively). The secondary income account recorded a sustained sizeable deficit (-RM18.6 billion: 2016: -RM18.6 billion) driven by foreign workers' remittances.

Significant cross-border capital flows

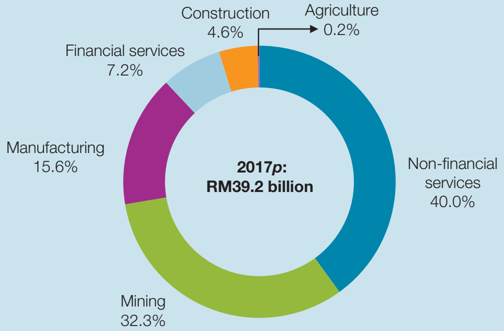
The financial account recorded a net inflow of RM2.3 billion (2016: net outflow of RM1.1 billion), attributable to continued long-term non-resident investment inflows in the form of FDI, and a resumption of portfolio investments by non-residents, driven by robust domestic growth, improvement in global growth prospects, and less volatile financial market conditions. These inflows were partially offset by DIA, albeit at a more moderate pace, and portfolio investments abroad by resident banks and institutional investors.

The *direct investment* account recorded a net inflow of RM12.4 billion (2016: net inflow of RM14.1 billion), as net FDI inflows exceeded net DIA outflows. The economy's growth performance and improved outlook provided support to Malaysia's attractiveness as an investment destination for international investors, leading to continued inward long-term direct investments by non-residents. FDI inflows amounted to RM39.2 billion, equivalent to 3.0% of GNI (2016: net inflow of RM47.2 billion or 3.9% of GNI), mainly in the form of equity capital injections from parent companies abroad and earnings retained for reinvestments in the domestic economy amid higher corporate profitability during the year. In terms of economic sectors, FDI remained broad-based. The largest recipient sector was non-financial services, particularly the real estate and information and communication services sub-sectors. FDI in the mining sector was also higher, increasing by 54% from the previous year to support ongoing upstream oil and gas exploration and extraction activities following the recovery in global oil prices. In terms of source countries, Europe and Asia were significant FDI contributors, particularly Hong Kong SAR, PR China, and the UK.

DIA by Malaysian companies registered a more moderate net outflow of RM26.8 billion, equivalent to 2.0% of GNI (2016: net outflow of RM33.1 billion or

Chart 1.9: Net Foreign Direct Investment by Sectors

Foreign direct investment[1] channelled mostly into the non-financial services sub-sector



[1] Foreign direct investment as defined according to the 5th Edition of the Balance of Payments Manual (BPM5) by the International Monetary Fund (IMF)

p Preliminary

Source: Department of Statistics, Malaysia

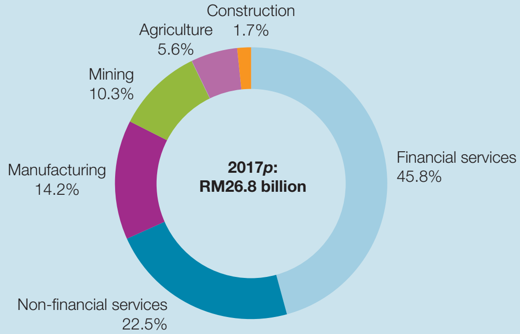
2.8% of GNI). The investments were mainly in the form of retained earnings and inter-company loan extensions to subsidiaries abroad. By sector, DIA was channelled mainly into the finance and insurance services sub-sector. DIA in the mining sector declined, reflecting the downscaling of upstream oil and gas investment activities abroad by the national oil company. ASEAN and Europe were major recipients of DIA by Malaysian companies, particularly Singapore, the UK and Indonesia.

Sufficient reserves and manageable external debt, while substantial capital flows were intermediated efficiently in the domestic financial markets

The *portfolio investment* account registered a lower net outflow of RM9.2 billion (2016: net outflow of RM15.4 billion), due mainly to a turnaround in non-resident portfolio investments, which recorded a net inflow of RM7.3 billion (2016: net outflow of RM0.4 billion), amid continued net acquisition of foreign financial assets by resident fund managers (net outflow of RM16.5 billion; 2016: net outflow of RM15.0 billion). Despite some volatility in the first quarter, non-resident portfolio investment flows saw a return to the domestic capital markets, reflecting purchases of domestic equity securities which were partially offset by a net liquidation of short-term domestic debt securities in the first quarter of 2017. In particular, foreign holdings of Malaysian Government Securities (MGS) declined during the quarter following a rebalancing of asset

Chart 1.10: Net Direct Investment Abroad by Sectors

Direct investment abroad[1] channelled mostly into the services sector



[1] Direct investment abroad as defined according to the 5th Edition of the Balance of Payments Manual (BPM5) by the International Monetary Fund (IMF)

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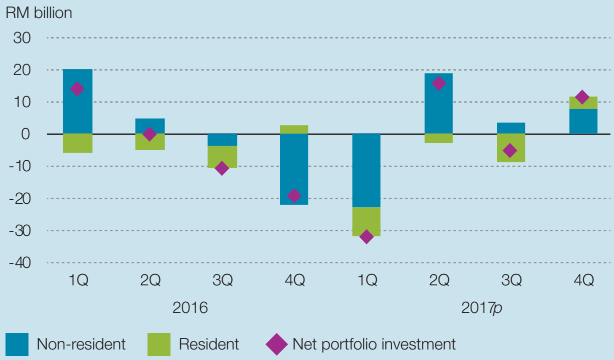
Source: Department of Statistics, Malaysia

Chart 1.11: Portfolio Investments

Resumption of portfolio investment inflows by non-residents



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Source: Department of Statistics, Malaysia

exposures to the emerging market economies by international asset managers. This was due to market expectations in March 2017 of monetary policy normalisation by the US Federal Reserve, renewed volatility in global oil prices, and the reduction of Malaysia's weightage in the JP Morgan GBI-EM Index following the inclusion of Argentina, Czech Republic and Uruguay in the index. As a result, non-resident holdings of public debt instruments declined to 16.4% as at end-March 2017 (end-December 2016: 20.8%). These large flows of funds were well-intermediated by Malaysia's deep and diversified financial market, and highly-capitalised and liquid banking system. The presence of domestic institutional investors supported demand during periods of financial market stress and capital outflows. Despite net outflows from debt securities, foreign purchases of equity securities resumed in the first quarter of 2017 (end-March 2017: non-residents held 22.4% of total market capitalisation; end-December 2016: 22.3%), amid stronger corporate earnings, better ringgit performance and improved economic prospects.

Non-resident portfolio investment inflows into the domestic financial markets resumed amid lower financial market volatility for the rest of the year. The improvement in investor sentiments was supported by expectations of better corporate earnings, sustained strong exports growth, better-than-expected economic performance, and domestic growth prospects. These factors supported non-resident portfolio investment inflows into both the equity and debt markets, despite the maturing of a few tranches of MGS and Government Investment Issues (GII). Consequently, non-resident holdings of domestic equity securities and public debt instruments rose to 23.2% and 17.7%, respectively, as at end-December 2017.

The *other investment* account recorded a net outflow of RM1.3 billion (2016: net inflow of RM1.0 billion), due mainly to net outflows in the corporate sector. This reflected mainly the placements of currency and deposits abroad and a net repayment of loans owed to non-residents. These outflows were partially offset by net inflows in the banking sector, due mainly to the placements of currency and deposits in domestic financial institutions, extension of loans to Malaysian banks from financial institutions abroad and the repayment of loans previously extended by domestic banks. These interbank transactions, which vary in both magnitude and direction every quarter, underscored the treasury management strategies of individual banking institutions. The public sector registered a net outflow, attributable to the repayment of long-term loans by the general government. Errors and omissions (E&O) amounted to -RM51.9 billion, or -2.9% of total trade (2016: -RM13.2 billion or -0.9% of total trade), partly due to foreign exchange revaluation losses on international reserves arising from the appreciation of the ringgit over the year. Excluding revaluation losses, the E&O declined to -RM26.3 billion, or -1.5% of total trade.

Following these developments, the international reserves of Bank Negara Malaysia amounted to USD102.4 billion as at end-2017 compared to USD94.5 billion as at end-2016. Besides the support from a higher current account surplus and continued inflows of FDI, the reserves level also reflected foreign exchange revaluation changes. The weakening of the US dollar against most of the currencies in the diversified foreign currency reserve assets during the year, except in the first quarter, contributed to the increase in reserves level. As at 15 March 2018, international reserves amounted to USD103.9 billion. The international reserves remain adequate to facilitate international transactions and sufficient to finance 7.3 months of retained imports and is 1.1 times the short-term external debt. Over the past 20 years, Malaysia has cultivated a wide range of monetary policy instruments and pursued greater exchange rate flexibility through deregulation and liberalisation. These have enabled the economy to reduce its reliance on the Bank's international reserves in managing external pressures.

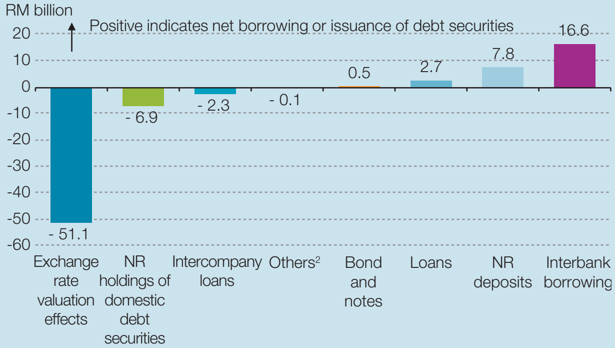
Of significance, the international reserves are not the only means for the country to meet its external obligations. Approximately 75% of external assets are held by domestic corporations, banks, and institutional investors. These external assets enable these entities to meet their external obligations without creating a claim on international reserves.

Manageable external debt

Malaysia's external debt declined to RM883.4 billion as at end-2017, equivalent to USD215.5 billion or 65.3% of GDP (2016: RM916.1 billion, equivalent to USD202.3 billion or 74.5% of GDP). The lower external

Chart 1.12: Changes in Total External Debt in 2017

Lower external debt in 2017
Net change[1]: -RM32.8 billion

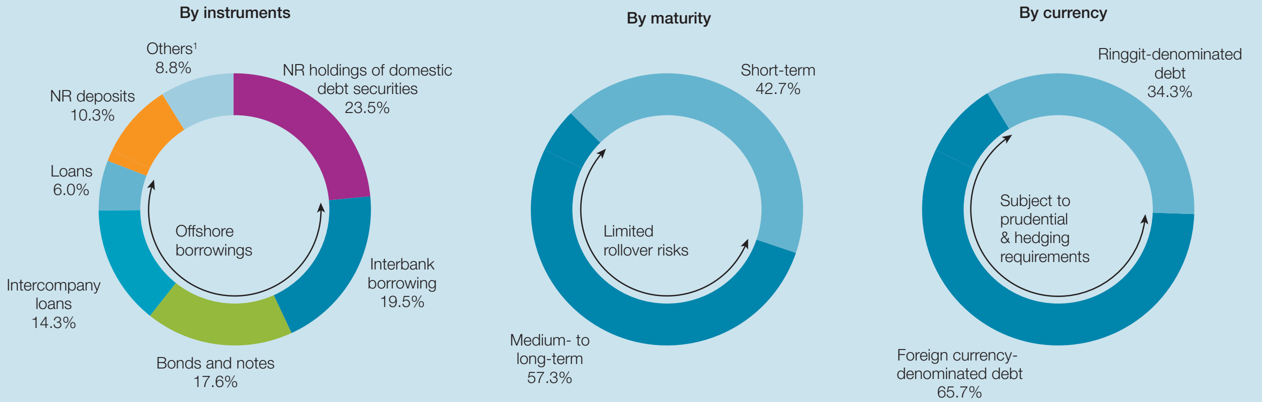


[1] Changes in individual debt instruments exclude exchange rate valuation effects
[2] Comprises trade credits, IMF allocation of SDRs and other debt liabilities
Note: NR refers to non-residents
Figures may not necessarily add up due to rounding

Source: Ministry of Finance, Malaysia and Bank Negara Malaysia

Chart 1.13: Breakdown of Malaysia's Total External Debt (% share)

Favourable external debt profile



[1] Includes trade credits, IMF allocation of SDRs and miscellaneous, such as insurance claims yet to be disbursed and interest payables on bonds and notes

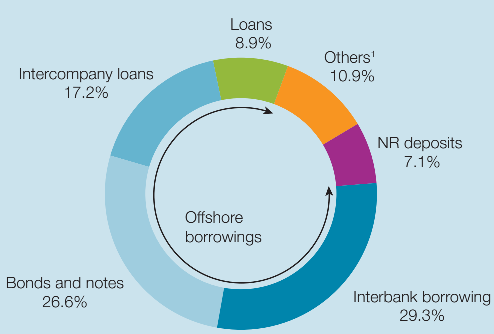
Source: Bank Negara Malaysia

debt was mainly attributed to valuation effects following the strengthening of the ringgit against most currencies during the year. Excluding valuation effects, Malaysia's external debt position increased by 1.4% of GDP, attributable mainly to increases in interbank borrowing and non-resident (NR) deposits.

Risks from external debt remain manageable, mitigated by its currency and maturity profiles. More than a third of external debt is denominated in ringgit (34.3%), mainly in the form of NR holdings of domestic ringgit debt securities and ringgit deposits in domestic banking institutions. As such, these liabilities are not subject to

Chart 1.14: Breakdown of Foreign Currency-denominated External Debt (% share)

Foreign currency-denominated debt subjected to prudent liquidity management practices and hedging requirements



[1] Includes trade credits and miscellaneous, such as insurance claims yet to be disbursed and interest payables on bonds and notes

Source: Bank Negara Malaysia

valuation changes from the fluctuations of the exchange rate. During the course of the year, the total NR holdings of domestic debt securities decreased by 3.2% to RM207.4 billion (end-2016: RM214.2 billion). This largely reflects the maturing MGS and GII, as well as Bank Negara Monetary Notes. In contrast, NR holdings of ringgit-denominated deposits in domestic banking institutions increased by RM0.8 billion or 1.6% to RM50.1 billion, equivalent to 55.0% of total NR deposits.

The remaining portion of total external debt of RM580.7 billion (65.7% share) is denominated in foreign currency (FC), which are subject to prudential and hedging requirements on banking institutions and corporations. The bulk of these obligations are offshore borrowings[4], raised mainly to expand productive capacity and to better manage financial resources within corporate groups. As at end-2017, offshore borrowing was lower at 37.5% of GDP compared to 60.0% of GDP during the Asian Financial Crisis.

Of the total FC-denominated external debt, around one third is accounted for by interbank borrowing and FC deposits in the domestic banking system, which increased by RM9.9 billion from end-2016. This reflects banks' intragroup liquidity management and placements of deposits by foreign parent entities, which are subject to prudent liquidity management practices, such as internal limits on funding and maturity mismatches. The next largest component is long-term bonds and notes

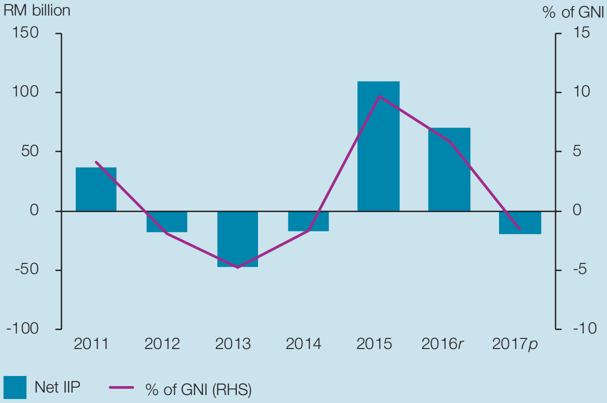
[4] Comprised mainly of foreign currency loans raised, and bonds and notes issued offshore.

issued offshore (26.6% share or RM154.2 billion), primarily to finance asset acquisitions abroad that will generate future income. FC-denominated intercompany loans was lower by RM12.9 billion following net repayment during the year. These obligations are normally subject to flexible and concessionary terms, such as a flexible repayment schedule or lower interest rates.

From a maturity perspective, more than half of the total external debt is skewed towards medium- to long-term tenures (57.3% of total external debt), suggesting limited rollover risks. Additionally, not all short-term external debt pose a claim on reserves. In 2017, Malaysia recorded a higher current account surplus from the favourable external demand environment, and continues to experience a net short-term external asset position. This indicates that most borrowers are able to meet their external obligations given the steady stream of foreign currency earnings via trade activities and accumulation of external assets. As at end-2017, Malaysia has a net short-term asset position of RM268.1 billion. The sustained net short-term asset position reflects the economy's ability to service short-term external debt falling due. Furthermore, Malaysia has a net foreign currency asset position, as the bulk of liabilities are in ringgit and assets are mostly denominated in foreign currency. This means that Malaysia's external position is well-protected from a sharp exchange rate depreciation.

Chart 1.15: Net International Investment Position (IIP)

IIP registered a net liability in 2017



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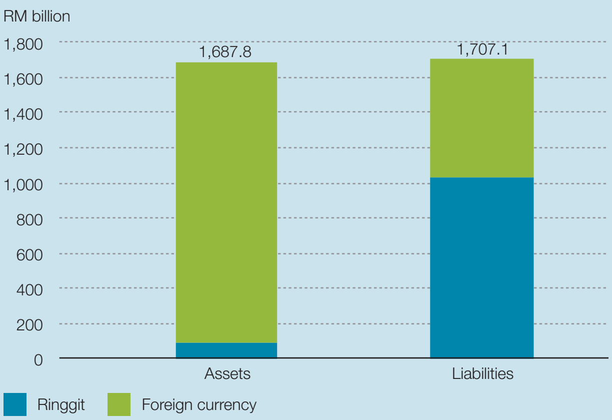
Source: Department of Statistics, Malaysia

Chart 1.16: International Investment Position (IIP) by Currency

Foreign currency external assets exceed foreign currency external liabilities



Source: Bank Negara Malaysia

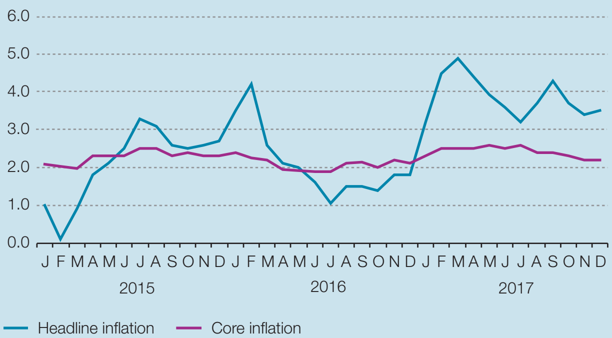
As at end-2017, Malaysia recorded a marginal net liability position of RM19.3 billion, equivalent to -1.5% of GNI, compared to a net asset position of RM70.1 billion, or 5.9% of GNI in 2016. The appreciation of the exchange rate (as at end-2017) was the key driver of the reversal in Malaysia's net international investment position (IIP). This underscores the role of the exchange rate as a shock absorber in influencing the IIP. The appreciation of the ringgit reduced the country's external assets, most of which are denominated in foreign currencies, when valued in ringgit terms. The impact of the stronger ringgit on external liabilities was relatively smaller given the high share of ringgit-denominated liabilities, namely in the form of non-resident holdings of domestic debt and equity securities as well as placement of deposits in the domestic banking system.

Headline inflation increased in 2017

Headline inflation, as measured by the annual percentage change in the Consumer Price Index (CPI), increased to 3.7% in 2017 (2016: 2.1%). While the inflation numbers were within the Bank's expectations, inflation during the year remained volatile and was driven mainly by higher domestic fuel prices. Higher external and domestic costs from higher global commodity prices and disruptions in domestic food supplies respectively also contributed to inflation during the year. However, the stronger ringgit exchange rate since April 2017 helped to contain the increase in cost of production for domestic goods. Underlying inflation, as measured by core inflation, was also higher during the year, averaging at 2.3% in 2017 (2016: 2.1%).

Chart 1.17: Consumer Price Inflation

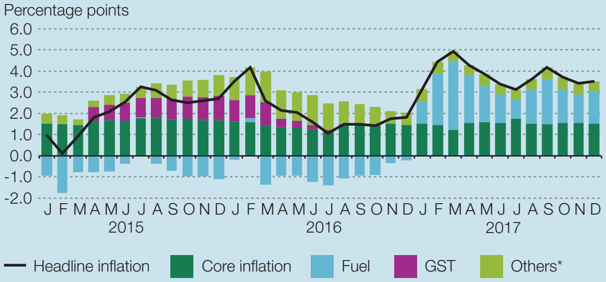
Headline inflation increased to 3.7% in 2017



Source: Department of Statistics, Malaysia and Bank Negara Malaysia

Chart 1.18: Contributions to Headline Inflation by Components

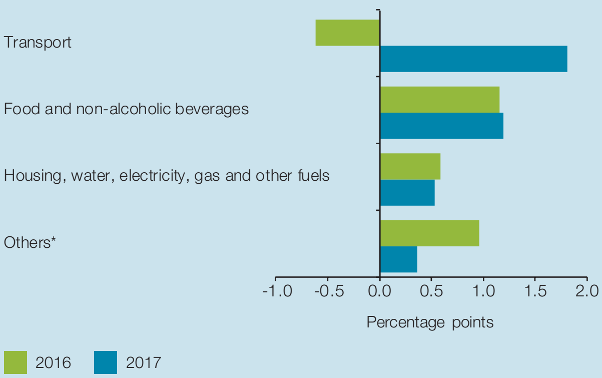
Headline inflation was driven mainly by higher domestic fuel prices



* Others include price-volatile items and other price-administered items
Source: Department of Statistics, Malaysia and Bank Negara Malaysia

Chart 1.19: Contributions to Inflation by Categories

Contributions from the *transport* and *food and non-alcoholic beverages* categories were higher



* Others include clothing and footwear, alcoholic beverages and tobacco, health, education, communication, recreation services and culture, furnishings, household equipment and routine household maintenance, restaurants and hotels and miscellaneous goods and services categories

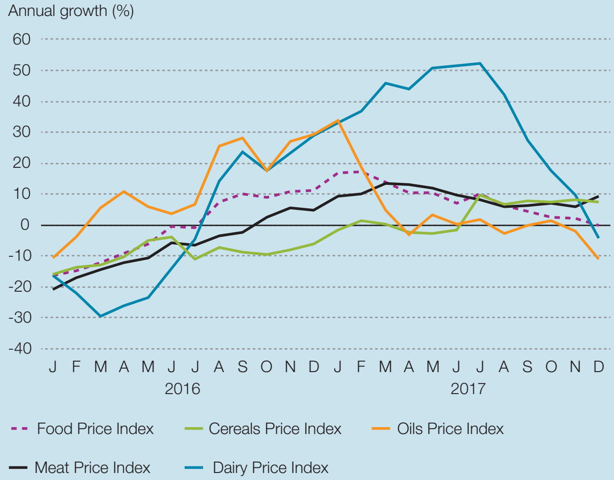
Source: Department of Statistics, Malaysia and Bank Negara Malaysia

Externally, global commodity prices were higher in 2017, driven by increases in the prices of oil and food. Global oil prices rose during the year following OPEC's agreement to cut production effective from 1 January 2017. The stronger-than-expected global oil demand since the second quarter of the year amid production cuts led to falling inventories, which also supported the increase in oil prices. The rise in global oil prices was further compounded by unexpected supply disruptions in the US Gulf Coast due to Hurricane Harvey at the end of August and geopolitical tensions in the Middle East towards the end of the year. Global food prices also increased during the year, driven mainly by stronger global demand amid supply shortages. The Food and Agriculture Organisation of the United Nations (FAO) Food Price Index, rose by 8% in 2017 (2016: -1.5%). With the exception of cereals, the annual rate of increases in prices for other food categories, notably meat, oils and dairy categories, accelerated during the third quarter of 2016, before slowing down in the second quarter of 2017. Specifically, palm oil prices also rose to a four-year high in the fourth quarter of 2016 as a result of tight supplies before declining in March 2017. Cereal prices only started to increase in the second half of 2017, driven partly by higher wheat prices following yield concerns from a worsening drought in the US and Canadian regions. The higher global commodity prices, coupled with a slight increase in import partners' inflation, resulted in higher cost for domestic producers.

Domestically, higher costs stemmed from supply disruptions and price adjustments that had been occurring since late 2016. In 2017, there were intermittent disruptions to the supply of fresh food caused by

Chart 1.20: FAO Food Price Index

Global food prices rose by 8%



Source: Food and Agriculture Organisation of the United Nations (FAO) Food Price Index adverse weather conditions during the monsoon season in January, the outbreak of bird flu in February and adverse sea conditions in May. As a result, inflation for price-volatile items remained relatively high at 4.9% (2016: 5.6%, 2011-2015: 4.4%). The impact of several revisions to prices that took place in the second half of 2016 persisted into 2017. These revisions included an increase in satellite TV charges in August 2016 and the removal of the subsidy for cooking oil in November 2016. The impact of these revisions however, lapsed towards the end of 2017, leading to a moderation in inflation in the fourth quarter.

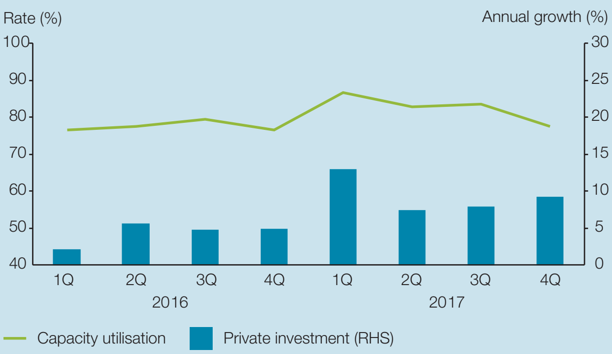
In terms of impact on CPI, the higher global oil prices during the year had a direct impact through domestic fuel prices. Prices of RON 97 petrol, RON 95 petrol and diesel were adjusted higher by 34 sen, 41 sen and 47 sen, respectively. The impact on inflation was compounded by the significantly lower global oil prices in the base period of 2016. As a result, *transport* inflation rose to 13.2% (2016: - 4.6%).

The higher external and domestic costs were also passed through indirectly to the prices of goods and services. Based on the Bank's industrial engagements[5], firms took advantage of the relatively stronger demand during the year to increase their retail prices, easing the compression of their margins, especially for firms in the *food away from home* and *furnishings, household equipment and routine household maintenance* categories. For example, fast food and wheat-based food products experienced upward price revisions during the year. The higher global palm oil prices also led to higher prices for non-durable household goods, such as washing powders and detergents. However, the adjustments were moderate as firms remained cautious. The impact was also partially contained by the stronger ringgit exchange rate since April 2017. These price revisions, coupled with slightly higher inflation of rental during the year, led to core inflation rising to 2.3% during the year.

Demand-driven inflationary pressures in the economy remained largely stable during the year, given the lack of persistent tightness in capital stock and absence of significant wage pressures. In 2017, firms in the manufacturing sector operated at a relatively high capacity utilisation rate of 82.6% (2016: 77.5%), supported by the increase in private sector spending and higher exports. While spare capacity has narrowed, it did not translate into broad-based price pressures. In terms of capital stock, the higher capacity utilisation was expected to lead to some tightness for firms. However, this tightness was not expected to persist and exert upward pressure on inflation as incoming investments, especially in machineries and equipment, would expand firms' productive capacity over time to cater to the stronger demand. In the labour market, there remained spare capacity even as the underutilisation of labour was declining. The unemployment rate during the year remained stable (3.4%; 2016: 3.4%) as the higher employment growth (2.1%; 2016: 0.7%) was matched by growth in the labour force (2.1%; 2016: 1.0%). While wages per worker grew in the manufacturing sector, it was offset by higher productivity, resulting in lower unit labour costs. In the services sector, unit labour costs were also lower given the stable growth in wages per worker amid increase in productivity.

Chart 1.21: Private Investment in Malaysia and Capacity Utilisation in the Manufacturing Sector

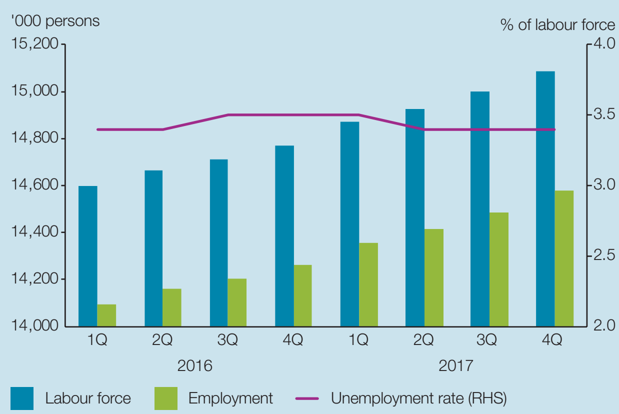
Higher growth in private investment would expand productive capacity in the manufacturing sector



Source: Department of Statistics, Malaysia and Malaysian Institute of Economic Research (MIER)

Chart 1.22: Unemployment Rate, Employment and Labour Force

Unemployment rate remained stable as higher employment growth was matched by growth in the labour force



Source: Department of Statistics, Malaysia

[5] The industrial engagements were undertaken by the Bank's Regional Economic Surveillance (RES) team.

Low-Skilled Foreign Workers'[1] Distortions to the Economy

By Ang Jian Wei, Athreya Murugasu, Chai Yi Wei

Introduction

A prerequisite to achieving a high income and developed nation is the progression to a 'high-productivity, high-income' workforce. Fundamentally, Malaysia would benefit from a clear shift away from an economy that is input-based and dependent on cost suppression as a source of competitive strength, to one that competes on the quality of its labour force, technical skills and product offerings. Such a shift requires the implementation of well-aligned, coordinated and consistent public policies. These policies encompass talent development, research and development, and industrial upgrading initiatives. Importantly, these policies need to be coherent, well-communicated and mutually-reinforcing.

The vision is for Malaysia to become an economy with the know-how and competitiveness to produce sophisticated goods and services that can command a market premium. Currently, while Malaysia has made progress on several fronts, there remains a broad reliance on low-cost production models that lean on low-skilled labour while keeping a lid on wages to maintain business margins. The relative ease of obtaining low-skilled foreign workers in Malaysia contributes to these tendencies.

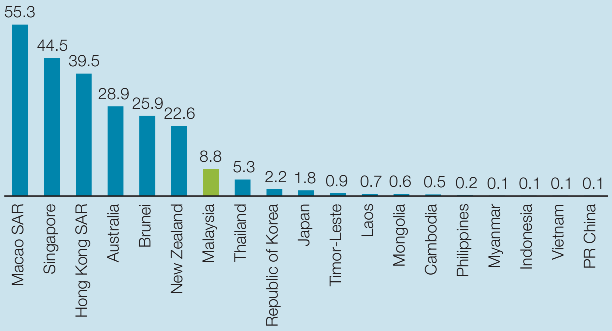
The purpose of this article is to highlight the costs of unchecked dependence on low-skilled foreign workers and how they weigh on Malaysia's efforts to raise productivity and create higher-skilled and better-paying jobs. Several policy thrusts are highlighted to build on the progress that has been made and to ensure policy alignment with Malaysia's long-term economic objectives.

History and Context

Malaysia's economy has long benefited from a supportive immigration stance. Malaysia is among the countries with a high ratio of migrants to total population in Asia Pacific (Chart 1). However, most of the migrants in Malaysia have low education attainment. Only 5.2%[2] of them are tertiary educated. In contrast, other economies like Australia, Singapore and Hong Kong SAR have intentionally planned to attract more skilled migrants[3].

Chart 1: Share of Total Migrants to Population (%)

Malaysia's migrant to population ratio is higher than most of its regional peers



Source: Conference Board, United Nations, CEIC, CIA 'The World Factbook'

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1 This refers to the workers who are employed under the Visitor Pass (Temporary Employment). The term 'foreigners' used in this article refers to the 'non-citizens' obtained from the Labour Force Survey.
2 Refers to non-citizen employed persons in Malaysia (2016 Labour Force Survey, DOSM).
3 8.8% of non-citizens working in Malaysia are high-skilled. The corresponding share for Singapore, Hong Kong SAR and Australia is 14.0%, 11.6% and 58.5% respectively.

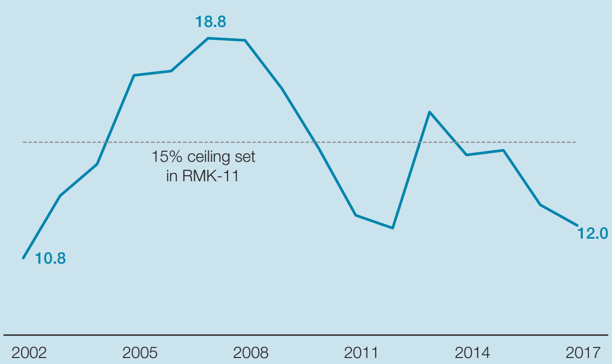
In the 1970s, foreign workers in Malaysia were mostly employed in the rural plantation and construction sectors in small numbers to meet seasonal demand. The rapid industrialisation and economic growth in the 1980s transformed a situation characterised by high unemployment in the mid-1980s to full employment by the early 1990s, with widespread labour and skill shortages, and rising wages[4]. This attracted both documented and undocumented foreign workers in large numbers. These workers eased production pressures and were compatible with the low value-added production of Malaysia then. However, what was initially conceived as a transitionary support[5] to alleviate production constraints and enable firms to move up the value chain has become a more entrenched feature of the Malaysian economy.

The share of documented foreign workers to labour force rose sharply from 10.8% in 2002 to a peak of 18.8% in 2007 (Chart 2). It was only within the past four years that the numbers have trended downwards since 2013, although amid strong industry pushback. Foreigners hold more than a fifth of the jobs in the agriculture, construction and manufacturing sectors (Chart 3).

While this served Malaysia well previously, the transition to a high-income economy requires a major shift from labour-intensive business models to those that are driven greatly by productivity gains, technological edge and sophisticated technical know-how. The ease and availability of these low-skilled workers at a cheap cost create deep distortions that disincentivises firms to transform.

Chart 2: Share of Documented Foreign Workers (% of labour force)

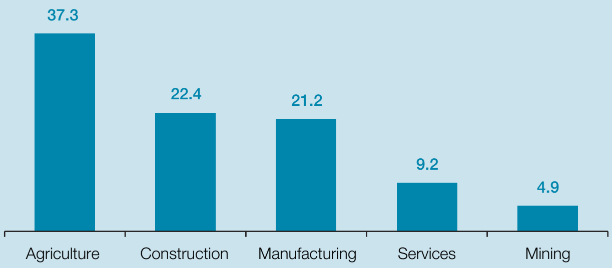
Foreign worker share of labour force has trended downwards of late



Source: Ministry of Home Affairs (MOHA), Department of Statistics Malaysia (DOSM)

Chart 3: Share of Foreigners* to Employment by Sector, 2016 (%)

Foreigners take up more than a fifth of employment in the agriculture, construction and manufacturing sectors



*Refers to non-citizens in the Labour Force Survey Report 2016

Source: Department of Statistics, Malaysia

The Macroeconomic Costs of Foreign Workers

Critically, the readily available pool of cheaper low-skilled foreign workers distorts domestic factor prices, and thus discourages industrial upgrading. It makes labour relatively cheap when compared to capital, and thus weakens incentives for firms to substitute labour for technology, or for greater value adding activities from employment of higher-skilled labour. While grants and incentives for automation and technology adoption are helpful, they are by themselves insufficient to create the necessary push for firms to move up the value-chain. Since 2008, around RM8 billion has already been allocated by the Government to assist with technology adoption and commercialisation efforts.

Observations from other advanced and emerging Asian economies are illustrative of this point. While public sector support for automation and talent policies are common, the drive for more efficient and sophisticated capabilities is often accompanied by pressures of rising costs, some of which are policy induced. These factors motivated the initial wave of Japanese investments into other parts of Asia in the 1980s[6] and the more recent ones from PR China to Vietnam. While this was done to take advantage of the cheaper labour and land in the recipient countries,

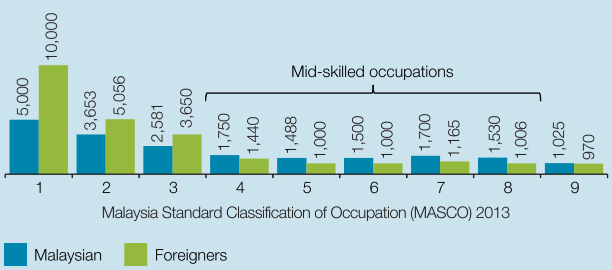
4 Kanapathy, V. 2001. International Migration and Labour Market Adjustments in Malaysia: The Role of Foreign Labour Policies.
5 Carpio, X. et.al 2015. Foreign Workers in Malaysia: Labour Market and Firm-Level Analysis.
6 Sheng, A. 2009. From Asian to Global Financial Crisis: An Asian Regulator's View of Unfettered Finance in the 1990s and 2000s.

the remaining business segments in both Japan and PR China were compelled to undergo sharp productivity increases and industrial upgrading to remain competitive.

Malaysia's transition to a high-income and developed nation is at risk, as long as firms are still engaged on a 'race to the bottom' in relation to labour costs and are unwilling to pay more, despite commensurable productivity gains had they adjusted. Employment of cheaper foreign workers vis-à-vis locals allows employers to keep wages low and in doing so, obviates the pressure to change the status quo. This distorts the natural wage clearing mechanisms that would have otherwise driven wages upwards. Studies[7] have pointed to some forms of depression on overall wages, and particularly on wages of low-skilled locals. Median wages of foreign workers are generally lower than those of locals (Chart 4), especially in mid-skilled occupations where 60.8% of locals are employed. It is entirely plausible that the very high presence of foreign workers in the private sector could widen wage differentials and deter job creation for locals. This is most evident in the Gulf Cooperation Council economies where 88% of private-sector jobs created from 2000-2010 were taken by foreign workers, of which 85% of them were low-skilled[8].

Chart 4: Median Monthly Salary of Firms by Occupations* and Nationality, RM

Employment of low wage foreign workers allow employers to keep salaries low



*High-skilled workers: Occupations Classification 1 to 3; Midskilled: 4 to 8; Low-skilled: 9

Note: 1. Managers; 2. Professionals; 3. Technicians and associate professionals; 4. Clerical support workers; 5. Service and sales workers; 6. Skilled agricultural, forestry, livestock and fishery workers; 7. Craft and related trade workers; 8. Plant and machine operators and assemblers; 9. Elementary occupations

Source: National Employment Returns 2016

Much has been said about the reluctance of local workers in undertaking 'dirty, dangerous and difficult' (3D) jobs. While cultural factors and the inherent nature of the work do play a role in deterring local involvement, it may also be argued that it is partly due to local wage conditions. Of the approximate 200,000 daily commuters from Malaysia to Singapore, it was found that 40% were working in mid- to low-skilled jobs, motivated mainly by higher wages[9]. This includes occupations that are often avoided in Malaysia such as plant and machine operators and assemblers, cleaners and labourers. In other words, at a more attractive level of wages, Malaysian workers would not shun 3D jobs.

While this is a limited example, it does suggest that current wages in Malaysia may be too low to attract local workers. Employers may also be reluctant to increase them due to the presence and abundance of cheaper alternatives. In the same vein, so long as blue-collar wages continue to face downward pressures, employers will not be hard pressed to adopt productivity-enhancing measures. Consequently, Malaysia risks being trapped in a low-wage, low-skill conundrum.

This can be observed through the share of job creation by skills from 2011 to 2017. When taken with other factors, Malaysia's share of low-skilled job creation has increased to 16% from 8% in 2002 to 2010 (Chart 5). In fact, 73% of jobs created in 2015 to 2016 went to foreigners (Chart 6), of which almost all of them had at most a secondary education.

7 World Bank 2015. Malaysia Economic Monitor: Immigrant Labour; Athukorala, P. et.al 2012. 'The Impact of Foreign Labor on Host Country Wages: The Experience of a Southern Host, Malaysia'; Ismail, R. et.al 2014. The Impact of Foreign Workers on Wages: A Case Study of Malaysian Firms.

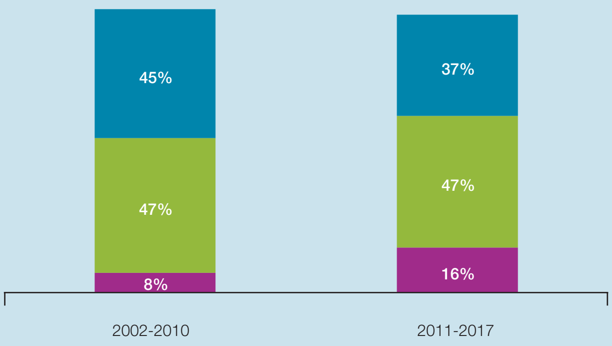
8 International Monetary Fund (IMF) 2016. Economic Diversification in Oil-Exporting Arab Countries.

9 Institute of Labour Market Information and Analysis 2017. A Study on Malaysians Working in Singapore.

On the other hand, the number of graduates in Malaysia increased by around 880,000 persons over the similar period, but with a corresponding high-skilled job creation of only 650,000 persons. This translates into increasing graduate unemployment from 2011 to 2016, outstripping that of non-graduates (Chart 7).

Chart 5: Share of Job Creation by Skill Level

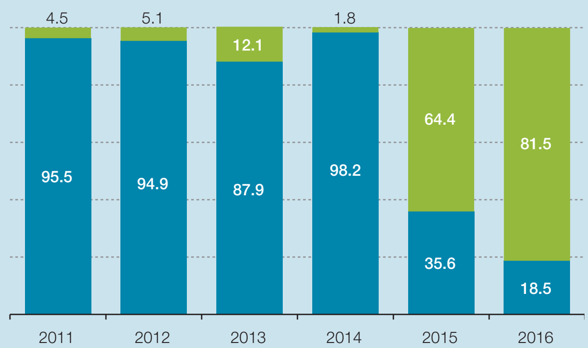
An increasing share of job creation is taken up by low-skilled workers in recent periods



Source: Department of Statistics, Malaysia, Bank Negara Malaysia's estimates

Chart 6: Share of Job Creation by Citizenship (%)

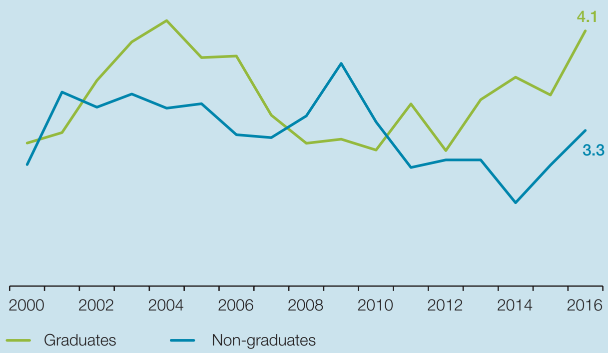
In the past two years, a large share of jobs created went to foreigners



Source: Department of Statistics, Malaysia

Chart 7: Unemployment Rate of Graduates and Non-graduates (%)

Graduate unemployment has increased more sharply since 2011



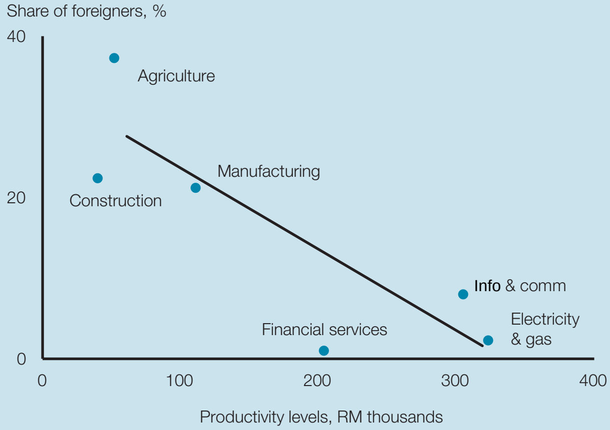
Source: Department of Statistics, Malaysia

It is also observed that industries with low productivity have a high share of low-skilled foreign workers (Chart 8), with a greater reliance on longer working hours to produce output. One study[10] found that South Korea increased real GDP per hour from USD4.7 in 1980 to USD25.4 in 2010, while Malaysia only registered an increase to USD7.1 in 2010 from USD5.3 in 2000. South Korea did this while reducing average weekly working hours from 49 hours to 44 hours from 2000 to 2008, while Malaysia's held steady at 49 hours. Malaysia's labour-intensive methods and longer working hours are clearly less efficient than those obtained through technological advancement and automation. This is seen through the gap between Malaysia and Asia's average usage of industrial manufacturing robots (Chart 9).

[10] Rasiah, R. et.al 2015. Industrialization and labour in Malaysia.

Chart 8: Productivity and Share of Foreigners[11] by Industries

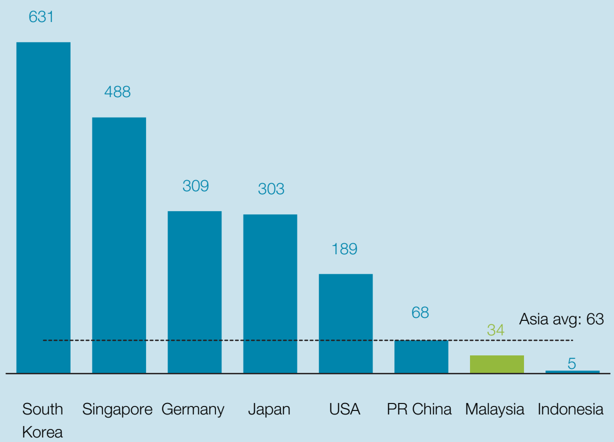
Productivity of industries negatively correlates with share of foreigners



Source: Department of Statistics, Malaysia

Chart 9: Robot Density* in the Manufacturing sector (2016)

Malaysia's robot density is below the Asian average



*Number of robots per 10,000 employees

Source: International Federation of Robotics

This raises an important point. With the advent of global value chains (GVCs) and the disruptive nature of technologies, two things are likely to unfold. First, competition on the low value-added and labour-intensive segments is likely to increase as more countries plug into the GVCs. Second, the fast-changing nature of technology cycles coupled with declining prices would provide more opportunities for others to leap frog and rapidly close the progress gap. In the past decade, labour costs in Asia have increased by 10% to 15%[12], leading to a convergence of labour and automation costs. Every year, the amount of time it takes for a firm's investment in robots to pay off (known as the "payback period") is narrowing sharply[13]. Malaysia's competitors are also actively embarking on industrial upgrading. Reliance on low-wage, low-cost production methods is an untenable long-term strategy with risks of Malaysia being left behind.

Malaysia's dependence on low-skilled foreign workers adversely shapes its reputation as a labour-intensive and low-cost destination to foreign investors. Increasingly, this affects the type of initial investments that foreign investors propose to bring to Malaysia. They are likely the less complex segments of their production chain, with many seeking to primarily leverage Malaysia's relative ease of hiring foreign workers and lower labour costs. This results in foreign multinationals relocating lower value-added processes to Malaysia, while moving higher productivity and value-added processes to neighbouring economies such as Singapore and PR China. In the end, this self-reinforcing image further locks Malaysia into this low-cost bind that would require significant resources to undo. This also worsens the displacement of local talent migrating to higher-paying employment countries, culminating in a brain-drain for Malaysia.

While the hiring of more low-skilled foreign workers does create demand for local workers in mid-skilled and supervisory jobs, it is arguable as to whether this is the most desired route in achieving that outcome. Automation and the adoption of more sophisticated technologies also create their own demand for higher-skilled workers. These positions usually come with better wages and can be filled by retrained unemployed graduates.

There are also several non-economic implications that must be considered. Over-concentration of migrant workers in urban areas may pose a strain on public amenities and infrastructure as well as resulting in additional fiscal costs

[11] Refers to non-citizens from the Labour Force Survey (LFS) 2016. While this figure also captures high-skilled migrants, 94.6% of non-citizens have at most a secondary education, making it a useful proxy for low-skilled foreign workers. The LFS would also capture information on both documented and undocumented workers. One limitation, however, is that the LFS does not capture information of workers who are living in communal housing, which may lead to an underestimation of workers in the agriculture and plantation industries. In contrast, the data by the Ministry of Home Affairs on the number of workers with Visitor Pass (Temporary Employment) only measures the number of documented foreign workers.

[12] RBC Global Asset Management. Global Megatrends: Automation In Emerging Markets.

[13] Sirkin H. et.al 2015. The Robotics Revolution: The Next Great Leap in Manufacturing.

to governments. Many also remit a significant share of their income abroad, thus reducing domestic spillovers in the domestic economy. Total outward remittances in 2017 remain sizeable at RM35.3 billion, of which the bulk was accounted for by foreign workers.

More pressing and worrying is the presence of many undocumented migrants in Malaysia. Estimates of their numbers vary greatly[14]. This impedes policy discussions and underestimates the full-impact of their employment on the Malaysian economy at large. Also, undocumented migrants who avoid compulsory health screening can potentially be a source of communicable diseases[15].

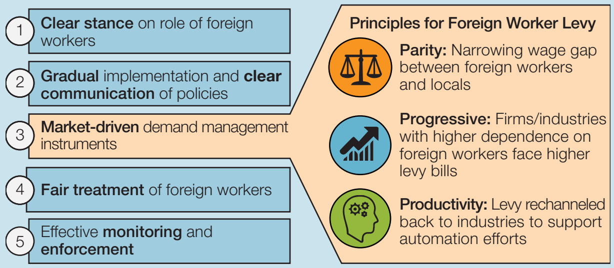
Policy Changes

Malaysia's efforts to reign in its dependence on foreign workers began in the early 2000s with the 8th Malaysia Plan. While it may not be easy, the challenge at hand is not insurmountable. Since the 11th Malaysia Plan, there has been greater clarity and a renewed focus to resolve the issue at hand. This has resulted in the steady decline in the share of documented foreign workers from 16.1% in 2013 to 12.0% of labour force in 2017.

Going forward, more can be done to build on the progress made. The end objective is to ensure that the future foreign worker management system in Malaysia is clearly articulated, firmly implemented, and more aligned to Malaysia's economic objectives. To this end, there are five key points that are worth pursuing (Chart 10).

Chart 10: Comprehensive 5-point Action Plan

Approach to Managing Foreign Workers:



Source: Bank Negara Malaysia

Firstly, there needs to be a clear stance on the role of low-skilled foreign workers in Malaysia's economic narrative. While these workers will continue to play an important role in supporting the Malaysian economy, there needs to be clarity as to where foreign workers are most needed and the manner in which they can be best engaged to support productivity growth and industrial upgrading. This includes clearly identified timelines for policy changes or the ease to obtaining up-to-date information on the existing framework. More importantly, policies on this front must be done in sync with other Government initiatives, be they talent development, labour market reforms, or enhancement to the existing incentives structure for attracting foreign direct investments (FDI).

Secondly, policy implementation and changes need to be gradual and clearly communicated to the industry. While reforms on foreign worker policies are necessary for Malaysia's long-term benefit, it will undoubtedly result in short-term adjustments to the economy. This will naturally result in industry pushback and eventually, the relocation of labour-intensive and low value-added goods and services production to other countries with abundant and cheaper labour. This will free up the requisite talent and fiscal resources to be redirected to more productive and complex industries. Most critically, it will allow affected industries and workers to prepare ahead for the incoming changes. This reduces the risks of policy reversals and aids policymakers in managing this delicate transition.

[14] Figures vary from official estimates of 600,000 persons by Jabatan Imigresen (2017) to alternative sources such as the 1.3 million undocumented workers registered under the 6P programme in 2013 (excluding East Malaysia and unregistered foreign workers) and 1.7 million persons indicated by the Malaysian Employers Federation (MEF) in 2017.

[15] Kanapathy, V. 2004. International Migration and Labour Market Adjustments in Malaysia: Economic Recovery, The Labour Market, and Migrant Workers in Malaysia.

Frequent policy reversals have complicated enforcement and increased business uncertainties. One example involves the several changes to the rules in foreign worker levy with regards to the party who should bear the cost – whether the employers or the workers themselves. Since the introduction of the levy in 1992, Malaysia has changed its stance on the matter three times within the last 10 years. The recent re-imposition of the levy on employers through the Employers Undertaking (effective 1 January 2018) is a step in right direction. This is in line with the Government's objective to develop a more effective means to manage demand for foreign labour and to encourage productivity gains among firms. Imposing the levy on workers does little in contributing to this outcome.

Thirdly, existing demand-management tools (such as quotas, dependency ceilings and levies) can be reformed to be more market-driven, while incentivising the outcomes that are in line with Malaysia's economic objectives. These tools should respond to evidenced-based labour and skills shortages as per Australia and Canada that rely on a mix of metrics to inform the recalibration of their immigration policies. Some foreign worker measures, such as the existing dependency ceilings, are argued to be either arbitrary, not sufficiently binding or simply hard to implement and enforce (Table 1).

Table 1

Selected Dependency Ceiling* by Industries

Industry	Quota determinants	Determinants	No. of foreign workers
Restaurants	Number of chairs	70-139 chairs	11 kitchen assistants, 12 helpers
		140-250 chairs	12 kitchen assistants, 20 helpers
		> 250 chairs	20 kitchen assistants, 30 helpers
Agriculture	Hectares	Oil palm: 8 hectares	1
		Rubber: 4 hectares	1
		Cocoa: 3.7 hectares	1

*Sets the upper limit for foreign worker intake by industry

Source: Ministry of Home Affairs (MOHA)

Reforms on the existing levy system can help disincentivise low-cost operations and prod firms to reduce dependence on foreign workers over time. There are three ways in which reforms can do so. The first would involve narrowing the wage per hour gap between local and foreign workers, arising from statutory exemptions. Internal estimates suggest that the average cost of hiring foreign workers on a per hourly basis is 30% lower than that of a local. While the upfront costs (e.g. compulsory medical check-ups, travel) of hiring the former may appear sizeable, it is important to note that these workers are usually subjected to longer working hours and that they do not enjoy the usual statutory benefits (e.g. Employer's EPF and SOCSO contributions) that locals do. In effect, the lower cost structure increases the appeal of foreign workers to employers over locals. Embedding the statutory costs in the levy calculations will help reduce this gap towards parity.

This can then be followed by making the levy system more progressive, so that industries or firms that are more dependent on foreign workers will face a higher total levy cost. The calculations can be made more nuanced, factoring the automation possibilities, wage growth and productivity improvements of each industry. The upcoming implementation of the multi-tiered levy in 2019 is a welcomed development, as it allows for a more differentiated deterrent mechanism depending on the firms' workforce profile. In line with best practices, the levy that is collected should be rechannelled back to the industry to support automation efforts.

Fourthly, there is room to ensure better treatment of foreign workers, be it improvements in working conditions or ensuring that foreign workers are paid as agreed. The questionable living and working conditions of foreign workers in certain industries do not merely raise concerns on workers' welfare but are symptomatic of the unhealthy business drive of certain unscrupulous employers to improve cost competitiveness. There are ongoing efforts by the Government to broaden the enforcement of minimum housing and amenities standards, from workers in the mining and estate industries to all relevant sectors. Additionally, the 2018 Budget announcement to ensure payment of foreign workers' salary through bank accounts will better leverage technology to prevent employers from withholding wages or make unfair deductions from their salaries.

Lastly, it is also important to note that these proposed reforms must be complemented with effective monitoring and enforcement on the ground, particularly with respect to undocumented foreign workers. Without addressing this challenge, any additional tightening in foreign worker policies will only penalise law-abiding employers. It may also lead to greater risks of corruption and employers circumventing existing regulations by resorting to the available pool of undocumented foreign workers.

Conclusion

While Malaysia has clearly benefitted from the presence of foreign workers in the past, the role that foreign workers play in the Malaysian economy must keep up with the times. Future foreign worker management policies, if poorly designed and inconsistently applied, will only detract from the progress that has been made to gradually wean Malaysia's dependence on foreign workers.

A high-dependence on them, if left unabated, will weaken the case for automation, suppress overall wages, and deter adoption of productivity-enhancing efforts. It will also hinder the creation of high-skilled jobs and adversely shapes Malaysia's reputation as a low-skilled, labour-intensive investment destination. When taken together, these factors trap Malaysia in a low-wage, low-productivity bind. The prevalence of large segments of undocumented workers in Malaysia compound the socio-economic costs.

While this challenge may seem daunting, critical reforms are very much within Malaysia's reach. Clear communication and firm implementation will help reduce the risks of policy reversals, and will aid Malaysia's transition into a high-income economy. If history were to serve as a guide, Malaysia's current economic strength is a result of bold reforms taken at the most critical junctures. Malaysia should seize the opportunity now to set itself on a more productive, sophisticated and sustainable economic growth path going forward.

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A Critical Assessment of Direct Investments Abroad (DIA) and the Changing Nature of Foreign Direct Investments (FDI)[1]

Introduction

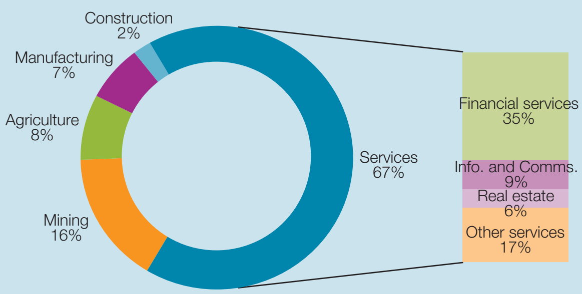
Building on from previous articles on the performance of Malaysia's direct investments abroad (DIA)[2] and investment incentives framework[3], this article presents a critical assessment on the positive spillovers and policy challenges of DIA and FDI to the Malaysian economy. A broad framework in assessing the costs and benefits of both DIA and FDI is applied, combining quantitative and qualitative perspectives. This includes measurable impacts such as investment, exports, value added, and employment; and associated costs such as tax revenue foregone, and investment income payments. We also take into consideration the less tangible benefits and costs associated with DIA and FDI, and the overarching backdrop of rapidly-changing global economic, industrial, and technological trends. The article concludes with a discussion on policy strategies, with an eye on ensuring the country maximises the economic and financial benefits from these ventures, and minimises potential exposure to risks.

I. Developments and Drivers of Direct Investments Abroad (DIA)

DIA by Malaysian companies has increased at a rapid pace, reflecting the maturity of domestic firms and limited domestic natural resources, facilitated by strategic national policy initiatives. Since 2001, on average, the stock of Malaysia's DIA increased by 20.7% per annum, from RM31.7 billion in 2001, to register outstanding DIA of RM522.5 billion as at end-2017. Between 2005 through 2014, DIA flows have averaged RM39.1 billion per annum, or 4.7% of nominal GDP. Since 2015, however, DIA flows have moderated somewhat, with average outflows amounting to RM33.7 billion per annum, or 2.7% of GDP between 2015 and 2017, reflecting a more cautious approach given greater uncertainty in the global growth environment and low global oil and commodity prices since December 2014. The depreciation of the ringgit in this period, which rendered investments abroad more expensive for domestic firms, may have also contributed to the moderation. As at end-2017, DIA was accumulated mainly in the financial services sub-sector (34.7% of outstanding DIA), followed by the mining and agriculture sectors (15.8% and 7.8%, respectively), and the information and communication services sub-sector (9.1%). By destination[4], DIA was channelled mainly to Southeast Asian economies, particularly Singapore and Indonesia, followed by European countries, and North America, particularly to Canada (Chart 1)[5].

Chart 1: Outstanding Direct Investments Abroad

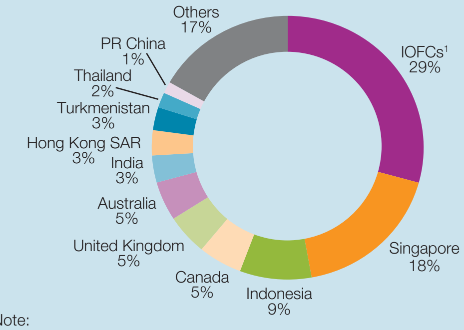
i) By economic sectors: DIA largely concentrated in the services sector



Note:
Banks and insurance companies account for 23% of DIA stock in the financial services sub-sector (or 8% of total DIA stock). The remaining 77% (27% of total DIA stock) comprise investment holding companies. Figures may not add up due to rounding.

Source: Department of Statistics, Malaysia

ii) By immediate destination countries: Southeast Asia, Europe and North America are the largest destinations for Malaysian DIA



Note:
International Offshore Financial Centres (IOFCs) include Mauritius (7%), Cayman Islands (6%), Isle of Man (5%), Bermuda (5%), British Virgin Islands (3%), Netherland Antilles (2%), Marshall Islands (1%), Bahamas (1%), Jersey and Seychelles (1%). Figures may not add up due to rounding.

1 This article was written in collaboration between the Economics and Foreign Exchange Administration Departments.
2 BNM Annual Report, 2016. 'Payoffs from Going Global: Assessing the Returns from Malaysia's DIA'.
3 BNM Quarterly Bulletin, 3Q 2017. 'Rethinking Investment Incentives'.
4 In line with the 6th Edition of the IMF's Balance of Payments and International Investment Position Manual (BPM6), Malaysia's DIA data is recorded by immediate destination basis, and not the ultimate country of destination.
5 DIA intermediated through IOFCs account for 29% of outstanding DIA stock. Investment via IOFCs, where investable funds are pooled before being directed to economic sectors in various locations, is a common global practice for companies operating internationally.

DIA was initially driven by the pursuit of natural resources in the 1980s and 1990s, mainly undertaken by Government-linked companies (GLCs) in the oil and gas and palm oil industries. Since the mid-2000s, however, private companies, particularly in the financial services and telecommunication industries, began to display greater interest and capability in venturing abroad to expand into new markets and customers, achieve greater economies of scale, and acquire strategic assets. These developments took place amid increased regional economic cooperation through bilateral and regional agreements, and are complemented by national policy initiatives, particularly the progressive liberalisation of foreign exchange administration (FEA) rules on residents' investments abroad in 2005. The flexibility to mobilise foreign currency funds was a key enabler for Malaysian firms to pursue opportunities abroad and strategic tie-ups with established international industry players, access new markets, acquire technical know-how, and fast-track technological transfers in various phases of the production process. Additionally, domestic industrial policies have nurtured market leaders well-placed to advance the strategic interests of the country in key industries. Furthermore, the development of the financial system in Malaysia has given rise to a strong banking system and large base of capable institutional investors, including provident and pension funds, and private and public asset managers, who invest the nation's savings abroad to maximise returns and diversify risk exposures. DIA was further supported by macroeconomic push factors, such as the strengthening of the ringgit between 2005 and 2013, and, after the Global Financial Crisis, the lower interest rate environment and relatively strong growth of emerging markets, which led to more attractive valuations of foreign assets.

II. Spillovers from DIA to the Malaysian Economy

(i) Establishment of the Malaysian Brand in the Global Market

In the past few years, we have begun to witness positive spillovers from DIA through the establishment of the Malaysian brand in the global market, and the increased benefits accruing to large Malaysian conglomerates. These companies, who are already market leaders in their respective industries, have investments that span across the globe and have since been recognised as capable industry players in their own right. As a result, fourteen Malaysian companies are ranked in the "2017 Forbes Global 2000" list of the world's largest public companies[6]. Unsurprisingly, the country's home-grown oil and gas company was the 125th largest corporation by total revenue on the "Fortune Global 500" list, topping the rank for Malaysia. The Bank's industrial engagements have also uncovered some anecdotal evidence of more intangible benefits, in the form of technological and knowledge transfers in selected industries like the utilities, financial services, leisure and hospitality, and tourism industries (please refer to the 'Information Box on Case Study of Top Resident Investors' at the end of this article, for more details).

(ii) Limited Evidence of Domestic Spillovers and Forward Linkages

Malaysia's DIA has generated a return on its outstanding assets (return on assets, ROA) of 5.2% per annum, between 2010 and 2017. Compared to regional peers, Malaysian corporates have performed relatively well on their investments abroad (Chart 2). The investment income accrued from DIA has helped offset some of the primary income payments in the current account. While the primary income deficit has remained sizeable (amounting to an average of RM32.1 billion per annum between 2010 and 2017), without the commensurate increase in income receipts from DIA, these deficits would have been almost double (at RM63 billion per year, on average). From the international investment position (IIP) perspective, DIA has also diversified Malaysia's external asset composition. In 2004, the proportion of external assets was heavily dominated by official foreign exchange reserves (60.6% of total external assets in the IIP; DIA share: 11.7%). As at end-2017, however, the DIA share of total external assets increased to 31%, with reserves accounting for a smaller share (24.6%). The diversification of external assets is important, given that the large portion of external liabilities is accounted for by domestic corporations and banks. A more balanced risk portfolio in terms of the composition of external assets and liabilities ensures that the country is not solely reliant on reserve assets to balance its external liabilities exposure.

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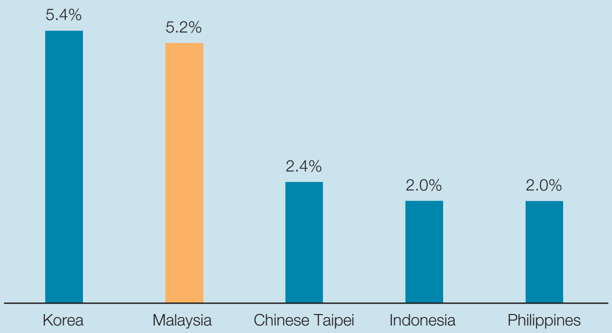
[6] By order, these companies are Malayan Banking Berhad, Tenaga Nasional Berhad, Public Bank Berhad, CIMB Group Holdings Berhad, Sime Darby Berhad, Genting Berhad, Petronas Chemicals Group Berhad, RHB Bank Berhad, Hong Leong Financial Group Berhad, Axiata Group Berhad, MISC Berhad, Maxis Berhad and AmBank Group and Petronas Gas Berhad, as listed.

Chart 2: Return on Assets of Direct Investments Abroad

Malaysia's DIA one of the best performers in the region



Notes:
1. Average return on DIA between 2010 and 2016 for Chinese Taipei
2. DIA stock for Indonesia and Philippines as at end-3Q 2017
3. Approximated 2017 annual income data for Philippines

Source: Department of Statistics, Malaysia, National Authorities, and Bank Negara Malaysia estimates

Economic theory, however, suggests that investments abroad should enhance trade and investment linkages and performance, foster internationally-competitive firms, increase high-technology industrial clusters and high-skilled employment domestically, and even increase the Government's tax revenue through stronger and more sustainable growth. Of interest, studies on the domestic impact of DIA on home countries have been relatively limited, compared to studies on the impact of FDI on host countries. This is partly due to the lack of comparable and reliable data, particularly for emerging and developing economies. For advanced economies, while findings are generally rather mixed, literature indicates that DIA tend to have positive spillovers in the home country, in terms of economic and domestic investment growth, high-skilled job creation, technology transfers, and exports performance. More recently, a few studies reported that Korean DIA has been found to have a positive impact on exports, domestic productivity, and employment. These trends may be different, however, for different sectors in which DIA has taken place, and even according to the different investment destinations[7].

For Malaysia, the domestic economic spillovers of DIA are not yet discernable. Findings from empirical studies indicate DIA has not been found to have a positive correlation with Malaysia's growth or trade performance, raising concerns that DIA may have come at the expense of growth domestically. Low domestic spillovers may also point to the limited formation of deeper backward linkages[8]. This may be due to the fact that DIA is largely concentrated in the services sector, which may offer fewer opportunities to form backward linkages, compared to sectors like manufacturing. Insights from industrial engagements allude to other structural constraints, such as the relatively lower capabilities of domestic firms to provide products and services meeting both the needs of Malaysian firms conducting businesses abroad and foreign firms operating in the country. These studies also point to the difficulties in quantifying the domestic impact of outward investments by resident companies. Even with tangible impacts like exports, investment, and employment, data limitations may limit deeper quantitative analysis, while more qualitative indicators like technology and knowledge transfers, and upgrading of value chains present an even bigger challenge.

Low repatriation from income and dividends earned from investments abroad is another factor that underscores the low impact of DIA on the domestic economy (for more details, please refer to the Information Box on 'Case Study of Top Resident Investors'). Between 2010 and 2017, DIA have accumulated income amounting to RM149.4 billion, of which 30.1% are retained abroad for reinvestment and 51.8% are declared as dividends.

[7] Kim, S (2000) and Ahn et al (2005). Positive correlation with trade is more statistically significant for 'high-tech' and 'medium-tech' industries. While DIA is positively correlated with total factor productivity and employment in general, DIA into PR China displays a negative effect.

[8] Goh and Wong (2014), Goh et al (2013), Wong (2013) and Chen et al (2012).

Estimates using internal data on cross-border banking flows indicate that only 51% of income are repatriated back to Malaysia. Out of these, an even smaller proportion are permanently retained in Malaysia to be re-channelled into further expansion of domestic operations or investment in domestic activities. In sum, the cost and benefit analysis of DIA must account for a wider set of considerations, and extend beyond simplistic profitability considerations for the investor.

(iii) Challenges and Concerns Surrounding DIA

On occasion, a few DIA projects have also been confronted with external headwinds and exposure to regulatory uncertainty, which may have affected the viability and profitability of these particular investments, and attracted prominent media attention. These include regulatory changes and restrictions in host countries, stiffer-than-expected competition in certain sectors, acquiring investments at high valuations, and venturing into assets beyond core business sectors or mandates. In addition, the rapid expansion of domestic banking groups across borders has contributed to greater interlinkages and increased complexity in managing potential risks to financial stability. These include increased complexities in terms of ensuring compliance with regulatory developments, managing enterprise-wide capitalisation, liquidity and business risks, and undertaking recovery and resolution planning. These observations, however, should not be generalised to represent the entirety of Malaysia's DIA. As noted earlier, on the whole, Malaysia's DIA has performed relatively well. At 5.2% between 2010 and 2017 ROA is slightly above the average global growth of 3.9% in the same period, and comparable to average regional[9] growth rates of 5.3%.

III. Developments and Drivers of Foreign Direct Investments (FDI)

Foreign direct investments have been a key driver facilitating Malaysia's productive expansion from a commodity-dependent, agriculture-based economy into an industrialised economy with a vibrant manufacturing base well-positioned in the regional and global trade value chain. The rapid industrialisation of developing countries in the 1970s-1980s was a pivotal period, with significant investments by multinational corporations in Malaysia, particularly in the manufacturing and mining sectors. These developments were shaped by the intensification of global manufacturing value chains, technological progress, a favourable demographic profile, and modern domestic infrastructure. At the same time, key domestic policies such as the Promotion of Investments Act 1986, liberalisation of foreign equity rules in the manufacturing sector, and the gradual liberalisation of foreign equity rules in selected services sub-sectors have continued to attract foreign investments and enhance the competitive environment in domestic industries. In the last 16 years, outstanding FDI in Malaysia increased by 9.9% per annum, from RM129.1 billion in 2001 to RM565 billion as at end-2017. In terms of economic sectors, FDI has been channelled mainly into the manufacturing sector (41% of outstanding FDI), followed by the financial services, wholesale and retail trade, and mining sectors (21.3%, 7.2%, and 6.9%, respectively). Most FDI flows are from regional economies like Singapore, Japan, and Korea, again underscoring the importance of regional trade and investment ties; followed by investments from Europe and North America (Chart 3).

IV. Benefits and Costs Associated with FDI

(i) A Catalytic Force in Malaysia's Economic Development

FDI is widely-acknowledged to have been a game-changer in Malaysia's economic development and came at the right time for Malaysia to partake in the globalisation surge that began in the 1980s. The increase in FDI, which, at its peak, registered flows amounting to 10.5% of GDP in the 1990s, brought a corresponding rise in the share of manufactured exports, employment, and income per capita. According to newly-released Inward Foreign Affiliates Statistics 2016 (Inward FATS 2016) published by the Department of Statistics, Malaysia (DOSM), exports generated by foreign firms amounted to RM292.8 billion, or 31.8% of gross exports in goods and services in 2016. Foreign firms have also created job opportunities, directly employing 847,300 workers (approximately 5% of total employment)[10]. The productivity of FDI firms are also significantly higher than the national average, with value added per worker at approximately three times higher than national productivity levels, at RM237,000 per worker per year on average between 2010 to 2016, compared to RM72,520 per worker nationally.

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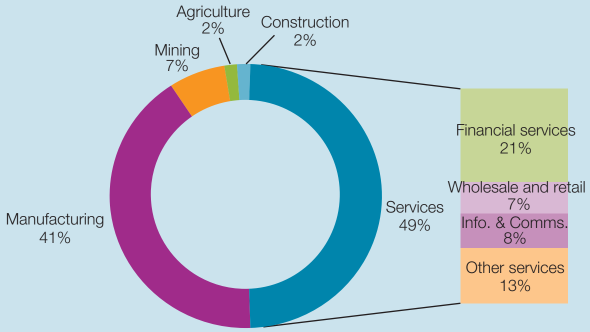
[9] Regional countries refer to Indonesia, Phillipines, Singapore and Thailand, which account for 29% of Malaysia's outstanding DIA stock.

[10] A key difference between FATS and direct investment data from the BOP is the equity threshold applied. Under BOP, a direct relationship is established at a 10% minimum equity stake in a related enterprise. Under FATS, control of an affiliate by an ultimate parent company arises when equity interest is more than 50%.

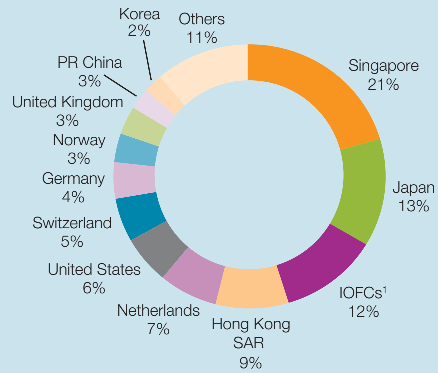
Chart 3: Outstanding Foreign Direct Investments

i) By economic sectors: FDI channelled mainly into the services and manufacturing sectors



Note:
Banks and insurance companies account for 63% of FDI stock in the financial services sub-sector (or 13% of total FDI stock). The remaining 37% (8% of total FDI stock) comprise investment holding companies. Figures may not add up due to rounding.

ii) By source countries: Largest FDI investors are from regional countries, Europe and North America



Note:
International Offshore Financial Centres (IOFCs) include British Virgin Islands (4%); Bermuda (3%); Jersey (2%); Cayman Islands (1%); Bahamas (1%); and Mauritus, Barbados, Panama, Samoa and Isle of Man (1%). Figures may not add up due to rounding.

Source: Department of Statistics, Malaysia

These investments have facilitated Malaysia's diversification away from a reliance on agriculture and minerals. This, in turn, has contributed to the fundamental strength of the economy. With the help of FDI and a rich and deep domestic ecosystem of production facilities, infrastructure, supporting services and talent, Malaysia is now firmly entrenched in the regional and global trade value chain.

(ii) Increasing Indication of Diminishing Net Benefits to the Economy

However, there is evidence that benefits to the country have been narrowing. The prevalence of labour-intensive and low-cost modes of production have led to the slow development of domestic value chains and ancillary services, and high reliance on imported goods, services, and foreign workers. This is evidenced by the slowing growth of domestic content in exports and lower spending on research and development by foreign MNCs. According to data compiled by the OECD, domestic content in Malaysia's gross exports is lower than regional average and regional economies (60.9% in 2014; regional average: 69%; Philippines: 76.3%; PR China: 70.7%). R&D spending by US FDI companies in Malaysia has also declined since 2012 (4.6% of total output; 3.6% share of output in 2014), and is lower than regional economies (India: 11.1%; Chinese Taipei: 4.9%; PR China: 4.5%)[11], indicating that technology transfers by foreign companies have plateaued. Inward FATS also point to other examples of waning benefits to the domestic economy, for example in declining shares of value added from foreign companies (2010: 19.5% of total value added; 2016: 18%), and investment (2010: 22.4% of gross fixed capital formation; 2016: 20.1%). Foreign firms have also contributed to the general trend of increased participation of low-skilled foreign workers in domestic industries[12]. While these trends are also contributed by local firms, unchecked reliance on low-skilled foreign workers have led to deep distortions, including the prevalence of low-skilled job creation and depressed wages in the Malaysian economy. The wider impact of these issues, such as stagnant wages amid rising cost of living, is disproportionately felt by the most vulnerable members of society. For example, reliance on low-skilled foreign workers tends to displace local workers in the low-skilled category, who also tend to be members of households in the bottom 40% of the household income distribution (B40). These industrial trends lead to the slow development of value creation among domestic suppliers and service providers, low pace of innovation and technological adoption, and wage and price distortions, which tend to outweigh some of the benefits of FDI.

[11] For a more detailed account, refer to Box Article on 'Rethinking Investment Incentives' in BNM's 3Q 2017 Quarterly Bulletin.
[12] For a more detailed account, refer to Box Article on 'Low-Skilled Foreign Workers and Its Distortions to the Economy'.

(iii) Costs and Leakages to the Economy

These concerns are especially stark when taking into account the cost of attracting foreign investments into the country. Over the years, the Government has deployed broad-based investment incentives to develop strategic industries and encourage desired economic activities. As previously estimated by Bank Negara Malaysia, the cost of incentives ranged between RM10 billion to RM15 billion annually, over the past five years, and account for up to approximately 9% of total Government tax revenue. These resources could have been channelled to improve public infrastructure and services, which are critical components in attracting and facilitating investments in the first place. There also appears to be a mismatch between the investments the country is receiving, and new growth areas in which the nation should be cultivating. For example, there is emerging evidence of increasing FDI in less productive sectors such as real estate and property development, particularly in segments in which policymakers have identified imbalances. FDI in the real estate and construction sector has risen in terms of share, from an average of 6.3% of annual FDI flows in 2010-2015, to 19.1% in 2016 and 2017. Industrial engagements suggest these investments are channelled mainly in the higher-end property segments. Other leakages include low domestic spillovers due to the high rate of income repatriation by foreign companies and high remittances from foreign workers, both of which are structural factors which weigh on Malaysia's current account balance.

Furthermore, the prevalence of fiscal incentives as a means to attract investment has come under scrutiny by international organisations, amid concerns of a 'race to the bottom' and wide-ranging changes in the regulatory environment aiming to discourage harmful tax practices. This also gives multinational companies the upper hand when it comes to deciding on an investment destination, and puts pressure on Governments to give in to the other immediate demands of industry, at the cost of strategic policy direction.

V. Policy Implications: A New Framework for Thinking about Investments

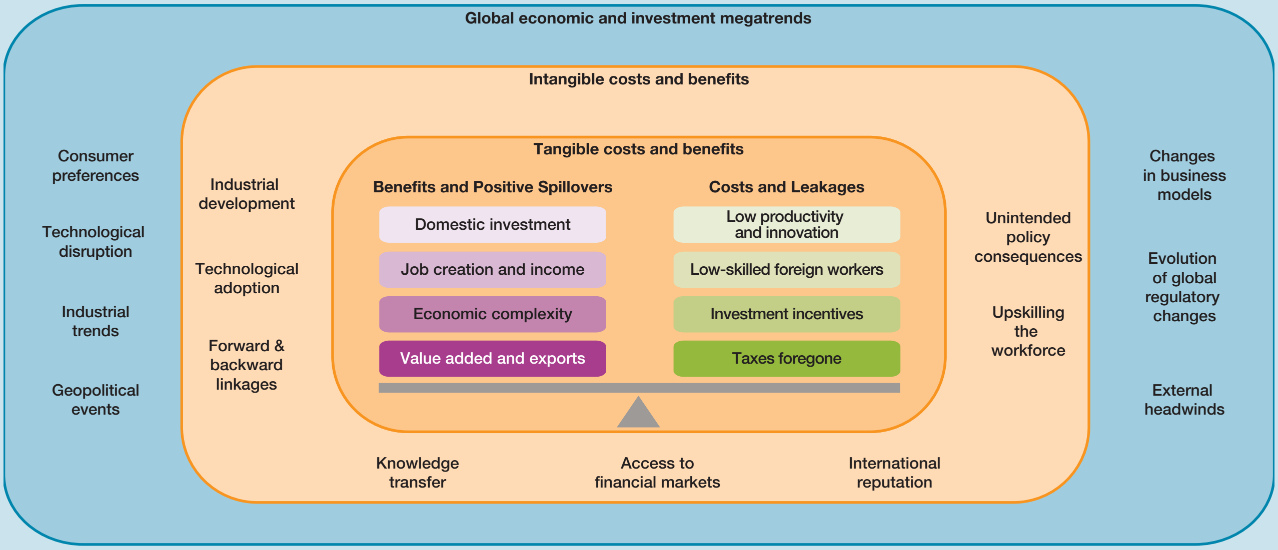
In the current highly-dynamic and complex economic environment, there is little room for complacency. Globalisation and technological disruption is rapidly changing consumer preferences, industrial trends, and business models. A fresh approach is needed, and policymakers must adapt to a new framework for thinking about investments. While traditionally, policymakers tended to place more emphasis on FDI, Malaysia is facing an interesting turning point. Aside from ensuring FDI remains an important contributor to economic development, we must also consider strategies to maximise backward and forward spillovers from DIA. These are challenging mandates but they are not insurmountable. The way forward lies in undertaking a rethinking of the national investment strategy and adopting a new approach to the cost and benefit analysis framework for both inward and outward investments. There also needs to be greater clarity in the direction of labour policy, particularly with regard to the role of low-skilled foreign workers in the economy. Communication on the Government's strategy on foreign workers need to be enhanced, alongside ease of obtaining information about current regulations, and offer clearly defined timelines on the gradual implementation of future regulations. At the highest level, however, policymakers have to agree on how Malaysia's DIA and FDI can best fit into global industrial trends and strategise accordingly, as regional countries such as PR China and Singapore have done.

Towards this end, a broad framework in assessing the net benefits of both DIA and FDI is envisioned, combining quantitative and qualitative perspectives, and an overarching backdrop of rapidly-changing global economic, industrial, and technological trends (Illustration 1). Costs and benefits associated with both FDI and DIA includes measurable impacts such as investment, exports, value added, employment, and associated costs such as tax revenue foregone and investment income payments. We also take into consideration the less tangible benefits and costs associated with DIA and FDI, particularly the benefits brought about by technological adoption, development of industrial clusters, and potential distortions to industrial behaviour from previous regulatory barriers.

This new framework in weighing costs and benefits highlights several policy implications. Firstly, the effectiveness of the current strategy to attract investments needs to be reflected upon. Regulations must spur investors to innovate, adopt new technologies, and serve emerging consumer preferences and industrial trends. FDI and prospective investments should deepen linkages in the domestic supply chain and build new value clusters. These investments should also exhibit desirable characteristics such as high-skilled job creation, and lift economic complexity and product sophistication[13]. Towards this end, a rethinking of the investment incentives framework is called for[14]. The decision on whether or not to award investment incentives should strike a balance between a nimble and flexible principles-based approach and a more decisive, performance- and outcome-based approach. Incentives awarded should be time-bound and tied to indicators on innovation, productivity, quality employment, and economic complexity. Malaysia cannot continue to rely on low-cost strategies to attract foreign investments, in an environment of increasing competition from other countries around the region.

Illustration 1: An Aspirational Cost-Benefit Analysis Framework

Considerations for investments must be broader than immediate impacts and profitability



Note: The indicators mentioned in the above framework are by no means exhaustive and serve as an illustrative example of a comprehensive perspective to assess the costs and benefits of both DIA and FDI.

Secondly and perhaps more challenging to achieve is the objective of maximising domestic spillovers from DIA. Efforts to promote two-way flows from investment activities and promote backward and forward linkages in the domestic economy must be strengthened. Part of this effort includes optimising the performance of Malaysian companies investing abroad. Korea, for example, facilitates local companies and SMEs in venturing abroad by offering investment consultancy services, which provides pertinent context on the social and political backgrounds of countries in which companies invest in. Through investment promotion agencies, the Government provides advisory services in terms of laws and regulations, and common challenges faced by foreign firms entering these markets. These services aim to reduce the incidence of companies falling into legal and regulatory pitfalls which could have been avoided, and prepare them for sector-specific challenges. Strategic and transparent communication of investment plans, particularly among GLCs and national institutional investors, would also be beneficial given the important roles that these companies play in the Malaysian economy. As discussed, a more dynamic investment incentives framework is needed to support this objective, coupled with more effective monitoring and enforcement to ensure performance measures are achieved, in line with investment approvals requirements and FEA regulations. This is complicated by the fact that domestic spillovers resulting from DIA activities may not be readily quantifiable due to data limitations and current frameworks for assessing the viability of investments abroad. Thus, a list of clear, principles-based requirements to complement quantitative indicators is warranted to comprehensively assess the

[13] For a more detailed account, refer to Box Article on 'Complexity and Growth: Malaysia's Position and Policy Implications'.
[14] For a more detailed account, refer to Box Article on 'Rethinking Investment Incentives' in BNM's 3Q 2017 Quarterly Bulletin.

likely financial and economic impact of investments abroad by domestic companies. Adoption of these policies will require implementation in a highly coordinated and cohesive manner to maximise the effectiveness of institutional support for DIA.

Finally, industry associations could also play a more constructive role in policy dialogue, either through providing industrial insights to national agencies, or by participating in policy ideation. Firms operating in the Malaysian economy must do so with a view of building a more facilitative industrial ecosystem, enhancing the functioning of domestic labour markets and continuously improving productivity. Initiatives by the Government such as the recently-introduced Employment Insurance System is necessary to enhance the flexibility of the labour market and encourage more efficient channelling of private savings. It has been observed that given the deep preponderance for low-cost models, there have often been strong industry pushback to Government-initiated reforms to lift labour or industrial standards. Corporate buy-in and meaningful participation is crucial in ensuring these key economic reform initiatives are implemented successfully. It is important to keep in mind that investments and economic progress in the economy must ultimately benefit the people and bring not only economic development, but also social progress.

Conclusion and Future Areas for Research

In summary, DIA has proven advantageous for certain domestic corporations, with some evidence of domestic spillovers in selected sectors. However, evidence of wide-ranging economic benefits of DIA have been inconclusive. On FDI, while the benefits to the economy are clearer, they are by no means constant or automatic. There is evidence that the net benefits to the economy is decreasing, amid the high costs of attracting foreign investments. Investment policy needs to be recalibrated such that the country does not rely solely on cost-pull factors to attract foreign investments, and to minimise economic leakages. The policy framework on investment needs to be reconsidered for both DIA and FDI, to ensure the country remains on track in its aspiration towards becoming a high-income nation. This would require that the country continues to invest in infrastructure and human capital and remove domestic impediments, so that it is always well positioned to ride the next wave of technological disruption and global economic megatrends. Going forward, a more concerted effort is needed to better quantify and assess the costs and benefits of both FDI and DIA. This includes conducting more research on the less-explored area of domestic complementarities of DIA, improving information collection and compilation methods to better quantify and take into account intangible impacts, and instituting greater discipline in enforcing a more comprehensive cost-benefit analysis framework which focuses on the wider impact of these investments. These policy tweaks to enhance backward linkages and spillovers from DIA and FDI are important, and they are a complementary effort in the long-run pursuit of efficient and functioning markets and high-quality infrastructure. Enhanced coordination between Government agencies and improved collaboration between the public and private sectors are necessary to strengthen the attractiveness of the domestic investment ecosystem for the sustainable long-term prospects of the Malaysian economy.

Case Study on Top Resident Investors

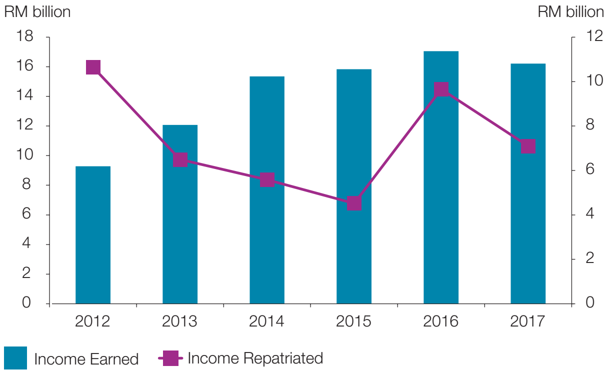
A series of industrial engagements and surveys on large DIA firms comprising of 52 companies which contributed to 60% of the total outstanding DIA stock as at 1H 2017[1] were conducted. The survey was aimed not only to gain insights into the financial performance of Malaysia's DIA but also to assess the intangible benefits of DIA to the domestic economy.

Moderate repatriation of financial returns

- Despite a challenging global economic environment, income on DIA remained stable for the past 6 years since 2012 reflecting the resilience of these investments. Of the DIA income earned, 51% (RM44.0 billion)[2] was repatriated with roughly equal share between GLCs and private companies. The remaining 49% (RM41.8 billion)[3] of DIA income retained overseas were used for reinvestment or paying off borrowings. Minimal conversion into ringgit is observed[4] from the repatriated income as it is generally kept in foreign currency to be re-channelled into new investments abroad, effectively leaving marginal amount for domestic utilisation.
- The moderate growth in investment income is also reflective of the relatively early stage of Malaysian DIA. Initially, DIA was mostly undertaken via greenfield ventures in which the payback periods were relatively long, ranging between three and 18 years. Following long gestation periods, some DIA started to yield return only recently. Over time, Malaysian corporates with increasing maturity started to undertake overseas expansion via brownfield ventures with shorter payback period ranging between three to five years.

Chart 1: Income Earned and Repatriated

Relatively stable income from DIA



Source: Bank Negara Malaysia

DIA has more apparent benefits in selected industries, as some sectors have benefited from technology transfer

- DIA can potentially expedite the technology transfer to Malaysia, especially in Malaysia's fledgling renewable energy sector. Acquisition of two brownfield projects in the United Kingdom and Turkey by the national power company can spur the development of Malaysia's own solar and wind power generation through technology transfer from global energy players. This is in line with the national strategy to develop renewable sources of energy as outlined in the Green Technology Master Plan Malaysia 2017-2030.
- Similarly, DIA in the leisure and hospitality sector has helped to develop a unique world class theme park in Malaysia through the participation of international producers and distributors of motion pictures. This bodes well for Malaysia's efforts to boost the tourism industry.

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1 For the purpose of this article, companies incorporated in Wilayah Persekutuan Labuan are classified as non-residents, in line with treatment under FEA regulations.
2 Figure excludes income earned by financial institutions and FEA treatment of Labuan as non-resident.
3 Source: Bank Negara Malaysia.
4 Source: Feedback from surveyed companies.

DIA not yet a catalyst for Malaysian exports

- While it is often acknowledged that DIA should facilitate greater market access, contribution to Malaysian exports via DIA has yet to be a reality. Only the plantation sector recorded some DIA related exports of equipment, machineries and fertiliser amounting to RM121 million between 2014 and 2016[5]. This amount is negligible compared to total exports from the country of RM2,330 billion in the corresponding period[6]. From this perspective, DIA has failed to spur Malaysian exports.

DIA in infrastructure projects abroad promotes Malaysia's brand and goodwill

- The success of Malaysian companies undertaking large scale overseas projects such as highways, power plants, and residential and commercial projects help to establish and elevate Malaysian corporates' reputation abroad. As at March 2017, Malaysia's corporates successfully completed 866 international projects with a combined value of RM92 billion and there are 55 projects still in the pipeline worth RM25 billion[7].

DIA benefits yet to be fully realised

- DIA flows are generally one way, as even repatriated income would be ploughed back into new investments, thus permanently impairing domestic liquidity in the process. There needs to be not only higher repatriation of DIA income but more importantly its conversion into ringgit should increase to replenish domestic liquidity and contribute towards more balanced flows in the onshore foreign exchange market. Based on anecdotal evidence, despite our GLCs and private companies undertaking large scale projects and huge investments overseas, the country's exports are yet to show a corresponding improvement due to DIA activities.

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5 Source: Feedback from surveyed companies.
6 Source: Department of Statistics. Malaysia.
7 Source: Construction Industry Development Board.

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Monetary and Financial Conditions in 2017

Monetary and Financial Conditions in 2017

INTERNATIONAL MONETARY AND FINANCIAL CONDITIONS

Global financial conditions improved amid brighter prospects in the global economy

Global financial conditions improved in tandem with brighter prospects in the global economy. The heightened financial market volatility, which stemmed from the uncertainties over the US elections and political events in Europe during 2016, had largely abated. Investors were more sanguine and had a higher risk appetite given the pickup in global economic conditions, expectations of a more gradual monetary policy normalisation path amid subdued underlying inflation in the advanced economies and a recovery in global commodity prices. In particular, signs of improvement in economic activity became increasingly apparent in the US and PR China as the year progressed, pointing towards a further strengthening in global demand, trade and investment. Global equity markets appeared to outperform real economic activity, raising concerns on potential overvaluation in some of the financial assets. Despite monetary policy normalisation in several advanced economies, long-term sovereign bond yields remained subdued as inflationary pressures eased globally.

During the first half of the year, global financial markets were supported by the upward revisions on the global growth outlook, driven by positive economic data from the advanced economies and PR China[1]. Decisions by central banks in the advanced economies to maintain monetary policy accommodativeness provided further assurance to investors that the global growth momentum would be sustained. As the policy rate increase by the US Federal Reserve (Fed) in March was accompanied by a less hawkish policy stance, market expectations were recalibrated towards a more gradual pace of monetary policy normalisation. Consequently, this led to a decline in long-term yields[2] and a 6.4% depreciation of the US dollar index during the period. Investor sentiments were further boosted by the anticipation of the US government's market-friendly policy packages which include large infrastructure expenditure, tax reforms and market deregulation. Subsequently, the search for yield intensified and global financial markets experienced significant upward momentum. Given the relatively higher returns with a positive economic outlook in emerging economies, capital flows returned to these economies, amounting to USD86.3 billion[3] in the first half of the year.

Against this backdrop, financial market volatility declined, with the Chicago Board Options Exchange Volatility (VIX) and Merrill Lynch Option Volatility Estimate (MOVE) indices reaching historical lows during the first half of 2017[4].

Chart 2.1: US Dollar Index

The US dollar index depreciated during the first half of 2017

Source: Bloomberg

[1] The IMF upgraded the outlook for global growth, revising it slightly higher from 3.4% to 3.5% for 2017 and maintaining its 3.6% forecast for 2018 (Source: IMF World Economic Outlook, October 2016 and April 2017).

[2] For the period January to June 2017, the 10-year US Treasury yield fell by 14.1 basis points.

[3] For the period January to June 2017 (Source: EPFR Global).

[4] The VIX, a gauge commonly used to measure equity market volatility, fell below 10, the lowest level since 1993 while the MOVE Index, a measure of implied volatility in the US Treasury market fell to 50 in June 2017, the lowest level since August 2014.

Global equity markets reached new highs in tandem with the US equity market. The US S&P 500 Index gained 8.2% during the period and breached the 2,300 level for the first time in February. Similarly, the Morgan Stanley Capital International Emerging Market (MSCI EM) Index recorded a new historical high, gaining by 17.2%. In the sovereign bond markets, the continued monetary accommodation and low volatility environment led to the decline in term premia in the advanced economies. Coupled with subdued inflation, long-term yields in advanced economies remained at low levels[5]. In turn, investors looked to sovereign bonds in emerging economies for better yields, increasing the demand for these assets. As a result, the JP Morgan Emerging Market Bond Index (EMBI) spread was compressed by 37.1 basis points during the period.

Chart 2.2: S&P 500 Index and MSCI Emerging Market Index*

Global equity markets performed strongly in 2017

* A benchmark index weighted by market capitalisation which tracks the equity market performance of 24 emerging market economies.

Source: Bloomberg

Chart 2.3: JP Morgan Emerging Market Bond Index (EMBI) Spread* and 10-year US Treasury Note Yield

EMBI spread tightened amid strong demand for emerging market bonds

* The spread refers to the difference in yields between dollar-denominated emerging market sovereign bonds and US Treasury notes.

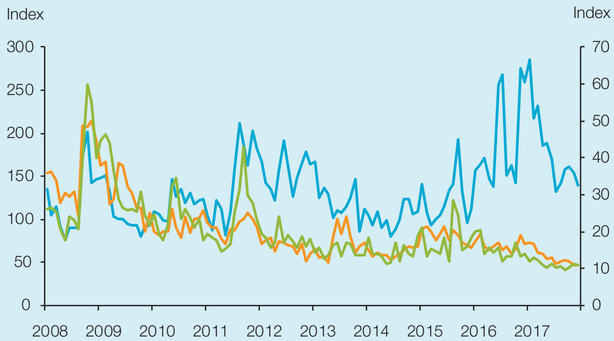
Source: Bloomberg

Despite the market optimism, political developments contributed to intermittent periods of heightened volatility during the first half of 2017. These developments revolved mainly around the US's ability to deliver its proposed fiscal reforms and the US-North Korea geopolitical tensions. These uncertainties, however, did not dampen the overall risk appetite in global financial markets. At one point, especially in early 2017, there appeared to be a widening gap between the increasing uncertainty surrounding policy developments and the persistently low financial market volatility. This was reflected particularly in the persistent divergence between the indicators of policy uncertainty vis-à-vis the VIX[6]. Such a dichotomy raised concerns on whether financial markets were mispricing risks.

Several central banks in the advanced economies proceeded to normalise the degree of monetary accommodation in the second half of 2017, leading to adjustments in market expectations and sovereign bond yields. The Fed, in line with expectations, raised its policy interest rate by 25 basis points twice, in June and December, while indicating another three policy rate increases in 2018. The Bank of England (BOE) also raised its policy interest rate by 25 basis points in November. Apart from

Chart 2.4: Indicators of Policy Uncertainty and Volatility

Disconnect between policy uncertainty and financial market volatility in early 2017



Source: Bloomberg, www.policyuncertainty.com

[5] Inflation fell broadly in the advanced economies during the first half of 2017. US inflation declined from 2.5% in January 2017 to 1.6% in June 2017 and the euro area inflation declined from 1.8% to 1.3% over the same period.

[6] The VIX reached historical lows in 2017, even during periods when the Global Economic Policy Uncertainty (GEPU) Index remained at elevated levels following the US presidential election in the previous year.

the interest rate increases, the Fed also started its balance sheet reduction process in October while the European Central Bank (ECB) announced that it would begin tapering its asset purchase programme from EUR60 billion to EUR30 billion a month starting in January 2018. Despite these actions, market performance remained upbeat amid the continued assurance by these central banks that monetary policy would remain accommodative and the path towards normalisation to be gradual. This was further supported by central banks' commitment to continue with their asset purchase programmes[7]. As a result, while long-term yields adjusted upwards, they remained subdued across the advanced economies[8]. The continued yield differentials led to increased cross-border carry trade activities, with emerging market economies receiving capital inflows amounting to USD66.7 billion during the second half of 2017.

Following another upward revision in the global growth outlook in the second half of 2017, indication of firmer action on tax reform proposals in the US and a recovery in global crude oil prices, global financial markets continued to rally to new highs[9,10,11]. The US S&P 500 Index gained 10.3% and achieved multiple record-highs during this period, closing above 2,600 points for the first time in November. The MSCI EM Index gained a further 14.6% and also recorded a new historic high. The continued demand for emerging market financial assets also led to further compression in sovereign bond yields as the JP Morgan EMBI spread narrowed further by 17.3 basis points.

The exuberance of global financial markets raised concerns on overvaluation of financial assets and underpricing of underlying risks. Global equity markets have consistently recorded new highs while the term premium component in sovereign bond yields, particularly in the advanced economies, was priced in the negative[12]. In the US, for example, price-to-earnings ratios of equity markets have surpassed the long-term median[13]. Technology stocks, in particular, exhibited excessive valuation growth, growing by almost 37% during the year[14]. A market survey of fund managers indicated that almost half believed that the US equity market was overvalued[15]. Such concerns on equity overvaluation also surfaced in emerging markets, albeit to a lesser extent, in view of the high investor risk appetite and large capital inflows. In Asia, most regional equity indices increased by double digits during the year. Price-to-earnings ratios, however, remained close to long-term averages. In the bond markets, signs of overvaluation have been prominent in the advanced economies, suggesting that markets have thus far underpriced risks of monetary policy normalisation. Long-term sovereign bond yields in major advanced economies are still subdued, with term premia remaining negative. In fact, the US Treasury yield curve is now almost as flat as it was prior to the Global Financial Crisis (GFC). Furthermore, the risk-taking activities have spilled over to corporate bonds, where the high-yield segment has also exhibited compressed spreads[16]. In emerging markets, sovereign bond yields experienced some compression due to large capital inflows, but remain close to long-term averages.

Prolonged periods of overvaluation could leave global financial markets susceptible to sharp and sudden corrections that would lead to heightened volatility. There are several risk factors that could

7 For example, the BOE kept its asset purchase programme unchanged despite raising rates. The ECB, while planning to pare down its asset purchases, also extended its programme at least until September 2018.

8 Between October and December 2017, the 10-year US Treasury yield increased marginally by 7.2 basis points while the 10-year euro area and the 10-year UK bond yields declined by 3.7 basis points and 17.5 basis points, respectively.

9 In October 2017, the IMF revised global growth upwards to 3.6% for 2017 and 3.7% for 2018. Subsequently in January 2018, the global growth estimates were further upgraded to 3.7% for 2017 and 3.9% for 2018 (Source: IMF World Economic Outlook, October 2017 and January 2018).

10 Eventually, the 'Tax Cuts and Jobs Act' was officially signed into law in December 2017.

11 Global crude oil prices recovered after declining in the first six months of the year, reaching USD66.8 per barrel at its peak in December. The recovery was driven by sustained production cuts by Organization of the Petroleum Exporting Countries (OPEC) and Russia, and higher global oil demand.

12 The term premium is the compensation demanded by investors for the risks that are being taken for holding longer-term bonds, more specifically against the risk of higher interest rates in the future. A declining or even negative term premium reflects investors' perception of lower interest rate risk.

13 As at end-2017, the Shiller price-to-earnings ratio, a valuation measure usually applied to the US S&P 500 Index, stood at 32.4 times, higher than the long-term (2000-2017) median level of 25.6 times (Source: Yale University).

14 The S&P Information Technology Index increased by 36.9% and reached an all-time high of 1128.9 points in 2017.

15 According to the November 2017 Global Fund Manager Survey conducted by Bank of America Merrill Lynch, 48% of fund managers responded that the US equity market was overvalued.

16 According to the Bank for International Settlements (BIS), corporate bond spreads are at their narrowest levels since the beginning of 2008. US and European high-yield corporate bond spreads, relative to government bonds, continued to narrow in 2017 amid improved sentiments and strong demand for riskier bonds. (Source: BIS Quarterly Review, December 2017).

trigger such corrections. First, a more rapid pace of monetary policy normalisation in the advanced economies against market expectations of a gradual increase in interest rates could trigger market volatility[17]. Second, uncertainties on political developments in the US could derail some of the market-friendly policy packages which have been priced into the US financial assets. This could be particularly impactful on equity prices, where valuations are based on expectations of increased corporate profits resulting from market deregulation and expansionary fiscal policy. Third, the elevated levels of leverage in emerging economies, which stood at 187% of GDP in 2016[18], remain a source of vulnerability to global financial stability as a debt crisis would cause significant negative spillovers to the global economy and financial markets. Fourth, any escalation of ongoing geopolitical tensions could reignite investor risk-aversion leading to sharp and sudden reversals from financial market assets, especially in emerging economies. Thus far, markets have only been temporarily affected as these geopolitical tensions have not had serious implications on the global economy and financial markets.

DOMESTIC MONETARY AND FINANCIAL CONDITIONS

Ringgit strength driven mainly by positive domestic developments

The ringgit strengthened against the US dollar in 2017, in line with most major and regional currencies. After experiencing four consecutive years of depreciation, the ringgit appreciated by 10.4% against the US dollar in 2017, its strongest performance in seven years. The ringgit was also one of the best-performing regional currencies despite intermittent depreciation due to "risk-off" events during the year. The strength of the ringgit was mainly a reflection of the robust domestic economic performance and positive investor sentiments following further liberalisation of the domestic financial markets. The ringgit was also supported by positive global developments during the year. These include the recovery in global growth and trade, slower-than-expected pace of monetary policy normalisation in the advanced economies, and the broad weakness of the US dollar[19].

After reaching a trough of RM4.4995 against the US dollar on 4 January 2017, the ringgit stabilised and recovered marginally against the US dollar in the first quarter. The appreciation of the ringgit was limited initially due to lingering investors' concern over the prospects of the Malaysian financial markets. The uncertainties reflected mainly the misperceptions regarding the liberalisation measures introduced by the Financial Markets Committee (FMC) in December 2016 and the lack of understanding of the onshore hedging facilities among foreign investors.

Sentiments on the ringgit and the Malaysian financial markets, however, improved significantly from the second quarter onwards, during which the ringgit was the best-performing currency in the region, with an appreciation of 9.0% against the US dollar. This period also saw the resumption of portfolio inflows to the domestic government bond market. While external developments continued to affect the movements of regional currencies, the appreciation of the ringgit during this period was also driven by the resilience of the Malaysian economy. This was reflected in the better-than-expected GDP growth in the first three quarters of 2017 and sustained double-digit growth in Malaysia's exports. The announcement of the second series of initiatives to develop the onshore financial market by the FMC in April to promote a fair and effective financial market, improve bond market liquidity, ease hedging activities, and enhance transparency and market information also provided additional impetus for the further strengthening of the ringgit. Finally, the recovery in global demand and positive sentiments on the global and Malaysia's economic outlook following the upward revisions to the growth projections for 2017 and 2018 by the IMF and the World Bank[20], also attracted international investors towards Malaysia's financial assets.

[17] Following the Federal Open Market Committee (FOMC) meeting in December 2017, the Fed has indicated another three interest rate increases in 2018. A change in this stance may become a source of considerable financial market volatility.

[18] Refers to G20 Emerging Market Economies (EMEs). Excluding PR China, the G20 EMEs recorded debt-to-GDP ratio of 108% at end-2016 (Source: IMF Global Financial Stability Report, October 2017).

[19] The US dollar started the year strong to reach a 14-year high in January 2017 amid growing optimism in the US economy. Nevertheless, as the year progressed, the US dollar was inundated with negative sentiments following uncertainties surrounding US fiscal reforms and the outlook for the path of US monetary policy normalisation. As a result, the US dollar index, which measures the performance of the US dollar against six major currencies, declined by 9.9% in 2017 (Source: Bloomberg).

[20] The World Bank revised upwards Malaysia's GDP growth forecast for 2017 for the third time in December, to 5.8% (previously 5.2%, 4.9% and 4.3%). Malaysia's GDP growth forecast for 2018 was also revised upwards to 5.2% in December.

Apart from being one of the best-performing currencies in the region, the ringgit was also one of the least volatile. The ringgit's 30-day rolling standard deviation averaged at 3.1% in 2017, while other regional currencies, which include the Chinese renminbi, Indonesian rupiah, Korean won, Philippine peso, Singapore dollar, New Taiwan dollar and Thai baht, averaged in the range of 3.2% and 7.8%. The ringgit volatility was low despite intermittent periods of depreciation pressure due to the occasional prevalence of "risk-off" sentiments in the global financial markets, such as the emergence of geopolitical concerns surrounding the tensions between the US and North Korea. The stability of the ringgit was a manifestation of the effectiveness of the measures introduced by the FMC in December 2016 and April 2017 to realign the ringgit market onshore and rebalance the demand and supply of the ringgit and foreign exchange in the domestic market. As a result of these measures, liquidity in the domestic foreign exchange market improved, with the daily volume of foreign exchange turnover registering a significant increase since the end of 2016. The volatility of the ringgit against the US dollar, as indicated by the difference between the highest and lowest intraday rates, also declined following the introduction of the measures. Furthermore, the balance between foreign exchange flows from exports and imports improved after the introduction of the export conversion measure[21], with the demand for ringgit supported by Malaysia's current account surplus.

For the year as a whole, the ringgit appreciated by 10.4% to end the year at RM4.0620 against the US dollar. The ringgit also appreciated against the Japanese yen and pound sterling but depreciated against the euro. Against regional currencies, the ringgit was broadly stronger. As a result, the ringgit's Nominal Effective Exchange Rate (NEER), a measure of ringgit performance against the currencies of Malaysia's major trading partners, appreciated by 4.0%.

While the ringgit's appreciation in 2017 has steered the ringgit towards reflecting the underlying strength of the Malaysian economy, any currency adjustment, irrespective of its direction, should be in an orderly manner. For a highly open economy like Malaysia, a gradual adjustment in the exchange rate provides the foundation for orderly adjustments in the external sector. Given that Malaysia is deeply integrated with the global economic and financial systems, this has proven to be a challenge in the past few years. Against the backdrop of highly volatile global financial markets, cross-border capital flows were driven by sentiments rather than the underlying fundamentals of the domestic economy, resulting in the over-adjustments of the ringgit. While the tide has turned in 2017 as the global economy gains traction, the challenge persists as the subsequent "risk-on" sentiments may result in one-sided speculative capital inflows to the domestic financial markets, which may result in destabilising currency movements. Hence, it is imperative for policymakers to ensure that any exchange rate adjustment is gradual and reflective of the changes in the economic fundamentals.

In the near term, the ringgit will remain susceptible to volatile conditions in the global financial markets given the fluid global environment. With the strengthening global recovery, major central banks other than the Fed will also be transitioning out of ultra-accommodative monetary policy. After years of monetary policy divergence between the Fed and other major central banks, the synchronous movement towards monetary policy normalisation in 2018 will be unchartered territory for financial markets since the GFC. This may accentuate financial market volatility, as financial market participants form differing views on the pace, timing, and magnitude of policy normalisations by these major central banks. At the same time, the proliferation of geopolitical developments in recent years will continue to pose significant risks to the global landscape. In this regard, policymakers have to remain pragmatic and develop a wide range of policy tools to manage these risks. Strong economic fundamentals, a flexible exchange rate, ample international reserves, deeper and more diversified financial markets and a strong banking system have and will continue to be crucial to Malaysia's resilience to swings in capital flows and exchange rate volatility.

In the longer term, the ringgit should reflect Malaysia's robust underlying economic fundamentals. Given the sustained domestic economic growth and improving growth prospects, the appreciation trend of the ringgit should continue. Nevertheless, for the ringgit to continue to better reflect Malaysia's strong economic fundamentals, measures to resolve the structural impediments that have affected the ringgit's performance in recent years will be required. These structural factors include:

- Growth in outbound travel expenditure that has outpaced inbound travel expenditure;
- Continued reliance on foreign service providers in the transport, construction and insurance services due to lack of domestic capabilities; and
- Increasing remittances by foreign workers in Malaysia.

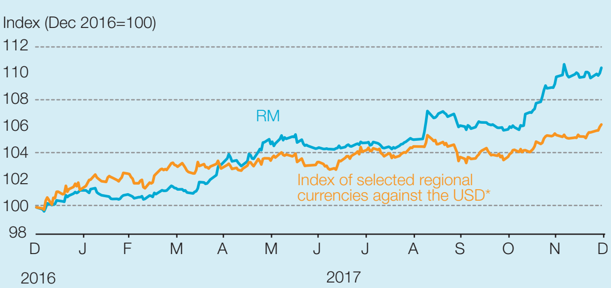
[21] One of the FMC measures introduced in December 2016 was requiring the conversion of foreign currency export proceeds into ringgit to address the imbalances where export proceeds were overwhelmingly placed in foreign currency accounts in offshore markets.

Furthermore, the ringgit's movement has been repeatedly amplified by misperceptions about Malaysia, in particular that it is an oil-dependent economy. While the Bank has taken steps to address the misperception by showing the disassociation between the ringgit and oil price movements, correcting perceptions takes time. The adequacy of Malaysia's international reserves is also a common concern raised by analysts based on unbalanced and simplistic assessments. Concerns on the Government's fiscal position may further add to the excessive movement of the ringgit. These structural factors and negative sentiments, stemming from sometimes unfounded views, could result in persistent imbalances in the foreign exchange market, preventing the ringgit from accurately reflecting Malaysia's real economic activity.

For the Bank, continuous efforts will be focused on ensuring an orderly functioning of the foreign exchange market. For an open economy like Malaysia, a stable exchange rate that adjusts gradually is key to support Malaysian households and businesses in planning their consumption, investment, and hedging needs. Nevertheless, the Bank is cognisant of the fact that while targeted policy measures to address misperceptions and imbalances, along with continuous effort by the Bank to ensure an orderly movement in the ringgit exchange rate may offer temporary solutions in the short term, fixing the root of the issues via long-term structural policies aimed at improving productivity and competitiveness of the Malaysian economy should continue being the focus going forward. This will ensure that the ringgit exchange rate remains competitive in the global environment.

Chart 2.5: Exchange Rate of the Malaysian Ringgit (RM) and Selected Regional Currencies against the US Dollar (USD)

The ringgit outperformed regional currencies in 2017



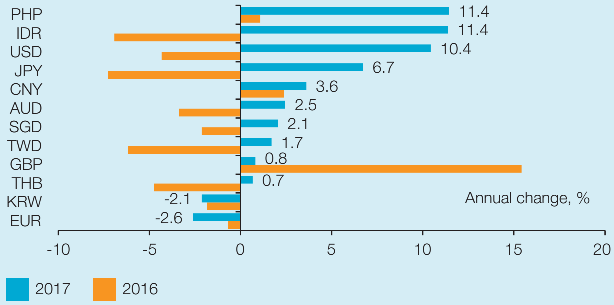
* Regional currencies: Chinese renminbi, Indonesian rupiah, Korean won, Philippine peso, Singapore dollar, New Taiwan dollar and Thai baht. Each currency carries equal weight.

Note: An increase in the index represents an appreciation of the ringgit or of selected regional currencies against the US dollar.

Source: Bank Negara Malaysia

Chart 2.6: Summary of Malaysian Ringgit (RM) Performance against Major and Regional Currencies

The ringgit appreciated against most major and regional currencies in 2017



Note: (+) indicates an appreciation of the ringgit against foreign currency

Source: Bank Negara Malaysia

Nominal interest rates were steady in 2017, reflecting stable liquidity and financial market conditions

Nominal domestic interest rates were stable in 2017. Funding costs were supported by sufficient aggregate liquidity in both wholesale and retail markets of the banking system. To a certain extent, stable funding conditions were also sustained by the resumption of capital inflows since the second quarter of the year.

Consistent with the unchanged level of Overnight Policy Rate (OPR) in 2017, money market rates were stable throughout the year. The average overnight interbank rate (AOIR) trended within a narrow range of 2.90%-3.00%. Similarly, interbank rates for other short- and medium-term tenures were relatively unvaried. Consequently, the Kuala Lumpur Interbank Offered Rate (KLIBOR) was also stable during the year, reflecting market expectations for the OPR to remain unchanged in 2017.

Table 2.1: Policy, Interbank and Lending Rates

	Dec-15	Jul-16	Dec-16	Dec-17
	%, as at end period			
Overnight Policy Rate (OPR)	3.25	3.00	3.00	3.00
3-month KLIBOR	3.84	3.40	3.41	3.44
Weighted average base rate (BR)	3.77	3.62	3.62	3.64
Weighted average lending rate (ALR)	5.40	5.27	5.22	5.22

Source: Bank Negara Malaysia

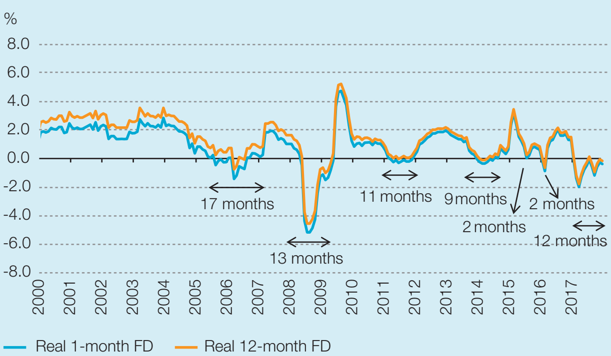
The stability in the interbank market translated into broadly steady trends in retail lending and deposit rates. In the first half of 2017, the weighted average base rate (BR) of commercial banks averaged at 3.61% (end-2016: 3.62%). During the second half of the year, however, the BR increased slightly by 3 basis points to 3.64%. This marginal increase was due to upward revisions by some commercial banks to reflect the shift in their funding composition towards longer-tenured liabilities that carry higher cost. Despite the higher BR, effective lending rates to both households and businesses remained broadly stable. The average quoted fixed deposit (FD) rates of commercial banks were relatively unchanged in 2017, with rates for FD tenures of 1 to 12 months being offered within the range of 2.87%-3.10% throughout the year.

Reflecting the higher headline inflation in 2017, real FD rates turned negative in January and remained so for the rest of the year. This period of negative real deposit rates was not unique to the current operating environment of the banking system. Historically, past episodes of negative real deposit rates have been driven by inflation developments resulting from supply factors which have typically been transitory. In 2018, real deposit rates would likely turn positive, given the increase in nominal interest rates following the higher OPR in January, together with the projected moderation in inflation.

In addition, corporate deposit rates were steady throughout 2017. This contrasted with the trends in the previous years, when corporate deposit rates would have typically increased towards the end of year. The

Chart 2.7: Real Fixed Deposit Rates

The period of negative real deposit rates in 2017 was not unprecedented



Note: The arrows indicate the periods of negative real fixed deposit rates (in months)

Source: Bank Negara Malaysia

stable development during the year was supported by the absence of competitive pressures for deposits among banks for year-end window dressing purposes and the resumption of capital inflows which helped contain potential funding pressures in the banking system.

Unlike in previous years, corporate deposit rates were stable during year-end, given the absence of competitive pressures for deposits among banks for window dressing purposes and the resumption of capital inflows

Domestic financial markets performed strongly in 2017

Malaysia's domestic bond and equity markets performed strongly in 2017. Sovereign bond yields continued to decline on sustained demand by non-resident and domestic investors. The domestic equity index ended the year higher after three consecutive years of negative returns. The strong performance of the domestic economy was the underlying factor driving these positive developments. Both markets, however, experienced very distinct developments throughout the year, underpinned by domestic factors that were unique to these markets.

MGS yields declined amid sustained non-resident inflows and strong support from domestic institutional investors

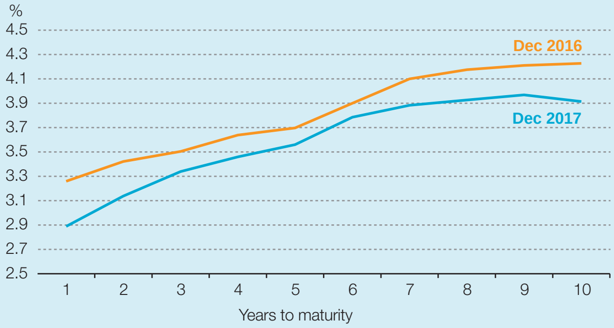
In 2017, the benchmark Malaysian Government Securities (MGS) yield curve shifted downwards, reflecting lower yields across all maturities. The sustained demand for Malaysian sovereign bonds was underpinned by Malaysia's strong economic performance during the year. The positive domestic development coincided with the lower volatility and improved risk-appetite in global financial markets, driving the demand by non-resident investors. A notable development in the bond market during the year was the investor reaction to the introduction of financial market development measures by the FMC in late 2016 which caused non-resident outflows and upward pressure on MGS yields. The impact, however, was temporary. For the year, the 3-year, 5-year and 10-year MGS yields declined by 16.4, 13.8 and 31.4 basis points, respectively.

During the first quarter of 2017, the bond market experienced large non-resident outflows, particularly from the MGS market, amounting to RM32.6 billion. The outflows were driven mainly by the unwinding of short-term speculative positions held by non-resident financial institutions and short-term asset managers following the introduction of FMC measures and the US presidential election in late 2016. Non-resident holdings of MGS with maturities of less than three years fell by RM31.9 billion, making up 98% of the outflows from MGS during the quarter. While these short-term outflows were the intended effect of the FMC measures, the overall outflows were also exacerbated by misperceptions surrounding the measures. In addition, the period also saw large maturities of MGS, particularly in February and March, of which RM11.5 billion was held by non-resident investors. Nevertheless, the non-resident outflows had limited impact on MGS yields as domestic institutional investors broadly increased their MGS holdings by RM25.5 billion during the same period. As a result, the 3-year and 5-year MGS yields increased by 6.4 and 12.4 basis points, respectively, while the 10-year MGS yield declined by 7.9 basis points[22].

In the subsequent quarters, MGS yields were on a downward trend amid a resumption of non-resident inflows to the domestic bond market and continued support from domestic institutional investors[23]. This was largely driven by improved investor sentiments following Malaysia's strong economic performance, including the better-than-expected GDP growth, continued double-digit growth in exports and stronger ringgit. During this period, the Bank also actively engaged the industry and market participants to reduce misperceptions on the FMC measures. Measures introduced in April that allowed better market accessibility and hedging flexibilities further revitalised investor interest in Malaysian bonds. In addition, these positive domestic developments coincided with market expectations for a more gradual pace of monetary policy normalisation in the advanced economies which led to capital inflows to regional financial markets. As a result, the 3-year, 5-year and 10-year MGS yields declined by 22.8, 26.2 and 23.5 basis points, respectively.

Chart 2.8: MGS Benchmark Yield Curve

MGS yields declined amid sustained demand by non-resident and domestic investors



Source: Bank Negara Malaysia

For the year, non-resident holdings of total Government bonds[24] declined to a more sustainable level of 27.7% as at end-2017 (2016: 30.6%). These holdings currently reflect a more stable and well-diversified composition of holders which mainly include longer-term investors such as pension funds, insurance companies, governments and central banks.

The domestic corporate bond market registered strong growth in 2017. Fund-raising activity increased significantly as new corporate bond issuances reached a 5-year high of RM175.7 billion[25] (2016: RM137.3 billion), amid improved sentiments and favourable cost of financing. The decline in corporate bond yields was broad-based in tandem with the decline in MGS yields, with yields on the 5-year AAA, AA and A-rated papers decreasing by 7.6, 14.1 and 30.3 basis points, respectively, for the year. Both liquidity and credit conditions also continued to remain healthy in 2017 with total turnover amounting to RM120.5 billion (2016: RM159.5 billion).

The domestic equity market improved, anchored by investor confidence on the strong economic outlook

Unlike the bond market, the domestic equity market started the year with a strong upward momentum after experiencing three consecutive years of negative returns. The turnaround in the FTSE Bursa Malaysia

[22] For the period between January and March 2017.
[23] For the period between April and December 2017, non-resident inflows to the MGS market amounted to RM28.5 billion while domestic institutional investors, in particular pension funds, increased their MGS holdings by RM13.5 billion.

[24] Refers to Malaysian Government Securities (MGS), Malaysian Government Investment Issues (MGII) and Sukuk Perumahan Kerajaan (SPK).
[25] Refers to securities issued in Malaysia by both local and foreign companies which can be either short-term, medium-term or long-term papers in Conventional or Islamic principles.

Kuala Lumpur Composite Index (FBM KLCI) was driven mainly by improved investor sentiments following Malaysia's strong economic performance and improved risk appetite in global equity markets which further supported the demand for Malaysian equities. For the year, the FBM KLCI increased by 9.4% (2016: -3.0%).

During the first half of the year, the FBM KLCI recorded an increase of 7.4%. Sentiments in the domestic equity market were supported by Malaysia's strong economic performance and improved corporate earnings, particularly for the *banking*, *plantation* and *export-oriented* sectors. The positive trend was also in line with regional equity indices, tracking the strong performance of the US equity market. During this period, Malaysia experienced net buying by foreign investors amounting to RM10.7 billion.

From July to November, the FBM KLCI experienced a partial retracement due to heightened global uncertainties and factors specific to Malaysia's equity market. The upward trend in global equity markets were interrupted by intensified geopolitical tensions and intermittent periods of uncertainties on the progress of tax reforms in the US, dampening the demand for global equities. When geopolitical risks eased and uncertainties subsided, global equity markets continued on its upward trend. However, the domestic equity index remained subdued during this period. The FBM KLCI was weighed down by cautious sentiments, especially in the *construction* and *manufacturing* sectors amid rising raw material prices. Investors were also cautious towards the *properties* sector amid concerns on the issues of low affordability and oversupply[26]. During this period, the Kuala Lumpur Stock Exchange (KLSE) Construction and Properties indices declined by 8.0% and 6.3%, respectively. These domestic factors resulted in the FBM KLCI's underperformance relative to regional peers. During the period, the index declined by 2.6% while regional indices mostly gained by between 2.1% and 13.2%.

In December, the FBM KLCI recovered firmly, with the index increasing by 4.6%. This occurred amid improved sentiments due to the upward revisions to Malaysia's growth outlook by the IMF and World Bank, and improvements in corporate earnings performance in the third quarter of 2017, especially in the *banking*, *plantation* and *oil and gas* sectors. The strong increase in global oil prices during the month, driven by stronger

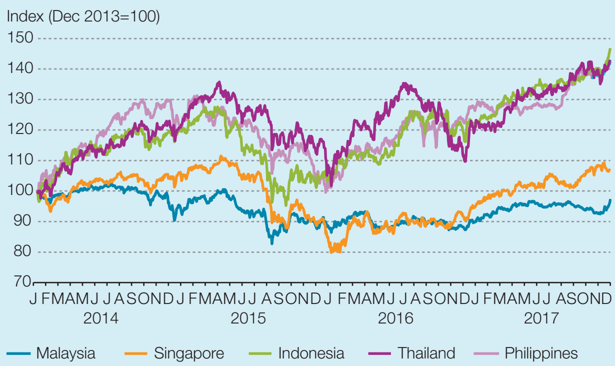
Chart 2.9: FBM KLCI vs MSCI Equity Indices

The FBM KLCI improved in line with the positive global equity market performance

Source: Bloomberg

Chart 2.10: Regional Equity Indices

The FBM KLCI ended higher in 2017 after three consecutive years of negative returns



Source: Bloomberg

global demand and sustained production cuts, also provided additional support to the *oil and gas* sector[27]. For the year, the FBM KLCI increased by 9.4% (2016: -3.0%) and closed at 1796.8 points. Amid rising concerns on global equity overvaluation, Malaysian equities remain fairly valued with a price-to-earnings ratio of 16.2 times, which is close to the 10-year average of 16.5 times[28].

Overall liquidity conditions remained sufficient

In 2017, overall banking system liquidity remained sufficient to support the financial intermediation

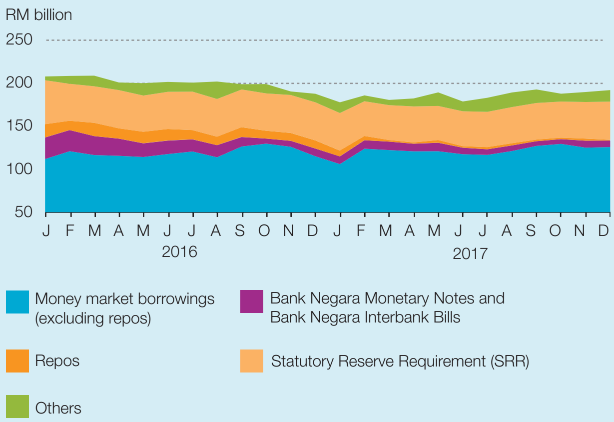
26 As at 3Q 2017, total unsold residential properties stood at 129,052 units (2016: 120,802 units, Average 2004-2016: 72,239 units).

27 On 30 November 2017, OPEC and Russia agreed on a nine-month extension of oil production cuts until end-2018, which were previously scheduled to expire in March 2018.

28 The price-to-earnings (P/E) ratio reflects how much investors value a company's stock based on its earnings. P/E ratios that trend much higher than its long-term average may indicate overvaluation.

Chart 2.11: Outstanding Ringgit Liquidity Placed with Bank Negara Malaysia (at end-period)

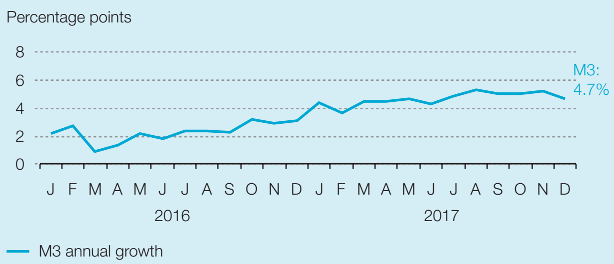
Outstanding ringgit liquidity placed with Bank Negara Malaysia remained sufficient



Source: Bank Negara Malaysia

Chart 2.12: M3 Growth

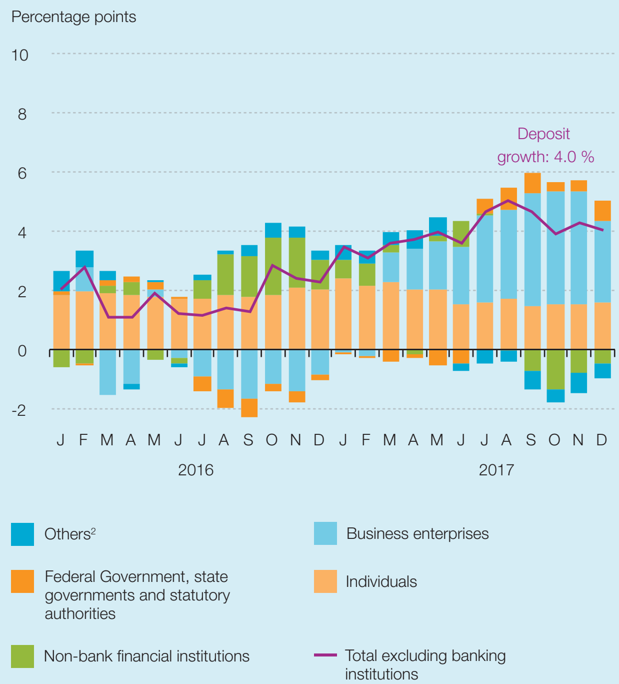
M3 growth increased in 2017



Source: Bank Negara Malaysia

Chart 2.13: Contribution to Banking System Deposit[1] Growth by Holder

Banking system deposit growth was higher in 2017



[1] Excludes deposits accepted from banking institutions
[2] Includes domestic other entities and non-bank foreign entities

Source: Bank Negara Malaysia

process. At the system level, aggregate outstanding liquidity placed with the Bank increased following capital inflows since the second quarter of the year. At the institutional level, most banking institutions continued to maintain surplus liquidity positions.

Throughout the year, the Bank's monetary operations remained focused on maintaining stability in the interbank market. In the first quarter of the year, the slight moderation in domestic liquidity arising from capital outflows were offset by liquidity injection operations through the reverse repo and foreign exchange swap facilities. Following the resumption of capital inflows from the second quarter onwards, the Bank was able to reduce its liquidity injection operations. Subsequently, activity in the domestic money market remained uninterrupted during the year.

Private sector liquidity, as measured by broad money (M3), grew at a much faster pace of 4.7% in 2017 (2016: 3.1%). The expansion in M3 continued to be supported by the extension of credit by banks to the private sector in the form of both loans and the purchase of corporate bonds. Total deposits in the banking system also recorded a higher annual growth rate of 4.0%, mainly due to a turnaround in deposits placed by businesses, which grew by 7.9% in 2017 (2016: -2.3%). Household deposit growth, however, moderated to 3.9% (2016: 5.1%) during the period.

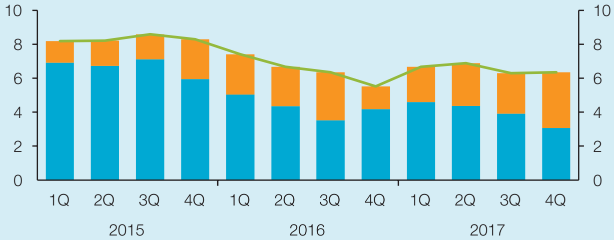
Financing to the private sector was driven by stronger growth in corporate bond issuances

Net financing through the banking system, non-bank financial institutions[29] and the corporate bond market expanded at an annual rate of 6.4% in 2017 (2016: 5.5%). The faster pace of growth in net financing during the year was driven by financing through the corporate bond market[30], which recorded

[29] Non-bank financial institutions comprise development financial institutions (DFIs) and major non-bank financial institutions.
[30] Excludes issuances by Cagamas and non-residents.

Chart 2.14: Total Net Financing to the Private Sector through Banks, Non-Bank Financial Institutions and Corporate Bonds

Increase in total net financing driven by corporate bonds

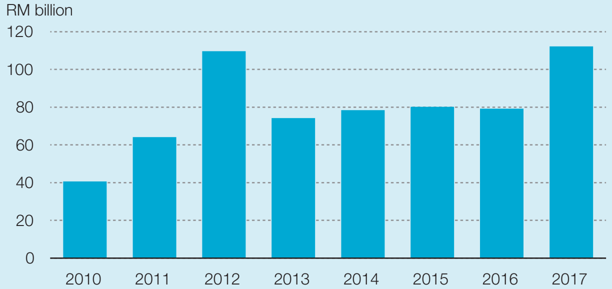


* Excludes issuances by Cagamas and non-residents.

Source: Bank Negara Malaysia

Chart 2.15: Gross Corporate Bond Issuances*

Issuances increased significantly in 2017



* Excludes issuances by Cagamas and non-residents.

Source: Bank Negara Malaysia

a strong double-digit annual growth of 15.4% (2016: 6.3%), the highest pace since 2012. In terms of contribution to net financing growth, corporate bonds outpaced loans[31] for the first time despite its relatively smaller weight[32]. The annual growth of outstanding loans moderated to 3.9% (2016: 5.3%) as business loans expanded at a slower pace given growth in repayments outweighed that in disbursements. This also reflected the diversified sources of financing in Malaysia with additional funds raised in the capital markets amid favourable market and economic conditions.

Business demand for funding from the capital markets increased significantly, with issuances of corporate bonds[33] reaching a 5-year high of RM112.2 billion in 2017 (2016: RM79.2 billion). The bulk of the bond issuances were from the *finance*, *insurance and real estate*; *electricity*, *gas and water supply*; and *construction* sectors, and were used to fund infrastructure projects and for working capital requirements. Financing through the equity market also increased significantly to RM12.2 billion (2016: RM7.0 billion), which reflected issuances of several large initial public offerings (IPOs) in line with improved market sentiments.

The moderation in the annual growth of outstanding business loans[34] (2017: 1.3%; 2016: 4.7%) was broad-based across most sectors, notably in the *manufacturing*; *wholesale and retail trade*, *restaurants*, *and hotels*; *transport*, *storage and communication*; *finance, insurance and business services*; and *real estate* sectors. The lower growth in business loans reflected higher growth in loan repayments of 7.9% (2016: 2.2%) relative to disbursements of 6.2% (2016: -0.3%). Larger business repayments reflected scheduled repayments and stronger business earnings recorded during the year. The amount of loan disbursements[35], however, increased (2017: RM750.0 billion; 2016: RM706.2 billion), in tandem with the growth in domestic demand of the economy. The increase in loan disbursements was distributed across various sectors, particularly to the *manufacturing*; *construction*; *wholesale and retail trade, restaurants and hotels*; and *primary agriculture* sectors.

The growth in household debt[36] continued to moderate during the year to 4.9% (2016: 5.4%), reflecting the moderation in loans for the *purchase of non-residential properties* and *personal financing*. The growth in *residential property* loans, which accounted for 52.0% of total household debt was sustained at 8.5% during the year (2016: 9.1%). Access to home financing remained intact for borrowers with the capacity to service their debt, supported by sustained approval rates for the purpose of *residential property* loans.

31 Includes outstanding loans extended by the banking system (both conventional and Islamic banks) and non-bank financial institutions.

32 The share of corporate bonds and loans in net financing are 25% and 75% respectively.

33 Excludes issuances by Cagamas and non-residents.

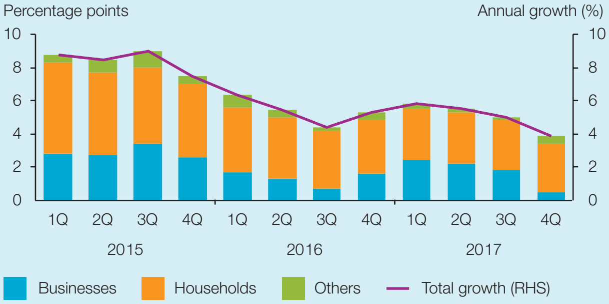
34 Includes outstanding loans of public enterprises (PEs), but excludes outstanding loans of domestic financial institutions, domestic non-bank financial institutions, Government, domestic other entities, and foreign entities with the banking system and DFIs. The change in the level of outstanding loans is total loans disbursed minus total loans repaid.

35 Includes loan disbursements to Small and Medium Enterprises (SMEs) and businesses other than SMEs.

36 Loans extended by banks, development financial institutions and major non-bank financial institutions.

Chart 2.16: Outstanding Loans by Borrowers*

Moderation in growth of total outstanding loans due mainly to business loans

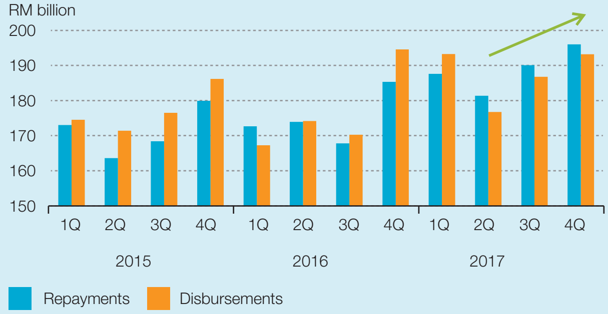


* Comprises outstanding loans from the banking system and non-bank financial institutions.

Source: Bank Negara Malaysia

Chart 2.17: Business Loan Repayments and Disbursements*

Business loan repayments outpaced disbursements in 2017



* Comprises loans from the banking system and development financial institutions (DFIs).

Source: Bank Negara Malaysia

Monetary Policy in 2017

Monetary Policy in 2017

MONETARY POLICY

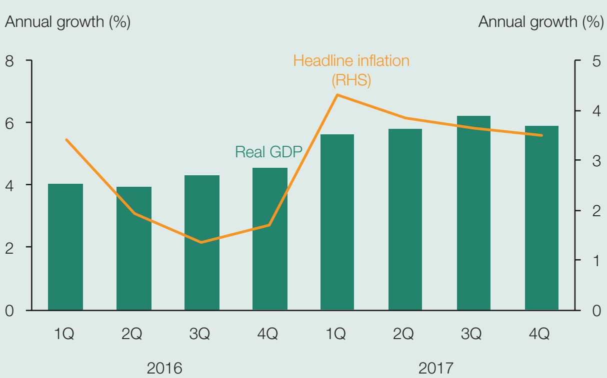
Monetary policy in 2017 focused on ensuring growth remained entrenched amid an environment of contained inflation

Monetary policy in 2017 focused on ensuring the growth of the Malaysian economy was firmly entrenched amid contained inflation. In the beginning of the year, downside risks to domestic growth arising from the external environment were prevalent. However, the upturn in global growth and trade during the course of the year resulted in a stronger growth momentum and a more favourable outlook. Inflation remained contained as the robust domestic demand was mitigated by some degree of spare capacity in the labour market and capital stock. Although the Overnight Policy Rate (OPR) was maintained at 3.00% in 2017, the Monetary Policy Committee (MPC) indicated in November that the degree of monetary accommodation could be reviewed, given the outlook of continued firm growth and contained inflation as the year progressed.

The Malaysian economy expanded by 5.9% in 2017 (2016: 4.2%), surpassing the initial projection of 4.3% - 4.8%. The expectation at the beginning of the year was for growth in 2017 to improve only slightly from 2016, amid pervasive downside risks from the external environment. During the course of the year, however, there was a strong upward shift in the growth trajectory and prospects. Global growth surprised on the upside and was stronger, more broad-based and synchronised. The continued robust global demand spurred global trade, which benefited Malaysia and other regional economies. Malaysia's gross exports growth persistently outperformed expectations, recording double-digit growth for the year. This had strong spillovers to the domestic economy through both the income and investment channels, as firms invested in productive capacity, raised wages and hired more workers. Consequently, this resulted in higher growth in private consumption and private investment. By the third quarter, growth for 2017 was expected to be significantly higher[1] than the initial forecast. More importantly, downside risks to the global environment receded, and upside potential became more apparent. However, downside risks remained, rooted in policy, political and geopolitical developments in the major economies.

Chart 3.1: GDP and Inflation

Entrenched economic growth amid contained inflation



Source: Department of Statistics, Malaysia and Bank Negara Malaysia

The headline inflation forecast for the year was 3.0% - 4.0% (2016: 2.1%). In terms of the expected trajectory, inflation was to peak early in the year, breaching 4.0%, and to moderate gradually thereafter. This was premised on expectations for global cost factors to wane. As the year progressed, however, the combination of stronger-than-expected global oil demand amid production cuts, adverse weather conditions[2] and geopolitical concerns in the Middle East contributed to higher global oil prices, which resulted in higher domestic fuel prices. Global oil and domestic fuel prices were expected to remain elevated.

[1] This was reflected in the growth projection for 2017 by the Ministry of Finance Malaysia of between 5.2% - 5.7% in the Economic Report 2017/2018 published in October 2017.

[2] The occurrence of Hurricane Harvey at the end of August 2017 led to unexpected supply disruptions in the US.

Given the developments in oil prices, the MPC assessed that the average inflation for the year would reach the upper end of the forecast range. However, a stronger ringgit exchange rate since April 2017 helped to contain the increase in production costs. More importantly, the higher inflation in 2017 was expected to be transitory, and this trend was expected to moderate in 2018 as the assessment was that the effect from global cost factors would be smaller relative to the previous year.

While core inflation was sustained by the robust domestic demand, the overall trend of core inflation was expected to be contained. Some degree of spare capacity in the labour market and capital stock, and continued expansion in productive capacity, were expected to allow the economy to meet the higher demand without exerting excessive price pressures.

Monetary and financing conditions remained stable and supportive of economic activity throughout the year. The growth of financing to the private sector was sustained and total banking system liquidity remained sufficient. The ringgit strengthened over the year, supported by the better-than-expected GDP growth performance. The ringgit also experienced more balanced demand and supply following the financial market development measures introduced by the Financial Markets Committee (FMC). The risks of financial imbalances were also contained. The prevailing micro- and macroprudential measures, including more prudent lending standards, were effective in limiting any excessiveness in credit conditions and the degree of imbalances in the property sector.

During the year, the MPC actively assessed the stance of monetary policy to ensure it remained consistent with the evolving prospects of growth and inflation. While the monetary policy accommodativeness remained necessary to ensure the improved growth prospects were sustained, it was also important for its degree to be appropriate to prevent a build-up of risks that could arise from interest rates being too low for a prolonged period of time. As the year progressed, the MPC recognised that the balance of risks to the growth and inflation outlook had shifted considerably, with greater signs of the domestic growth being firmly entrenched. The MPC therefore began to consider whether the favourable macroeconomic conditions could warrant an adjustment in the degree of monetary accommodation. Furthermore, it became increasingly evident that economic conditions that warranted the previous OPR reduction in 2016 had vastly improved. Consequently, in November, the MPC communicated its consideration for a potential review of the degree of monetary accommodation in the Monetary Policy Statement. In the MPC's assessment, any potential adjustment would reflect a normalisation from the previous monetary accommodation in July 2016, rather than a tightening of monetary conditions.

Beyond the scope of monetary policy, the MPC also recognised the need to assess the broader distributional effects of economic growth in assessing the underlying strength of the Malaysian economy. The MPC was mindful that issues such as income inequality, low productivity and quality job creation are more structural in nature. Remedial solutions would necessitate collaboration with other policymakers and targeted policies that lie beyond the capacity of monetary policy, which is a blunt macroeconomic instrument.

MONETARY OPERATIONS

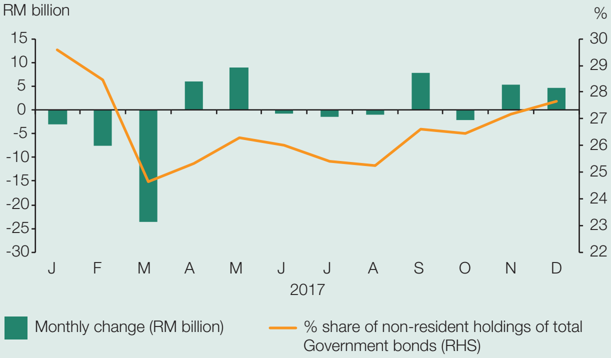
Monetary operations remained focused on ensuring smooth financial intermediation within the domestic banking system

In 2017, the Bank's monetary operations remained focused on ensuring smooth financial intermediation within the domestic banking system despite volatile movements in capital flows. Overall liquidity in the domestic banking system thus remained sufficient, with aggregate outstanding ringgit liquidity placed with the Bank increasing from RM184.8 billion in 2016 to RM189.1 billion in 2017.

Domestic financial markets were affected by periodic shifts in capital flows during the course of the year. In the first quarter, there were outflows from the unwinding of short-term speculative positions held by non-resident financial institutions and short-term asset managers following measures introduced by the FMC in December 2016, particularly from the Malaysian Government Securities (MGS) market. Nevertheless, there were capital inflows from the second quarter onwards, supported by positive investor sentiments arising from the recovery in global demand, improved global economic outlook and Malaysia's strong economic performance. The announcement of further initiatives to develop the onshore financial market by the FMC in April 2017 also led to renewed non-resident investor interest in Malaysian financial assets.

Chart 3.2: Monthly Change in Non-resident Holdings of Government Bonds*

Inflows from the second quarter, supported by positive investor sentiments

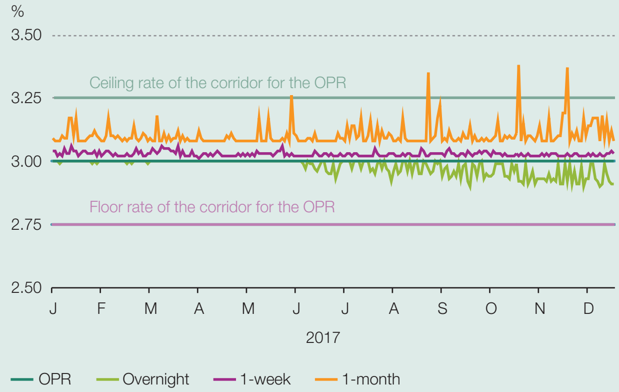


* Refers to Malaysian Government Securities (MGS), Malaysian Government Investment Issues (MGII) and Sukuk Perumahan Kerajaan (SPK)

Source: Bank Negara Malaysia

Chart 3.3: OPR and Interbank Rates

Interbank rates remained stable



Source: Bank Negara Malaysia

While there were shifts in capital flows, interbank money market rates remained stable across tenures and traded within fairly narrow spreads against the OPR. In particular, the average overnight interbank rate (AOIR) tracked the OPR closely, ranging between 2.90% and 3.00%. Kuala Lumpur Interbank Offered Rate (KLIBOR) rates were also stable throughout the year. Corporate deposit rates, which in the past several years faced upward pressure towards the end of the year[3], remained stable in 2017. In December 2017, the 3-month corporate deposit rate was unchanged at 4.00%, compared to the increase of 40 basis points to 4.20% in the previous year. Of note, rates on interest rate swaps (IRS), however, shifted upwards in November 2017, in part reflecting market expectations for an increase in the OPR subsequent to the release of the November Monetary Policy Statement.

In ensuring effective monetary policy operations and smooth financial intermediation, the Bank optimised the use of both liquidity absorption and injection instruments. For liquidity absorptions, the Bank utilised a wide range of both conventional and Islamic liquidity instruments. Direct money market borrowing and *Qard* acceptance were the main instruments for conventional and Islamic financial institutions, respectively. Demand for repo, which were longer-term in tenure, declined from 5.0% in 2016 to 0.5% in 2017 of total outstanding ringgit liquidity absorbed through monetary operations, reflecting greater demand by financial institutions for shorter-term placements to meet the short-term liquidity needs of their investors. The increase in *Qard* acceptance from 20.3% in 2016 to 26.1% in 2017 of total outstanding ringgit liquidity absorbed through monetary operations was mainly due to the increase in the share of Islamic surplus liquidity, which consequently increased the demand for Islamic liquidity instruments.

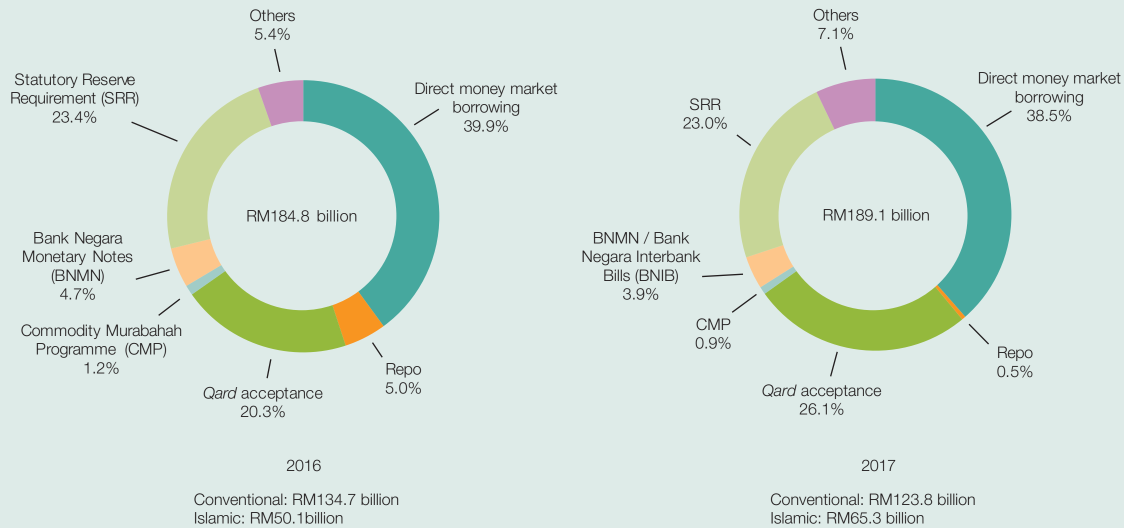
The Bank's liquidity injection operations also provided support to domestic liquidity conditions amid capital outflows during the first quarter of the year. This was done mainly through reverse repos and foreign exchange swap facilities. However, these liquidity injection operations declined following the resumption of capital inflows from the second quarter onwards.

To further enhance the efficiency and flexibility of liquidity management in the interbank market, the Bank introduced Bank Negara Interbank Bills (BNIB) in November 2017. The BNIB is only available and tradable between onshore banks and is recognised as Level 1 high-quality liquid assets (HQLA). As at end-2017, a total of RM5.0 billion of BNIB was issued via eight issuances. Moving forward, the BNIBs are expected to play a bigger role in complementing the direct borrowings of the Bank. Additionally, the Bank has also announced that the scope of eligible collateral for monetary operations will include banker's acceptance (BA) and negotiable instrument of deposits (NID) issued by AAA-rated financial institutions.

[3] Since 2014, corporate deposit rates have typically trended higher towards the end of the year due to competition for deposits among banks for window dressing purposes. This competition led to spillover effects on short-term money market rates.

Chart 3.4: Composition of Outstanding Ringgit Liquidity Placed with Bank Negara Malaysia (as at end-period)

Direct money market borrowing and *Qard* acceptance were the main liquidity absorption instruments



Note: Figures may not necessarily add up due to rounding

Source: Bank Negara Malaysia

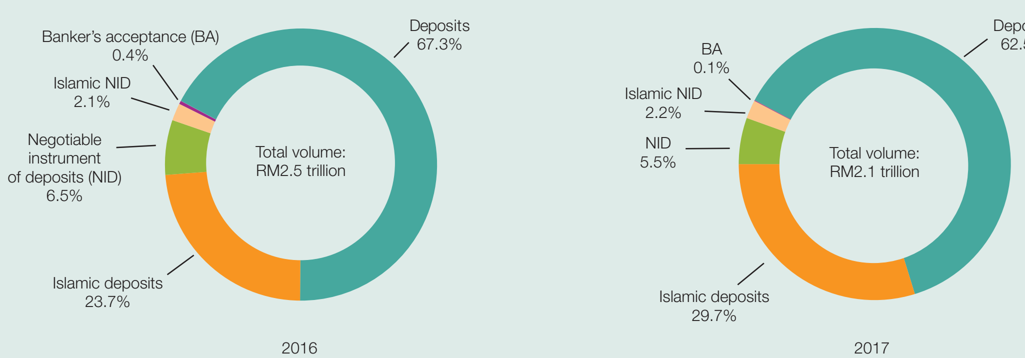
This will provide financial institutions with a wider range of securities that can be pledged to obtain liquidity under the Bank's Standing Facilities. This initiative is also expected to provide an impetus to the secondary trading and pricing of NID and BA.

In terms of money market transactions in the interbank market, both conventional and Islamic instruments, which comprised deposits, NID, and BA, recorded a lower volume of RM2.1 trillion (2016: RM2.5 trillion). Conventional money market deposits remained the major instrument of liquidity, representing 62.5% of the total volume traded, followed by Islamic deposits and NID (both conventional and Islamic).

In May 2017, the Bank issued the Code of Conduct for Malaysia Wholesale Financial Markets (CoC) as part of the initiative to enhance market professionalism and the integrity of market participants in both the money and foreign exchange markets. The new code supersedes the earlier version issued in 1994 and is consistent with the principles of the ACI Financial

Chart 3.5: Breakdown of Interbank Money Market Transactions

Interbank money market transactions mainly in conventional and Islamic deposits



Source: Bank Negara Malaysia

Markets Association (ACI) Model Code and Bank for International Settlements (BIS) FX Global Code. As part of continued efforts to foster market development, the Bank has extended the Regulated Short Selling (RSS) framework to Malaysian Government Investment Issues (MGII) held by both conventional and Islamic financial institutions based on the bilateral binding promise (*muwa'adah mulzimah*) concept. The revised framework will encourage repo activity and increase liquidity for MGII in the secondary market and tighten pricing gaps and yield differences between conventional and Islamic papers.

Outlook and Policy in 2018

Outlook and Policy in 2018

THE INTERNATIONAL ECONOMIC OUTLOOK

Synchronous uptrend in growth for most major economies in 2018

The global economy is forecast to expand at a faster pace in 2018, building on the strong positive momentum from the previous year. Growth will be driven primarily by private consumption and further lifted by investment activity in the advanced economies. In Asia, trade activity will continue to expand, albeit at a more moderate pace compared to 2017. This outlook will be further lifted by policy support, both on the monetary and fiscal fronts. Although global monetary policy is likely to continue on a path of gradual normalisation, financing conditions should remain relatively accommodative. Furthermore, additional spending on infrastructure in economies such as Thailand, Korea and the Philippines should provide impetus to regional growth. Given the broadly positive outlook, the assessment is for the trajectory of the current expansion to be sustained.

The strength of investments in the advanced economies is likely to persist through 2018. Business sentiment remains buoyant and profits have been strong in the improved global demand environment. Economic data showed that the need to upgrade existing capital stock remains. In addition, the recently passed Tax Cuts and Jobs Act in the US is likely to encourage further investment in the near term, as businesses benefit from corporate tax cuts and increased deductions for capital spending. In PR China, ongoing policy reforms to rebalance the economy are expected to lead to more moderate growth. Nevertheless, economies in the Asian region will, through trade channels, continue to benefit from the domestic demand strength in the advanced economies.

Growth in other emerging economies from Asia, Middle East, and Latin America is also projected to pick up. For commodity exporters, higher prices, notably for crude oil, will support a rebound in domestic demand following several years of below-trend growth. Furthermore, activity in several economies is projected to recover from the negative impact of reform policies in 2016 and 2017, with an example being India in the aftermath of demonetisation and GST implementation.

Risks to the global growth outlook are poised to become more broadly balanced. This is in contrast to the high prevalence of downside risks assessed in the past few years. On the upside, in the advanced economies, there is potential for investments to pick up further, and wages to rise as labour markets tighten. This would have positive bearing on both business and household spending, and generate more spillovers to the global economy through trade. In addition, the US administration's recent plans to increase spending on disaster relief and infrastructure in the 2018-19 fiscal years may also lend some upside risk to the outlook. Nevertheless, some downside risks from 2017 remain. Firstly, there is uncertainty regarding the impact of synchronised monetary policy normalisation across major economies. The global economy is shifting away from unprecedented levels of accommodative monetary conditions. Financial markets may correct abruptly if policy actions become misaligned from investors' expectations. Secondly, inward-looking trade policies remain a threat to global trade. Risks emerge mainly from protectionist measures by the US administration, and uncertainty in Europe amid pending new UK-EU trade agreements and the formation of key governments. Finally, geopolitical risks in relation to domestic conflicts, terrorism attacks and territorial disputes remain, which could affect sentiments in the global financial markets and dampen economic activity.

THE MALAYSIAN ECONOMY

In this positive environment, Malaysia is projected to remain firmly on a steady growth path to grow by 5.5% – 6.0% (2017: 5.9%).

The Malaysian economy is projected to expand by 5.5% - 6.0% in 2018

Malaysia's strong economic fundamentals, diversified structure and inherent dynamism have always been key factors to deliver economic growth. For 2018, growth prospects are further lifted by strengthening global economic conditions. Growth will be underpinned by continued expansion in private sector activity. The strong growth momentum will also be supported by the continued positive spillovers from the external sector to the domestic economic activity. Malaysia's trade performance will benefit from favourable global demand, exposure to the global technology cycle and new export production capacity. On the domestic front, continued income and employment growth will sustain household spending, amid the continuation of Government measures and improving consumer sentiments. Private investment activity is also projected to be sustained by capital spending for ongoing and new projects amid elevated business sentiments. On the other hand, public sector spending is expected to moderate given the continuation of fiscal consolidation efforts and the near completion of several major projects by public corporations.

The economic outlook is also characterised by some upside risks emanating from both external and domestic factors. Stronger-than-expected global demand will improve the prospects for export-oriented industries. This can translate into higher revenue and profits for businesses and higher income for households, further reinforcing business and consumer sentiments. The potential increase in minimum wage and faster-than-expected pickup in existing and new production facilities in various industries including oil & gas, resource-based manufacturing and E&E will also support the better growth outlook. Nonetheless, downside risks to growth remain. Unfavourable monetary and regulatory policy shifts in the advanced economies, rising trade protectionism by major trading partners and a sharper-than-expected growth moderation in PR China, on the other hand, may impact the strength of Malaysia's exports to the major trading partners. A re-emergence of volatile commodity prices or abrupt corrections in the international financial markets could also weigh down sentiments, dampening the strength of domestic economic activity.

Malaysia remains well positioned to weather these headwinds should the downside risks materialise. Past experiences have demonstrated that Malaysia has the economic and financial adaptability to manage these risks. The strategic policy imperatives and structural reforms that were undertaken over the years have endowed the Malaysian economy with multiple sources of growth, ample buffers and robust policy frameworks. Going forward, the positive economic environment will provide policymakers with ample policy space to continue with the necessary reforms. The domestic financial markets are resilient and well positioned to intermediate large swings of capital flows in the event of heightened financial market volatility, thus preserving orderly market conditions that are supportive of the real economy. Fundamentally, policymakers have the tools, capacity and flexibility to undertake the necessary measures to steer the economy on a steady growth path.

Domestic Demand Remains the Anchor of Growth

In 2018, the Malaysian economy is projected to expand by 5.5% – 6.0%. Private sector expenditure will remain the key driver of growth, underpinned mainly by continued growth in wages and employment, business optimism and favourable demand. Public sector expenditure is expected to decline due to the contraction in public investment amid more moderate growth in public consumption. The external sector is expected to benefit from better global growth, and is likely to generate positive spillovers to domestic economic activity.

Private consumption growth is projected to remain sustained at 7.2% in 2018. The key factors that will support consumption spending during the year include continued growth in employment and income, lower inflation, and improving sentiments. In particular, robust export performance is expected to support wages in the export-oriented industries amid continued growth in domestic economic activity. The continued Government measures will also increase household disposable income in 2018. These measures include the

Table 1

Real GDP by Expenditure (2010=100)

	2017*p*	2017*p*	2018*f*	2017*p*	2018*f*
	% of GDP	Annual change (%)		Contribution to growth (percentage point)	
Domestic Demand[1]	**92.2**	**6.5**	**5.7**	**6.0**	**5.3**
Private sector expenditure	71.2	7.5	7.6	5.3	5.4
Consumption	*53.7*	7.0	*7.2*	*3.7*	*3.8*
Investment	*17.4*	*9.3*	*9.1*	*1.6*	*1.6*
Public sector expenditure	21.0	3.3	-0.9	0.7	-0.2
Consumption	*13.0*	*5.4*	*0.6*	*0.7*	*0.1*
Investment	*8.0*	*0.1*	*-3.2*	*0.0*	*-0.3*
Change in Stocks	**0.0**			**0.0**	**0.0**
Net Exports of Goods and Services	**7.8**	**-1.1**	**5.5**	**-0.1**	**0.4**
Exports	72.9	9.6	8.8	6.7	6.4
Imports	65.1	11.0	9.1	6.8	5.9
Real Gross Domestic Product (GDP)	**100.0**	**5.9**	**5.5 ~ 6.0**	**5.9**	**5.5 ~ 6.0**

[1] Excluding stocks
p Preliminary
f Forecast

Note: Figures may not necessarily add up due to rounding

Source: Department of Statistics, Malaysia and Bank Negara Malaysia

continuation of *Bantuan Rakyat 1Malaysia* cash transfers, individual income tax reduction by two percentage points on taxable income between RM20,000 to RM70,000 per annum, and the special payment to all civil servants and retirees.

In 2018, labour market conditions are expected to remain favourable and supportive of growth. This is underpinned by continued strong economic activity and improving hiring sentiments. Employment is expected to remain expansionary, and job growth will be sufficiently robust to absorb new entrants into the labour force. As such, unemployment rate is expected to be relatively unchanged (3.2% - 3.5%; 2017p: 3.4%). Effective 1 January 2018, Malaysia has implemented the Employment Insurance System (EIS) and the Employers Undertaking (EU). These would be followed with a review of the minimum wage later in the year. While these reforms may entail some short-term adjustments, these measures are necessary to put Malaysia's labour market on a more competitive, resilient and flexible path going forward.

Private investment growth is projected to be sustained at 9.1% in 2018, supported by ongoing and new capital spending in both the manufacturing and services sectors, and strengthened by continued positive business sentiments. Mining investment, while remaining moderate, is estimated to exert a lesser drag to growth following the improvement in commodity prices. Investments in the export-oriented industries (for example, the E&E and resource-based industries) would continue to benefit from the expected expansion in global growth. By type of asset, investments in machinery and equipment (M&E) are expected to receive further impetus from the recent Government measures to encourage automation and innovation. Investments in structures would be supported mainly by ongoing multi-year projects in the broad property sector.

Public consumption is expected to register a marginal expansion of 0.6% in 2018 on account of more moderate growth in emoluments amid prudent spending on supplies and services. This is in line with the Government's commitment to reprioritise and rationalise non-critical expenditure.

Public investment is projected to decline by 3.2% due to lower capital spending by public corporations following the near completion of large-scale projects. Investment by the General Government is expected to increase, reflecting mainly higher investment to improve public infrastructure and transportation network.

Continued Expansion across All Economic Sectors

All economic sectors are projected to expand in 2018. The services and manufacturing sectors remain the key drivers to overall growth.

Table 1

Real GDP by Sector (2010=100)

	2017*p*	2017*p*	2018*f*	2017*p*	2018*f*
	% of GDP[1]	Annual change (%)		Contribution to growth (ppt)	
Services	54.4	6.2	6.1	3.4	3.3
Manufacturing	23.0	6.0	5.9	1.4	1.4
Mining and quarrying	8.4	1.1	1.8	0.1	0.2
Agriculture	8.2	7.2	3.6	0.6	0.3
Construction	4.6	6.7	7.3	0.3	0.3
Real GDP	**100.0[1]**	**5.9**	**5.5 ~ 6.0**	**5.9[1]**	**5.5 ~ 6.0**

[1] Figures may not necessarily add up due to rounding and exclusion of import duties component
p Preliminary
f Forecast

Source: Department of Statistics, Malaysia and Bank Negara Malaysia

The **services** sector is expected to record sustained expansion. The *wholesale and retail trade*, *food & beverages* and *accommodation sub-sectors* are anticipated to benefit from favourable labour market conditions. Similarly, growth in the *information and communication* sub-sector is expected to remain strong, reflecting sustained demand for telecommunication and computer services. In the *transport and storage* sub-sector, growth will be driven by continued strength in trade activity.

Growth in the **manufacturing** sector is projected to be sustained. In the export-oriented industries, growth will be supported mainly by continued demand for chemical-related products in the primary-related cluster. Production of E&E products will be sustained, in line with the expected normalisation in global semiconductors demand. Growth will also be supported by new production capacity in the resource-based industries such as petrochemicals and rubber gloves. In the domestic-oriented industries, growth will be driven by higher production of construction-related materials for new and on-going infrastructure projects as well as continued strength in demand for food-related products.

The **construction** sector is expected to record a stronger growth. This will be driven primarily by large new and existing multi-year civil engineering projects. These projects are mainly in the transportation and utilities segment.

In the commodities sector, the **mining** sector is projected to register higher growth, reflecting the continued pickup of natural gas production from the new gas fields and production facilities. The **agriculture** sector is expected to register a more moderate growth. This mainly reflects the normalisation in crude palm oil production growth following the exceptional post-El Niño rebound in 2017.

Potential Output and the Output Gap of the Malaysian Economy

Potential output is the maximum level of output that an economy can produce given its existing resources – comprising capital, labour and technology – without generating inflationary pressures. Output beyond this potential indicates the possible presence of inflationary pressures, while the converse reflects disinflationary pressures. Given the Bank's objective of maintaining price stability[1], the potential output, and the level of actual output in relation to potential (also known as the output gap[2]), are important indicators of inflation.

The Bank estimates that Malaysia's potential output expanded by 5.4% in 2017 (2016: 5.3%; 2010-2015 average: 5.0%), following higher capital expenditure in the private and public sectors. The faster pace of capital expansion was in line with higher demand for existing resources, as robust global growth resulted in spillovers to the domestic economy. The stronger demand conditions were reflected in higher capacity utilisation in the manufacturing sector during the year (average MIER capacity utilisation rate in 2017: 82.6%; 2016: 77.5%).

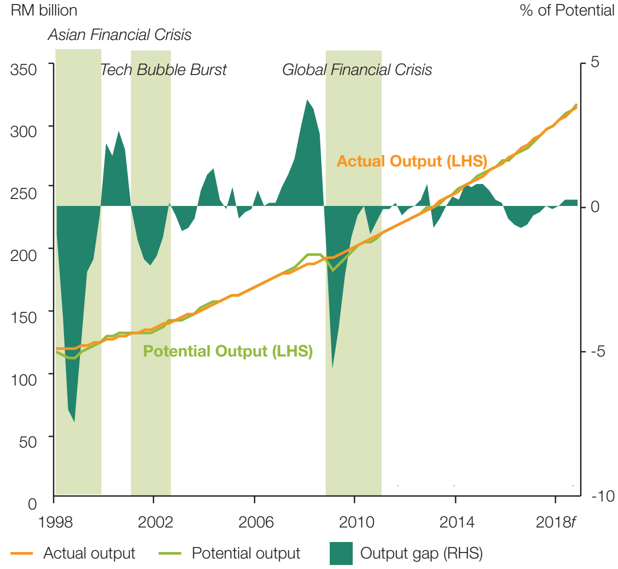
Despite faster GDP growth (2017: 5.9%; 2016: 4.2%), the output gap remained negligible during the year (2016: -0.6%), as the faster growth was accompanied by concurrent improvements in potential output. The increase in inflation to 3.7% (2016: 2.1%) in 2017 was mostly accounted for by cost factors (in particular, higher domestic fuel prices and the recovery in global commodity prices) and is expected to moderate going forward.

Looking ahead, the output gap is expected to turn marginally positive in 2018, in line with the continued growth momentum within the economy. Continued growth in the labour force and capital deepening will, however, result in an increase in potential output, thereby mitigating the build-up of demand-driven inflationary pressures.

Over the longer time horizon, there are ongoing policy measures that will boost potential output and hence sustain economic growth at a higher level. Some of these policies aim to boost labour force participation and encourage more efficient utilisation of capital. For example, these include policies to increase the participation of women in the workforce and to promote sharing economy activities that will unlock previously idle assets. In addition, Government initiatives to accelerate the development of the digital economy will increase productivity. Among others, this includes the implementation of the Digital Free Trade Zone (DFTZ), which will provide a consolidated digital platform for Small and Medium Enterprises (SMEs) to gain access to global markets. Such reforms will secure the long-term sustainability and quality of growth for the Malaysian economy.

Chart 1: Actual and Potential Output

Output gap to turn marginally positive in 2018



Year	Annual Growth in Potential Output (%)
2016	5.3
2017*e*	5.4
2018*f*	5.0 ~ 5.5

e Estimate
f Forecast

Source: Department of Statistics, Malaysia and Bank Negara Malaysia estimates

[1] Central Bank of Malaysia Act 2009.
[2] More formally, the output gap is defined as $\frac{\text{(Actual output-Potential output)}}{\text{Potential output}} \times 100\%$

EXTERNAL SECTOR

Malaysia's exports and current account surplus to remain firm in 2018

The external sector is projected to remain resilient amid further strengthening in the global economy in 2018. Malaysia's export performance will be supported by favourable demand from major trading partners, continued expansion in the global technology upcycle and broadly sustained commodity prices. Gross exports and gross imports are projected to grow at above-average trends, albeit at a more sustainable pace of 8.4% and 8.6%, respectively. Amid continued strength in trade activity, the goods surplus of the current account is expected to increase. Deficits in the services and income accounts, however, will continue to weigh on the current account balance. Overall, Malaysia's current account balance is expected to register a surplus of 2.0 - 3.0% of GNI.

Exports to benefit from favourable external demand

Malaysia's gross export growth will be supported by demand from Malaysia's key trading partners, such as the US, EU and regional economies. Broad-based improvement in forward looking indicators such as business confidence indices of major trading partners, manufacturing production indices in the advanced and regional economies and the US Technology Pulse index suggest continued strength of manufactured exports in the early quarters of 2018. In particular, continued investments in the advanced economies will lend support to the global electronics upcycle as the boost from smartphone demand eases. Malaysia's semiconductor exports (2017: 19.0% share of gross exports) will strongly benefit from the increasing pervasiveness of semiconductors used in automobiles and consumer electronics such as connected devices and smart appliances. Insights from the Bank's regional economic surveillance suggest that exports of semiconductors for the automotive market is likely to remain firm on account of rising semiconductor content per vehicle and growing demand for advanced vehicle safety, infotainment and comfort systems. For non-E&E exports such as petroleum, chemical and metal products, growth will be supported by steady demand from most regional countries. PR China's (2017: 13.5% share of gross exports) rebalancing efforts, however, may weigh down export of these products.

Table 4.1

External Trade

	2012-2016 *average*	2017*p*	2018*f*
	Annual change (%)		
Gross exports	**2.5**	**18.9**	**8.4**
of which:			
Manufactured	5.0	18.9	9.5
Agriculture	-5.4	10.9	3.5
Minerals	-5.7	23.9	3.7
Gross imports	**4.1**	**19.9**	**8.6**
of which:			
Capital goods	4.9	15.3	3.4
Intermediate goods	0.8	20.0	5.8
Consumption goods	10.5	6.1	2.5
Trade balance (RM billion)	**85.9**	**97.2**	**104.2**

p Preliminary
f Forecast

Source: Department of Statistics, Malaysia and Bank Negara Malaysia

Increase in domestic productive capacity to support export growth

Capacity expansions particularly in the export-oriented manufacturing and mining sectors are also expected to support export growth. Of note would be the commencement of several approved investments, including the relocation of a sizeable E&E production line to Malaysia, which will contribute to the exports of high-value wireless communication chips. Firms in the resource-based manufacturing industries, such as petrochemicals and rubber gloves, have announced operationalisation of new manufacturing plants. The anticipated pickup in crude oil and LNG production from existing and recently commenced facilities will also provide some support to commodity export volume growth. Arising from these developments, growth in Malaysia's manufacturing exports is expected to remain at above-average trend, although the pace is expected to ease. In tandem with the performance in manufacturing exports, imports of intermediate inputs will continue to expand to cater for export-oriented manufacturing production.

Imports supported by continued expansion in domestic demand

Imports of intermediate inputs for domestic production[1] will be supported by sustained private sector spending.

[1] Using the 2010 input-output tables published by the Department of Statistics, Malaysia, 51.7% share of total gross imports are intended for domestic use.

Similarly, consumption imports will also expand, reflecting steady household demand for imported apparel, food and beverages. The decline in capital spending by public corporations, however, will partly weigh on capital imports as major projects are near completion. The moderation in capital import growth also reflects the high base in 2017, on account of the delivery of an oil and gas platform in the first quarter of 2017.

More moderate commodity price growth

Export prices of major commodities are expected to diverge in 2018, after the synchronous and strong rebound in 2017. Mineral prices will continue to increase, but at a smaller magnitude compared to 2017. The relatively smaller price increase will contribute to slower crude oil export growth. Similarly, slower increase in LNG price will also result in a more moderate expansion in LNG exports. In contrast, major agriculture export prices, particularly crude palm oil (CPO) is likely to decline reflecting elevated inventory levels as the recovery in CPO output continues post-El Niño. The slower growth in commodity prices will also be reflected in the lower exports of resource-based manufactured exports (e.g. petrochemicals and oleochemicals) and intermediate imports (e.g. fuel and lubricants) which use these raw commodities as feedstock.

On balance, Malaysia's export outlook will remain firm, supported by continued strength in export volumes amid a moderation in export price growth. Of importance, while the pace of overall export and import expansion is expected to moderate, it continues to exceed the recent five-year average performance. Consequently, the goods surplus in the Balance of Payments is forecast to rise to RM120.5 billion.

Table 4.2

Current Account of Balance of Payments[1]

Item (Net)	2017*p*	2018*f*
	RM billion	
Goods	118.1	120.5
Services	-23.1	-23.2
Primary income	-36.1	-39.1
Secondary income	-18.6	-19.3
Current account balance	**40.3**	**38.9**
% of GNI	*3.1*	*2.0 ~ 3.0*

[1] The data are compiled in accordance with the Sixth Edition of the International Monetary Fund (IMF)'s Balance of Payments and International Investment Position Manual (BPM6)

p Preliminary

f Forecast

Note: Figures may not necessarily add up due to rounding

Source: Department of Statistics, Malaysia and Bank Negara Malaysia

The services account is projected to record a marginally higher deficit of RM23.2 billion, owing to higher net transport payments, as local firms continue to rely on foreign freight providers to transport goods. In addition, payments for professional and technical services are also expected to rise as firms engage in foreign expertise to facilitate construction of high-end commercial projects and civil engineering projects which use complex technologies. The travel account, which is the largest services account in surplus, will increase on expectations of higher tourist arrivals and rising per capita spending. Tourism Malaysia targets tourist arrivals to edge up to 33.1 million in 2018, from 25.9 million in 2017.

The income accounts are also projected to record a wider deficit. The primary income deficit will increase to RM39.1 billion as locally-incorporated multinational corporations are expected to continue to earn sizeable profits, especially in the manufacturing sector, in tandem with improved global demand. This will more than offset the increase in income accrued to Malaysian firms investing abroad, particularly in the mining sector which accounts for more than one-third of investment income receipts. The secondary income account is expected to register a larger deficit of RM19.3 billion due to higher outward remittances by foreign workers.

INFLATION OUTLOOK

Headline inflation to moderate in 2018 due mainly to a smaller contribution from global cost factors

Headline inflation is expected to average between 2.0% – 3.0% in 2018 (2017: 3.7%). While global energy and commodity prices are expected to trend higher in 2018, the higher base in 2017 will result in a smaller contribution to headline inflation. In addition, a stronger ringgit exchange rate compared to 2017 will partially offset the impact of higher global energy and commodity prices. It will also contain increases in import costs. Given the dependency of domestic inflation on the trajectory of global oil prices, there remains a high degree of uncertainty surrounding the inflation projection. Underlying inflation, as measured by core inflation, is also expected to moderate in

2018, due to smaller cost pass-through to retail prices compared to the previous year. Inflationary pressures from domestic demand factors will be contained by improving labour productivity and ongoing investments for capacity expansion.

Global oil prices are expected to be higher in 2018 supported by continued tightness in the global oil market as the global oil output cuts agreement between Organization of the Petroleum Exporting Countries (OPEC) and several non-OPEC producers, notably Russia, has been extended to end-2018. Oil prices will also be supported by higher global oil demand amid improvements in global economic growth. The IMF projects crude oil prices to average at USD60 per barrel in 2018[2], an 11.7% increase compared to 2017 (2017: +23.1%). While the higher global oil prices will lead to higher domestic fuel prices in 2018, the higher base of domestic fuel prices in 2017 and a stronger ringgit exchange rate in 2018 could result in a smaller contribution of domestic fuel prices to domestic headline inflation.

Similar to global oil prices, other external cost factors are also expected to register some increases. Higher global demand for food amid sufficient supply is expected to lead to slight increases in food prices during the year. In addition, the weighted inflation rate of Malaysia's import partners is projected to increase slightly in 2018, following the continued cyclical recovery in global demand. However, in some major economies, the risks of higher-than-expected inflation remain due to the tighter labour market conditions, which may lead to accelerations in wage growth and hence, inflationary pressures.

These smaller increases in external cost factors, combined with a stronger ringgit exchange rate are expected to result in a relatively subdued cost environment for firms. Against the backdrop of sustained growth in domestic demand, however, some firms that have not fully passed on the higher costs faced in previous years could continue to raise retail prices in 2018. Nevertheless, the extent of such increases in prices is expected to be smaller. The Bank's Regional Economic Surveillance (RES) team reports that amid stronger competition, firms are finding it more challenging to pass on higher costs to retail prices as consumers are now more price-sensitive.

Continued expansion in demand conditions is expected to lead to a marginally positive output gap in 2018. However, price pressures arising from demand factors are expected to be limited, contained by improving labour productivity and ongoing investments for capacity expansion. In the labour market, the unemployment rate is expected to remain relatively stable as the high employment growth will be matched by the expansion in the labour force. In addition, wage growth is expected to remain stable. The Malaysian Employers Federation (MEF)[3] reports that employers expect salary increments to average at approximately 5.5% in 2018 (2017: 5.5%). The tightness in capital stock seen in 2017 is also not expected to persist, following the expansion in firms' productive capacity. Private investment grew by 9.3% in 2017 (2016: 4.3%) and is expected to be sustained in 2018, further expanding firms' productive capacity.

The inflation outlook is, however, subject to two key risks. Externally, stronger-than-anticipated increase in global oil prices could lead to headline inflation averaging higher. Global oil price movements remain uncertain, subject to geopolitical risks and developments in the US shale oil industry. Domestically, stronger-than-expected growth in demand could support larger cost pass-through to prices, and risk stronger demand-driven price pressures.

MONETARY POLICY

Monetary policy in 2018 will focus on ensuring the sustainable growth of the Malaysian economy with price stability

The global economy is seeing stronger growth prospects compared to a year ago. Growth is expected to continue to be broad-based, entrenched and synchronised across regions. The stronger global economic activity will be underpinned by more robust investments in the

[2] The IMF projection was published in IMF World Economic Outlook in January 2018. The price is the average price of Dated Brent, West Texas Intermediate (WTI) and Dubai Fateh crude oil, equally weighted.

[3] Refers to the MEF Salary Survey for Executives and Non Executives 2017. The salary increment figures used are simple averages of employers' expectations of salary increments for both executives and non-executives.

advanced economies. Asian economies, including Malaysia, will continue to benefit from sustained strength in global trade even as it is projected to moderate from the strong growth recorded in 2017.

At this juncture, upside potential to the global growth outlook marks a distinction from past years, which had been dominated by downside risks. The considerable improvement in the upside potential is influenced mainly by the prospects of higher wage growth in the advanced economies and greater positive spillovers from stronger growth in the advanced economies to the global economy through trade. However, the potential upsurge of uncertainties surrounding geopolitical developments, repercussions from trade tensions, global oil and commodity prices, and shifts in capital flows amid ongoing monetary policy normalisation in the major economies weigh on the outlook. A key concern is that the international financial markets could experience renewed volatility, which may be triggered by a deviation from the expected path of monetary policy normalisation in the advanced economies, escalation of geopolitical risks and correction in overvalued financial assets globally. Overall, taking all these factors into account, risks to the global growth outlook are now balanced.

The Malaysian economy is expected to experience sustained growth momentum in 2018 within the range of 5.5% - 6.0%, after the remarkable pace of economic expansion in 2017. Domestic demand will continue to drive growth, underpinned by favourable income and employment conditions, and new and ongoing infrastructure projects and capital spending. Export growth will moderate[4], but remain above long-term averages[5]. The domestic economy will continue to benefit from positive spillovers from the external sector, particularly given ongoing investments by firms to expand their productive capacity in meeting the global demand.

Improving consumer and business sentiments also provide indication of more robust private expenditure growth. However, it is also important to note that consumer sentiments have yet to reach the optimism threshold[6], and this may weigh on the outlook for private consumption. The subdued consumer sentiments may in part be a reflection of the distributional issues of growth and income, which need to be addressed by structural policies. The Monetary Policy Committee (MPC), however, is cognisant of the importance of monitoring how monetary policy actions could interact with such issues. On balance, given the optimism on the global growth outlook and sustained domestic demand, the overall outlook is for domestic growth to remain firmly on a steady growth path.

Headline inflation is projected to average lower, within the range of 2.0% – 3.0% in 2018. The lower inflation compared to 2017 is due mainly to a smaller contribution from global energy and commodity prices. A stronger ringgit exchange rate compared to 2017 will also mitigate import costs. Inflationary pressure from domestic demand factors will be contained by improving labour productivity and ongoing investments for capacity expansion. The inflation outlook, however, depends on the trajectory of global oil prices, which remains highly uncertain.

Given the continuing positive macroeconomic outlook and firm growth path, the MPC decided to normalise the degree of monetary accommodation at the January 2018 MPC meeting. The MPC raised the Overnight Policy Rate (OPR) by 25 basis points to 3.25%. This is aligned with the focus of monetary policy for the year, which is to ensure that the monetary policy stance is appropriate for sustainable growth prospects moving forward. The MPC also recognises the need to prevent the build-up of risks that could arise from interest rates being too low for a prolonged period of time, even as the risks of financial imbalances currently remain contained.

The current level of the OPR will continue to support the Malaysian economy. The MPC will monitor closely the evolving economic outlook, including the impact of the OPR adjustment in January 2018. The Bank's monetary operations will continue to ensure that domestic liquidity in the financial system will remain sufficient to support the orderly functioning of the domestic financial markets.

4 The expected moderation in export growth is in part due to the high base in 2017 and dissipating support from commodity prices.

5 Refers to the 5-year average (2012-2016: 2.5%) and 10-year average (2007-2016: 3.3%).

6 The Malaysian Institute of Economic Research (MIER) Consumer Sentiments Index as at 4Q 2017, Nielsen Consumer Confidence Index as at 3Q 2017 and Mastercard Index of Consumer Confidence as at 2H 2017, were all below the optimism thresholds.

FISCAL POLICY

Lower fiscal deficit target of 2.8% of GDP in 2018

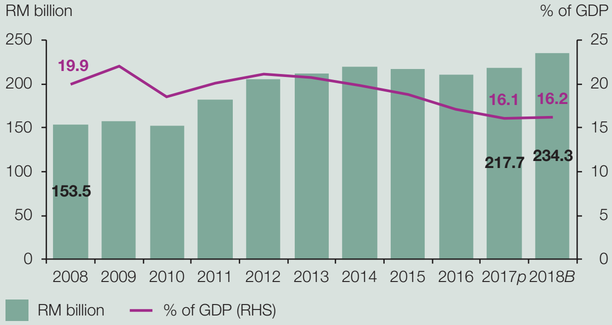
Fiscal policy in 2018 will continue to focus on strengthening the Government's fiscal position, while ensuring sustainable and more inclusive economic growth. In consonance with a robust growth environment, the Federal Government's fiscal deficit is expected to narrow further to 2.8% of GDP in 2018 (2017: -3.0%; from a peak of 6.7% of GDP in 2009), supported by higher growth in revenue. This marks the ninth consecutive year of fiscal consolidation, which is a reflection of the Government's commitment towards fiscal reform.

Fiscal reforms over the past few years have ensured that the Government maintained its fiscal position on a consolidation path. This was achieved through initiatives to optimise both expenditures and enhance revenues. The moderation in growth of key operating expenditure items reflects the Government's efforts to rein in spending. The share of operating expenditure as a percentage of GDP declined to 16.1% in 2017 compared to 17.1% in 2016 due to subsidy rationalisation and a reduction in non-critical spending on grants and transfers. For 2018, the share of operating expenditure is expected to amount to 16.2% of GDP. The Government also continued to diversify its sources of revenue through the introduction of new measures which include a spectrum auction[7], vehicle entry permits and a tourism tax. Measures to enhance tax compliance were further reinforced by the Collection Intelligence Arrangement (CIA) through integrated information sharing across the Inland Revenue Board, Royal Malaysian Customs Department and the Companies Commission of Malaysia.

As outlined in the 2018 Budget, fiscal resources in 2018 will prioritise infrastructure projects with large multiplier effects, capacity building programmes and initiatives to raise productivity. These include public infrastructure projects such as highways, railways and urban public transportation[8]. In fortifying the fourth industrial revolution

Chart 4.1: Federal Government Operating Expenditure

Federal Government operating expenditure as a percentage of GDP has gradually declined since 2012



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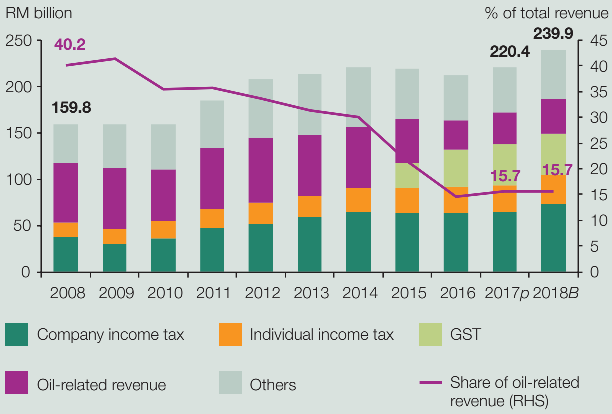
B Budget

Source: Ministry of Finance, Malaysia

Chart 4.2: Federal Government Revenue

Share of oil-related revenue has declined following revenue diversification measures



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B Budget

Source: Ministry of Finance, Malaysia

(Industrial Revolution 4.0) and the digital economy, the Government will continue to promote measures to incentivise innovation and automation[9], which are necessary to increase Malaysia's competitiveness. Emphasis has also been placed on human capital development through the enhancement of various active labour market programmes[10] consistent with the

[7] A spectrum auction is a process where the government auctions the right to companies to use specific radio frequencies or radio waves, for various purposes including telecommunications, aeronautics, and industrial use. A well-designed auction could efficiently allocate resources to the parties that value them the most, while generating government revenue in the process.

[8] Public infrastructure projects include the Pan Borneo Highway, East-Coast Rail Link (ECRL), High Speed Rail (HSR) and Mass Rapid Transit Line 2 (MRT2).

[9] These include matching grants under the Domestic Investment Strategic Fund to enhance smart manufacturing facilities and the Green Technology Financing scheme to promote investment in the green technology industry.

[10] Examples include the implementation of the Technical Vocational Education Training (TVET) Masterplan, establishment of Science, Technology, Engineering, and Mathematics (STEM) centres, and apprenticeship programmes and open interviews under 1Malaysia Training Scheme (SL1M).

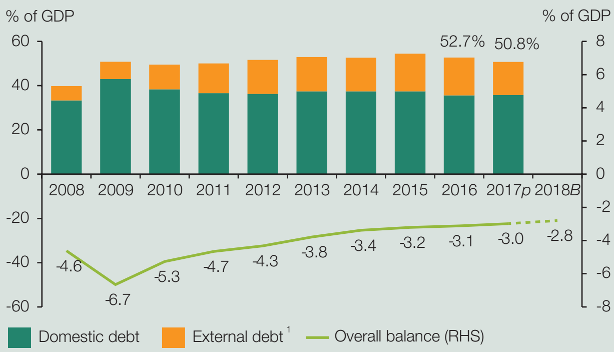
aspirations of *Transformasi Nasional 2050*[11], such that resources are concentrated on developing future-relevant skills.

In ensuring inclusive economic growth, the Budget also lends support towards the lower- and middle-income segments through welfare enhancement programmes and fiscal transfers[12]. These programmes will provide support to private consumption spending given the higher marginal propensity to consume of these segments. To sustain the capacity of the underserved groups to cope with the higher cost of living, socio-economic assistance is also dispersed through various programmes, including affordable housing[13] and educational support[14].

The Government has indicated its commitment to the fiscal consolidation plan of achieving a near-balanced budget over the medium term. Towards this end, the adoption of the Medium Term Fiscal Framework since 2015 could enhance communication and increase transparency on the direction of fiscal policy. However, further enhancement of the Medium Term Fiscal Framework is critical. This is to ensure that spending on various programmes and projects, particularly those extending beyond the annual planning horizon will remain within the budgeted expenditure. This will provide fiscal flexibility and support the Fiscal Policy Committee in ensuring the sustainability of public finance and the effectiveness of the Government's fiscal policy.

Chart 4.3: Federal Government Fiscal Balance and Debt

This year marks the ninth consecutive year of fiscal consolidation



[1] External debt comprises foreign currency debt (offshore borrowing) and non-resident holdings of RM-denominated debt (MGS, GII, T-bills and *Sukuk Perumahan Kerajaan*)
p Preliminary
B Budget
Source: Ministry of Finance, Malaysia

Table 4.3: Federal Government Finance

	RM billion		Annual change (%)	
	2017*p*	2018*B*	2017*p*	2018*B*
Oil price (USD/barrel)	50	52		
Revenue	220.4	239.9	3.8	8.8
Total expenditure	262.6	280.3	4.1	6.7
Operating expenditure	*217.7*	*234.3*	*3.6*	*7.6*
Gross development expenditure	*44.9*	*46.0*	*6.9*	*2.5*
Loan recoveries	1.9	0.6		
Overall balance	**-40.3**	**-39.8**		
% of GDP	**-3.0**	**-2.8**		
Sources of financing:				
Net domestic borrowing	40.8	-		
Net external borrowing	-0.3	-		
Realisable assets[1] and adjustments	-0.1	-		

[1] A negative (-) sign indicates a build-up in assets
p Preliminary
B Budget
Note: Numbers may not add up due to rounding
Source: Ministry of Finance, Malaysia

[11] *Transformasi Nasional 2050* (TN50) is an initiative to plan for the future of Malaysia for the year 2020 to 2050.
[12] Welfare enhancement programmes and fiscal transfers include *Bantuan Rakyat 1Malaysia* (BR1M) and a 2 percentage point reduction in income tax for the chargeable income tax band between RM20,000 and RM70,000.
[13] Affordable housing schemes include the People's Housing Programme (PPR), *Rumah Mesra Rakyat*, PR1MA and PPA1M.
[14] The Government announced matching grants of RM500 for contributors between 7 and 12 years old under *Skim Simpanan Pendidikan Nasional 1Malaysia* (SSPN1M).

The Living Wage: Beyond Making Ends Meet

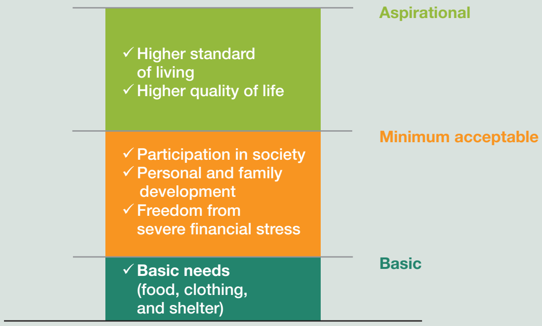
By Eilyn Chong and Farina Adam Khong

Introduction

The concept of a 'minimum acceptable' standard of living goes beyond being able to afford the necessities, such as food, clothing, and shelter[1]. This standard of living should include the ability to meaningfully participate in society, the opportunity for personal and family development, and freedom from severe financial stress. At the same time, it should reflect needs, not wants. It does not capture the cost of lifestyle, which is the spending to fulfil the desires for an aspirational living standard (Figure 1).

Figure 1: Different Concepts of Living Standard

The living wage is the wage level that could afford the minimum acceptable living standard



Source: Bank Negara Malaysia

In recent years, many low-wage employees across countries have found it difficult to attain a minimum acceptable living standard. Such development has prompted calls for a living wage – a wage level that could afford such a living standard. This article discusses the motivation of introducing the living wage; the estimation of a representative living wage level for Kuala Lumpur; international experiences in adopting a living wage; and the potential impact on the economy, employers, and employees. While living wage is the standard terminology used in the literature to describe the level of income needed for a household to afford a minimum acceptable standard of living, in practice, this standard of living could be achieved through various sources of income besides wages, such as non-wage work benefits and social assistance. For simplicity, this article will use the term 'living wage' to mean income from all sources; i.e. from wages, benefits, and other non-wage incomes.

In 2016, a typical family of two working adults and two children in the United States (US) needed to work nearly four full-time minimum wage jobs to earn a living wage (Glasmeier and Nadeau, 2017). In 2017, more than one-fifth of the employees in the United Kingdom (UK) were still earning below the living wage (IHS Markit, 2017).

In Malaysia, the bottom 40% of households by income experienced a notable increase in average monthly income of 6% per year between 2014 and 2016. Yet, this 6% growth did not amount to much because of the low base. In absolute terms, the monthly income for this group grew from RM2,537 to RM2,848, which is equivalent to a small average increase of about RM150 per year relative to other income groups[2]. After accounting for the increase in the cost of living, households in the bottom 40% experienced a 3.8% growth in real income. For some households, especially the ones with additional dependants, the small increase in income may suffice to keep up with the increase in the price of basic necessities but falls short of achieving a minimum acceptable standard of living[3].

1 The World Bank calculates the global poverty line based on the costs of basic food, clothing, and shelter.
2 The middle 40% of households by income and top 20% experienced an average increase of RM420 per year and RM892 per year respectively. Source: Report of Household Income and Basic Amenities Survey 2016, Department of Statistics, Malaysia.
3 For example, the increase in income may not be able to keep up with the increase in expenditure associated with the expansion in family size.

As Malaysia moves closer towards becoming a high-income nation, it is timely to aspire for all citizens to attain at least a minimum acceptable living standard. The provision of a living wage can be a step towards that goal. Using the living wage as a benchmark to assess the adequacy of current wages and social assistance, international experiences suggest that it has the potential to inform, challenge, and enhance policies towards the goal of achieving a minimum acceptable living standard. As such, a significant amount of consideration is needed in calculating a representative living wage level.

The motivations for a living wage

A range of market imperfections, such as unequal market power and labour immobility, may depress wages in favour of large employers. Support for a living wage was particularly strong during the British Industrial Revolution in the 18th century, in response to the low pay and bad working conditions for manual workers. The more recent calls for a living wage over the past two decades reflect renewed efforts to enable workers to afford a minimum acceptable standard of living, amid a large number of underpaid full-time workers seeking social assistance (International Labour Organization, 2014). An increased concentration of wealth in the hands of those with higher incomes amid robust economic growth, has led to widening inequality in many advanced economies. In these economies, the resultant income inequality was one of the central concerns that motivated the need for a living wage framework.

Modern society recognises that the minimum acceptable living standard is beyond just affording the necessities, but should also provide for social participation and financial security. On social participation, the acceptable minimum includes being able to afford a trip to visit family and friends during festive seasons, and having the ability to occasionally purchase gifts for family members, such as during birthdays or visits. In addition, financial strains should not be a source of persistent stress. Figure 2 summarises some motivations that prompted the advocacy for a living wage in several countries.

Apart from allowing employees to afford a minimum acceptable standard of living, the living wage may also yield positive spillovers to the broader economy. These include reductions in employee turnover rates and improvements in employees' morale and productivity[4].

Figure 2: Motivations for a Living Wage in Canada, New Zealand and the United Kingdom

The minimum acceptable living standard should also provide for social participation and financial security

Canada	New Zealand	United Kingdom
• Sufficient income to cover reasonable costs • Healthy child development • No severe financial stress	• Ability to pay for the necessities of life • A life with dignity • Participation as an active citizen in the community	• Opportunity to spend more quality time with children • Some savings for an emergency • No concern about affording the basics

Source: Living Wage Canada; Living Wage New Zealand; and Living Wage Foundation, United Kingdom

[4] Several studies in the US show that employee turnover rates in firms fell significantly following the implementation of the living wage, resulting in improved productivity (Brenner and Luce, 2005; Reich, Hall and Jacobs, 2005; Fairris, 2005). A study in the US also finds that paying the living wage raised employees' morale and boosted productivity (Brenner and Luce, 2005).

Differences between a living wage, a minimum wage, and an aspirational income

In practice, a living wage differs from a minimum wage in several aspects. First, a living wage is typically not a statutory requirement for the economy unlike a minimum wage[5]. Second, a living wage refers not just to the existence of a minimum level of remuneration, but also to a minimum acceptable standard of living (International Labour Organization (ILO), 2014). Therefore, the living wage rates are usually higher than the minimum wage rate, especially when the latter has been less frequently updated in line with living cost increases. Third, while the determination of a living wage is based primarily on cost of living concerns, the minimum wage may consider additional factors given that it is a legislated requirement, such as its effect on employment and job creation (ILO, 2014).

In terms of affording a certain standard of living, the living wage is meant to sustain the socially acceptable minimum standard of living, beyond the basic necessities such as food, clothing, and shelter. An aspirational income goes beyond that: it could fulfil a desired lifestyle beyond the socially acceptable minimum, including spending on the latest gadgets or travels abroad.

Estimating a representative living wage in Kuala Lumpur

An important process of developing a living wage framework is estimating a wage level that is representative of a minimum acceptable living standard. While a wide range of methods may be used to estimate the living wage, these methods generally follow a standard approach as outlined in the flowchart (Figure 3). The first step is to ascertain whether there are significant variations in prices and living standards across location and household composition, which would make a case for developing different estimates of a living wage. The next step is to derive a representative basket of goods and services. Information is often drawn from a combination of publicly recognised standards on basic needs, expert opinion, public feedback, and data on household expenditure. Due to the diversity of households' needs, it is imperative to consult households of different profiles, to ascertain what items are deemed as necessities, and to distinguish these from items that are regarded as aspirational. Public consultations are often undertaken through focus group discussions, as was extensively done in the UK for 11 types of households (Bradshaw et al., 2008).

Figure 3: A Standard Approach in Calculating a Representative Living Wage

The standard approach used to estimate the living wage involves these four steps

1. Ascertaining whether there are significant variations in prices and living standards across location and household composition
2. Deriving the representative basket of goods and services that reflects a minimum acceptable living standard
3. Estimating the cost of the representative basket of goods and services
4. Periodically updating the living wage estimates

Source: Bank Negara Malaysia

[5] The UK government introduced a mandatory National Living Wage, which is a higher minimum wage rate for workers over 25 years old. The rate of the National Living Wage is lower than the estimated Real Living Wage Rate calculated by the UK's Living Wage Foundation.

The next step is to compute the total costs for the representative basket given prevailing price levels. Official price statistics are typically used for this purpose. These estimates and the underlying assumptions would be validated through the focus group discussions. Finally, the living wage estimates are periodically updated to account for inflation. The estimates would also be revisited to consider changes in social norms, given that rising urbanisation could materially influence the composition of households' consumption basket. For instance, in the UK, households have recently indicated the greater difficulty of living near their workplaces due to limited housing options, resulting in an increase in the mileage required to travel to work and for other social activities (Davis, Hill, Hirsch and Padley, 2016).

To derive provisional estimates of a living wage in Kuala Lumpur in 2016, the standard approach is applied using three illustrative household types: single adult, couple without children, and couple with two children. First, a broad representative consumption basket that reflects the average consumption pattern for each type of household in Kuala Lumpur was constructed. Next, the cost of these baskets was estimated using data available from various sources, such as the Department of Statistics Malaysia (DOSM), Ministry of Domestic Trade, Co-operatives and Consumerism (KPDNKK), and the National Property Information Centre (NAPIC). Subsequently, representatives from the three household types were consulted through focus group discussions to identify the basket of goods and services that best reflect their interpretation of a minimum acceptable living standard. They were also asked to estimate the budget required to obtain the representative basket. The internal estimates were validated against findings from the focus group discussions.

Table 1: Provisional Living Wage Estimates in Kuala Lumpur for 2016

In Kuala Lumpur, the provisional estimates of a living wage range between RM2,700 and RM6,500 per month

	Single adult	***Couple, without child***	***Couple, with two children***
Estimates of a living wage in Kuala Lumpur (RM/month)	***2,700***	***4,500***	***6,500***
Key assumptions on the representative basket of goods and services	• Rents a room • Eats out more often, cooks occasionally • Drives less, uses more public transport	• Rents a one-bedroom apartment • Eats out half of the time • Owns two vehicles (a motorcycle and a car)	• Rents a three-bedroom apartment • Cooks most of the time, eats out during weekends • Owns two vehicles • Pays for private extra classes and childcare

Note: The estimates above are provisional and subject to further revision as the underlying assumptions and cost estimates are refined. Single-adult households include adults who live alone and those who live together with non-related members of a household.

Source: Bank Negara Malaysia estimates using data from Household Expenditure Surveys 2014 and 2016, Department of Statistics, Malaysia, Ministry of Domestic Trade, Co-operatives and Consumerism, and the National Property Information Centre

Table 1 presents the living wage estimates in Kuala Lumpur, derived based on the specific assumptions and price levels that prevailed at the point of estimation in 2016. The estimates range between RM2,700 and RM 6,500 per month[6]. The basket of goods and services includes items that reflect the typical purchases of households in Kuala Lumpur, which are validated through the focus group discussions. Assumptions made include the following:

- Food, housing, and transport constitute the largest expenditure shares in the representative basket for these three household types;
- Due to the hectic lifestyle in the city, households are assumed to regularly eat out more often in inexpensive eateries. The frequency of eating out falls as the family size grows due to the higher cost involved;
- Single-adult households are assumed to primarily utilise public transportation, while couples are assumed to own an entry-level locally produced car[7];
- Allocation is also provided for recreation, such as sport equipment and movies, one inexpensive domestic holiday trip per year, and festive season travel and celebration;

[6] Households with more than two people are assumed to share some expenses, such as utilities. Thus, the living wage estimates for larger households are not multiplicative of the estimate for single-adult households.

[7] An entry-level car is typically small and designed for low-cost operation. An example would be Perodua Axia.

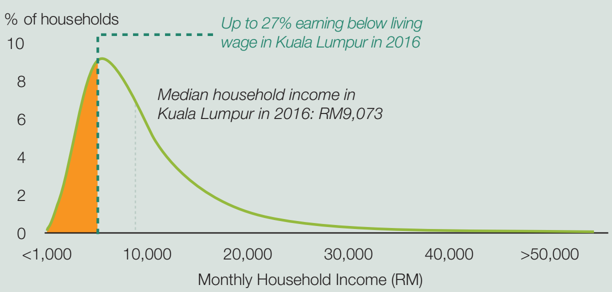
- The estimates also include contributions to the Employees Provident Fund (EPF), income tax payable, and savings that could be used to meet an emergency spending, including an unexpected healthcare bill; and
- A minimum sum is allocated to education and healthcare as these services are provided nearly free-of-charge by the Government.

There are important caveats to these estimates. The estimates are provisional and subject to further revision as the underlying assumptions and cost estimates are refined. The representative baskets of goods and services constructed in this article are based on the findings from focus group discussions conducted in Kuala Lumpur in 2016 by Bank Negara Malaysia. It is likely that these estimates would be considerably different in other parts of Malaysia due to variations in consumption patterns and prices, which have to be further validated through additional focus group discussions with households that reside in these areas. For instance, urban households have relatively greater access to public transportation to meet their minimum transportation needs, while rural households may need to own a private vehicle. In terms of cost variations by location, one that stands out is housing costs (either owner-occupied costs or rental) are likely to be cheaper in rural areas and the less urbanised states. The estimates of a living wage in Kuala Lumpur are also likely to evolve over time due to inflation and lifestyle changes, and would only remain relevant if the representative baskets are updated periodically.

The living wage estimates in Kuala Lumpur for the three illustrative household types are below the median income in Kuala Lumpur of RM9,073[8]. As shown in Figure 4, up to 27% of households in Kuala Lumpur were earning below the living wage. In terms of household type, a larger share of single-adult households and couples with two children were earning below the estimated living wage in 2016, compared to couples without children. The finding for single-adult households is consistent with the fact that graduates with a first degree or diploma earn on average, starting salaries of RM2,207 and RM1,346 per month respectively[9]. Among households earning below the living wage, close to 70% consisted of just one employed household member. Those earning below the living wage were mostly secondary school graduates with low- to mid-skilled jobs, while those earning above the living wage were mostly tertiary graduates with high-skilled jobs (Figure 5). Indeed, the median monthly salaries in 2016 for managers and professionals in Malaysia – RM5,500 and RM4,450 respectively – are well above the living wage estimates for a single-adult household (Figure 6). These findings underscore the importance of creating a high-skilled workforce in Malaysia that is equipped with the necessary competencies for higher-paying jobs.

Figure 4: Income Distribution of Households in Kuala Lumpur

Up to 27% of households in Kuala Lumpur were earning below the living wage

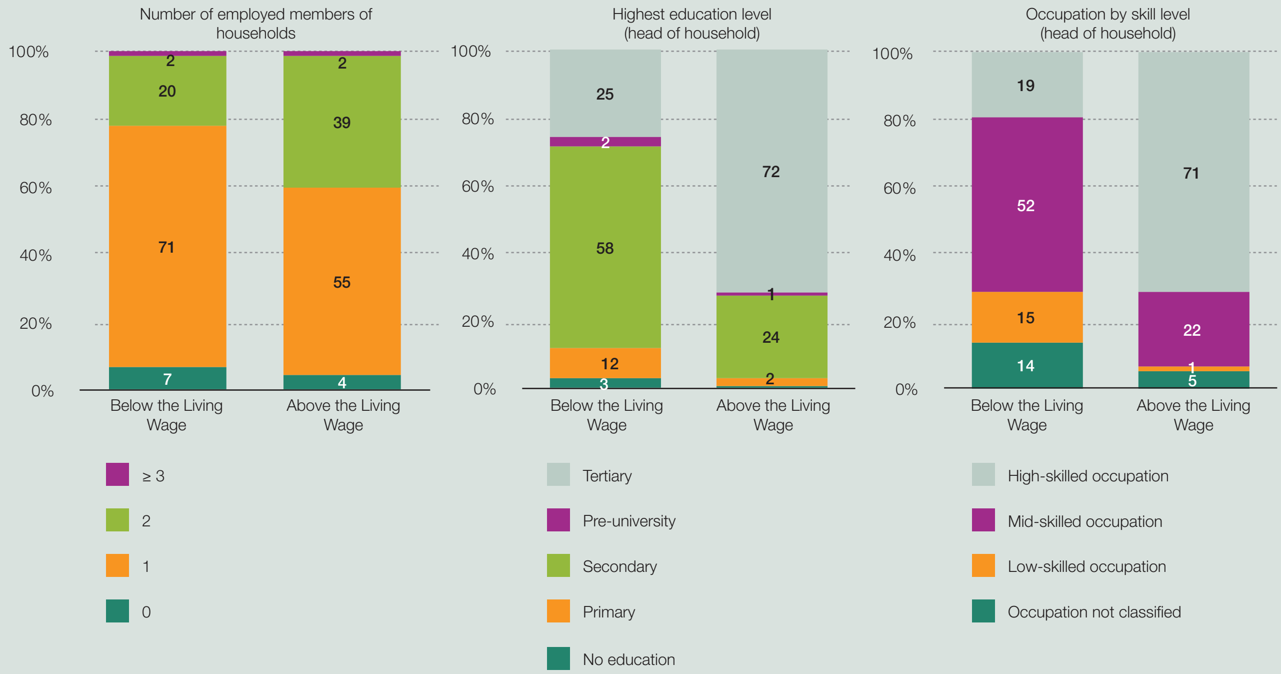


Source: Bank Negara Malaysia estimates using Household Income and Expenditure Survey 2016, Department of Statistics, Malaysia

[8] Source: Report of Household Income and Basic Amenities Survey 2016, Department of Statistics, Malaysia.
[9] Source: Ministry of Higher Education and Bank Negara Malaysia estimates.

Figure 5: Profile of Households in Kuala Lumpur Earning Below and Above the Living Wage

Households earning below the living wage were mostly secondary school graduates with low-to mid-skilled jobs

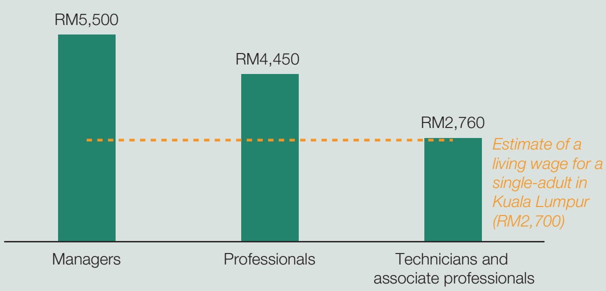


Note: Occupations are categorised by skill level according to the Malaysia Standard Classification of Occupations 2013 (MASCO 2013). High-skilled occupations include managers, professionals, and technicians and associate professionals; mid-skilled occupations include clerical support workers, service and sales workers, skilled agricultural, forestry, livestock and fishery workers, craft and related trades workers, and plant and machine-operators and assemblers; and low-skilled occupations include elementary occupations.

Source: Bank Negara Malaysia estimates using Household Income and Expenditure Survey 2016, Department of Statistics, Malaysia

Figure 6: Median Monthly Salaries and Wages in 2016 for High-Skilled Occupations in Malaysia

The median monthly salaries for high-skilled occupations are higher than the living wage estimate for a single-adult household in Kuala Lumpur



Source: Salaries & Wages Survey Report Malaysia 2016, Department of Statistics, Malaysia

International experiences in operationalising a living wage

Contemporary living wage movements are often spearheaded by civil society organisations, consisting of unions, community- and faith-based groups, academics, and employers (Heery, Hann and Nash, 2017). They are also often the ones undertaking the estimation of the living wage rate. Formal institutions may also oversee the estimation, as in the case of Europe, where the European Commission funded a project to develop estimates of reference budgets that are necessary to reach an acceptable standard of living[10].

In Canada, New Zealand, and the UK, civil society organisations play an active role in advocating public and large private employers to voluntarily pay living wages in return for accreditation, which could be in the form of a plaque, the Living Wage trademark, or a listing of the company's name on the Living Wage website. In the US, the living wage was initiated by the public sector, with ordinances being passed in more than 140 cities and counties, aimed at employees of private businesses that have service contracts with the local governments. Thus, the living wage does not cover low-income workers who are not under the jurisdiction of living wage ordinances. However, the enforcement of living wage ordinances in the US has arguably been weak (Luce, 2004)[11]. In some cities, the ordinances were eventually repealed (Holzer, 2008)[12]. Like the US, several local governments in South Korea have also established the living wage ordinance for its employees and workers of organisations that are funded by the local governments. While there have been efforts to estimate a living wage especially in the cities, the push for a living wage for private sector employees in Asia has not been as prevalent as in Canada, New Zealand, and the UK[13].

Macroeconomic and distributional impact of a living wage

Unlike a minimum wage, the living wage is not widely implemented and has mainly been confined to a few advanced economies. Empirical studies based on US cities[14] found that paying a living wage brings benefits for both employees and employers[15]. The impact on employment also appears to be more modest than the theoretical predictions of a binding wage floor[16].

Nevertheless, it is worth cautioning against broad-brush applications based on the conclusions from these studies. Macroeconomic effects are likely to vary across countries due to differences in labour market characteristics and the prevailing economic environment. Paying a living wage, for example, would be easier during an economic boom, when employers are less compelled to minimise labour costs.

In addition, a living wage could only be effective if it is set at a realistic and sustainable level. It is imperative to carefully derive living wage estimates that balance between ensuring employees can afford a minimum living standard, and the capability of employers to pay wages that commensurate with employees' productivity. Setting a living wage rate that is too high could lead to the risk of employers passing on the additional wage cost to consumers through higher prices of goods and services. Wage pressure on employers could also intensify if high-wage workers insist on maintaining the same wage differential with low-wage workers as before. The benefits of the living wage may be offset if the wage pressure eventually translates to an even faster increase in inflation and cost of living.

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[10] Further information is available on the European Reference Budgets Network (http://www.referencebudgets.eu/).

[11] State and federal laws do not require employers to routinely provide details to the government on hours worked and pay.

[12] For instance, the living wage ordinance in Omaha, Nebraska was rescinded in August 2001 after the election of a new council majority who were committed to repealing the law (Luce, 2004).

[13] Amid the rise in international trade, ethical initiatives in importing countries have led to the promotion of living wage for garment workers in exporting countries in Asia (Hirsch and Valadez, 2017).

[14] Unsuccessful living wage laws in some cities in the US also provide a control group or counterfactual for estimating the effects of living wage laws.

[15] See Brenner and Luce (2005), Reich et al. (2003), and Sokol et al. (2006).

[16] See Brenner and Luce (2005), Lester (2011) and London Economics (2009). Theory predicts that a wage floor that exceeds the market wage level will lead to retrenchments. This prediction, however, assumes that all workers are the same and have a fixed productivity, and that employers could only respond by reducing the number of workers. Additionally, the prediction also relies on the assumption that the existing wage level is at the equilibrium. However, if the prevailing wage level is below the equilibrium due to, for instance, labour market imperfections, mandating a higher wage level could lead to more employment.

Furthermore, the living wage could inadvertently harm the intended beneficiaries in the near term[17]. For instance, employers could respond to the living wage by employing more high-skilled workers at the expense of low-skilled ones, who could be the group of people earning below the living wage, before they could upskill themselves (Hirsch and Valadez, 2017). An environment of strong growth, however, could sustain labour demand and reduce the possibility of labour retrenchment of low-skilled workers.

The need for corresponding productivity improvements

The possibility of adverse outcomes from the implementation of the living wage underscores the importance of a corresponding increase in productivity and movement towards a high-skilled workforce. Productivity improvements and higher value-added output make paying a living wage more affordable for employers, thereby enabling them to sustain the living wage in the long run. A high-productivity, high value-added economy will promote a supportive environment that could mitigate the risks of retrenchment and labour substitution.

The Malaysian economy faces the challenge of modest productivity growth relative to its peers. Based on data from the International Labour Organization, between 2011 and 2017, Malaysia's growth of GDP per person employed – a measure of labour productivity – is only 1.7%, less than half of the average labour productivity growth in upper-middle income economies (3.8%)[18]. Persistently weak productivity growth risks lower wage growth, which could ultimately hamper the ability of households to afford at least a minimum acceptable living standard.

The move towards productivity-led wage growth relies on wide-ranging support from all parts of the economy. Governments can foster a conducive environment for employers to improve productivity by ensuring the availability of good institutional support, minimal regulation on productive investment activities, and the affordability of training and higher-level education. Employers can train existing employees and provide incentives for them to upgrade their skills. Higher morale and lower turnover rates that come with the living wage could, in turn, set off a virtuous cycle of higher wages, and higher productivity. Employees need to also recognise the importance of self-improvement to achieve a higher wage level that can sustain a minimum acceptable living standard, and take the initiative to upskill.

Conclusion

As Malaysia develops into a progressive high-income nation, all segments of society should reap the benefits and not be dislocated in the process. It is thus important that Malaysia overcomes the challenge of modest productivity growth, and strives towards creating high-productivity, high-paying jobs that could afford a minimum acceptable living standard. The living wage can be a tool to potentially inform, challenge, and enhance policies towards that end.

If successfully adopted, the living wage can bring benefits to both employees and employers, with limited negative consequences on the economy. This relies on a few pre-requisites. The living wage estimates have to be representative and reasonable enough to guide employers towards paying fair wages to employees. The living wage also has to be accompanied by greater productivity, and this requires collective effort from employers, employees, civil societies, and the public sector.

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17 See for example, Neumark and Adams (2003).

18 For international comparison, the GDP component of this measure is the GDP that is converted to 2011 constant international dollars using purchasing power parity rates. This estimate of average labour productivity growth in 2011-2017 is close to the average based on the labour productivity data published by the Department of Statistics, Malaysia (2.3%).

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Complexity and Growth: Malaysia's Position and Policy Implications

By Brenda Cheah Wenn Jinn and Mohd Shazwan Shuhaimen

Introduction

The favourable global environment presents a timely opportunity for Malaysia to undertake important structural reforms. While higher growth can be achieved through capital accumulation and productivity gains, for an emerging economy such as Malaysia, technological advancement and innovation are critical to expand the country's production frontier and lift long-term growth potential. A study by Hausmann et al. (2013) looks into the role of technology and innovation as a fundamental predictor of future growth, namely, through economic complexity. Economic complexity expresses a country's overall productive capabilities through its cumulative know-how, skills and technological endowment. It is, therefore, a useful indicator to track structural change. This article serves as a primer on the key concepts of economic complexity. It then proceeds to showcase the evolution of Malaysia's economic complexity and its position relative to regional peers. The article also outlines several strategies to increase Malaysia's complexity, by utilising Hausmann et al.'s pioneering product space and feasibility maps which lay out the ease of diversifying into more complex products. The article concludes with an estimation of Malaysia's potential GDP growth based on our ability to converge to the income levels of countries with similar economic complexity.

Understanding Economic Complexity

'Economic complexity' is a summary measure of the productive capabilities within a country, as reflected by the diversity and complexity of products it makes and exports. Complex economies tend to be characterised by the prevalence of a vast amount of skills and knowledge which are the necessary pre-conditions for the production of highly diversified and complex range of products. Less complex economies, in contrast, can only make fewer and more elementary products on account of their limited skills and knowledge base. Because greater levels of complexity entail the creation of high-skilled jobs and a more sophisticated supporting ecosystem, more often than not, complex economies enjoy higher per capita GDP.

Sectoral diversification is an important means to enhance economic complexity. As a country diversifies its production base, individuals and firms amass a large amount of knowledge and expertise, thus increasing sophistication and income levels over time. An advanced economy like Japan can manufacture diversified and complex products, ranging from chemicals to robotics and autonomous cars, as a result of continuous innovation and technological advancement over the years.

A country's degree of economic complexity can be measured using the Economic Complexity Index (ECI). The ECI is calculated by taking into account the number of export products a country has comparative advantage in (*product diversity*), and the number of countries that make those products[1] (*product complexity*). The complexity of specific products that a country makes is represented by the Product Complexity Index (PCI). Based on the PCI, the most sophisticated products are machinery and chemicals (e.g. steam turbines, photographic chemicals), while the least complex products are mainly raw commodities (e.g. tin ores, cotton). The ECI and PCI are measured as the standard deviation above or below the world average (denoted by positive or negative values, respectively). Key to analysing economic complexity is the 'product space' map, a pioneering tool developed by Hausmann et al. that illustrates the country's product mix and ease of future diversification to raise overall economic complexity (*Details in Insight Box 1: The Product Space*).

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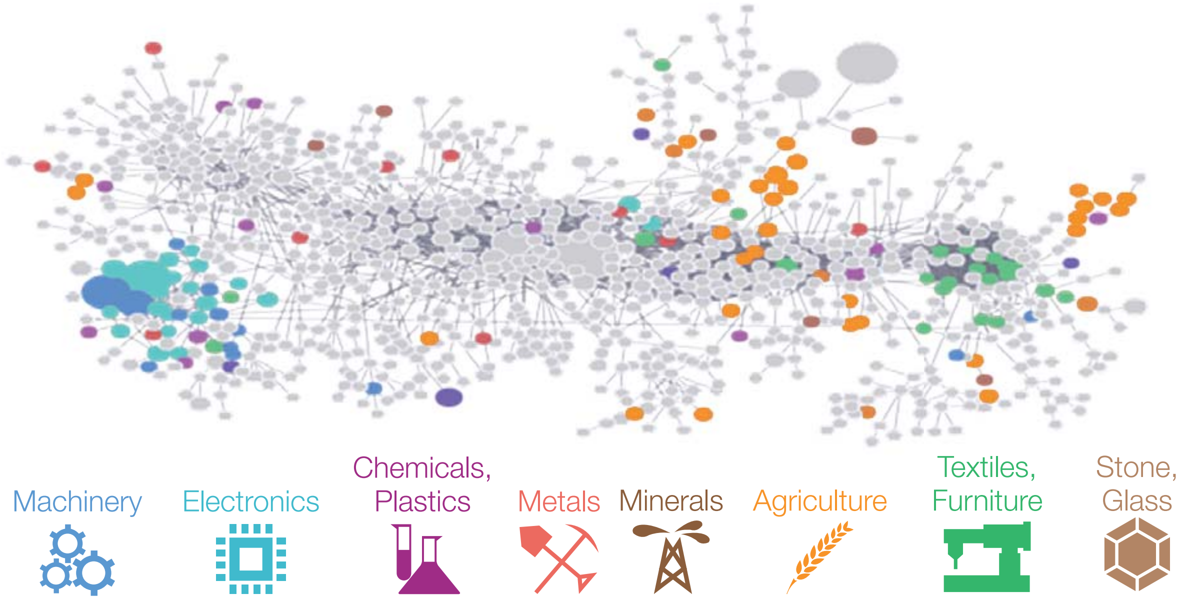
[1] A product that is made by only few countries can be considered a 'complex' good, as this reflects the need for more advanced capabilities to produce them (e.g. X-ray machines).

Insight Box 1: The Product Space

Chart 1: The Product Space

The product space depicts the diversity of products made and the ease of diversification into different, more complex products



Source: The Atlas of Economic Complexity

The product space visualises the universe of products that a country can export. Every dot or node represents a different export product. The different colours represent the broader industry that these products are in. Nodes that are coloured in the product space indicate the products that a country has comparative advantage in exporting, while nodes that are greyed represent products that a country has limited exposure in. Two key features of the product space illustrate a country's level of economic complexity. Firstly, the diversity of products can be seen from the number of coloured dots across the product space. The greater the number of dots in different colours, the more diverse a country's export products. Secondly, the location of the product nodes (i.e. dots) matters. A high number of products located at the centre of the product space reflects its high connectivity to a multitude of goods. In addition, the product space also provides insights on the ease of diversification into new and more complex products. The ease in which a country increases its complexity depends on how tightly connected the country's product space is, and is represented by the distance between the product nodes. The closer the product nodes, the easier it is to increase complexity. Products that are tightly connected share most of the requisite capabilities. Thus, firms can easily diversify from one product to another by leveraging on existing capabilities. Conversely, a sparse product space suggests greater difficulty in raising complexity as producers have insufficient pre-existing capabilities to make new products. They would need to acquire vast knowledge and skills to make these products, which will take considerable time and effort.

Evolution of Malaysia's Economic Complexity

Over the last two decades, Malaysia's economic complexity has improved from +0.39 in 1996 to +0.82 in 2016 (Chart 2), making it the 29th most complex economy in the world. The increase not only reflects Malaysia's ability to produce more varied and complex goods over time, but that Malaysia has been able to grow its complexity at a faster pace compared to the rest of the world.

Chart 2: Trend in Malaysia's Economic Complexity Index

Malaysia's economic complexity has improved over the past two decades

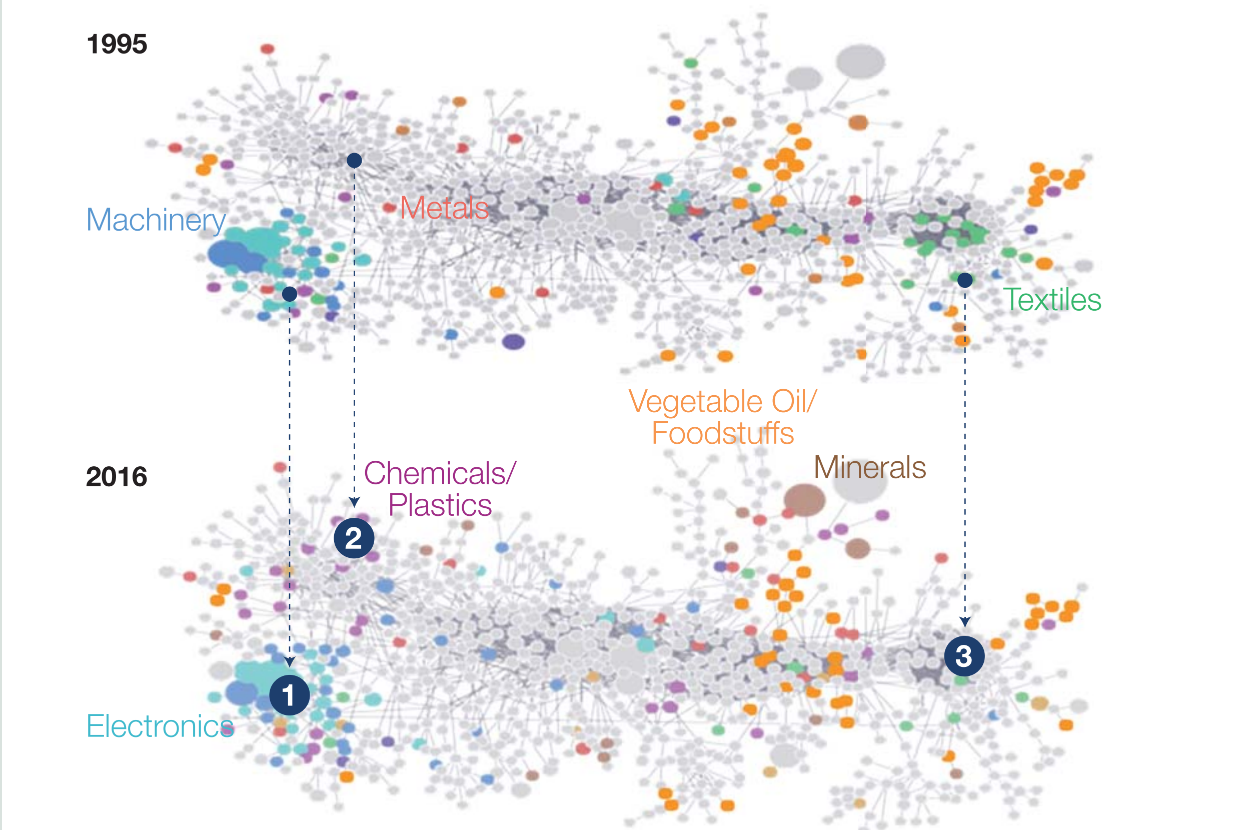
Source: The Atlas of Economic Complexity

The evolution in Malaysia's product space over time reveals three key developments (Chart 3). These include:

1. Greater linkages in the machinery and electronics cluster (*represented by denser blue dots*),
2. Development of new products, such as chemicals and plastics (*emergence of new purple dots*); and
3. Hollowing out from low-complex products, such as textiles (*reduction in green dots*), which frees up resources to develop comparative advantage in more complex goods.

Chart 3: Snapshot of Malaysia's Product Space in 1995 and 2016

Higher economic complexity supported by sectoral diversification into more complex products

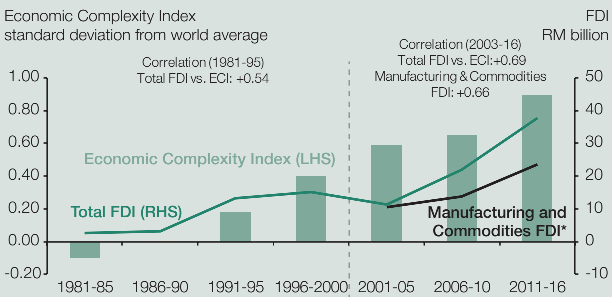


Source: The Atlas of Economic Complexity

The increase in Malaysia's economic complexity can be traced back to the rapid industrialisation phase in the 1980s and 1990s. During this time, the composition of Malaysia's exports shifted from mainly commodities to manufactured exports[2] (1975: 22% share of exports; 1995: 80%). Comprehensive policy initiatives were undertaken to enhance the supporting business ecosystem to ensure an environment conducive for the manufacturing sector to flourish[3]. These include improving training and skills development, financing support, physical infrastructure, and regulations pertaining to trade and investment activity. Of significance were the enactment of the Promotion of Investments Act 1986 and reduction in trade barriers that facilitated production, trade and investment activities. Buoyed by a favourable business climate, foreign direct investment (FDI) in the manufacturing and mining sectors surged. These FDIs were a critical game-changer in Malaysia's development as they provided impetus to job creation and productivity in addition to the country's economic complexity (Chart 4).

Chart 4: Foreign Direct Investment (FDI) and Economic Complexity Index (ECI) in Malaysia

FDI provided impetus to Malaysia's economic complexity



*Official data for FDI by sector only available from 2003 onwards

Source: The Atlas of Economic Complexity, United Nations Conference on Trade and Development (UNCTAD), Department of Statistics, Malaysia

This was particularly evident in the machinery and electronics cluster. In the 1990s, there was a gradual transition from basic testing and assembly services for integrated circuits to the more complex production of office and computer equipment. This transition allowed both multinational and domestic manufacturers to develop and hone the necessary knowledge and skills to achieve global production standards. The growth in capabilities catalysed the subsequent diversification into even more complex electronic products, particularly for semiconductors in the fast-growing consumer and automotive segments[4]. Home-grown manufacturers are now more integrated into the E&E global value chain and are capable of producing parts and components independently for international brands, such as Apple, Samsung, Intel, BMW and Airbus.

Over the years, Malaysia's ability to produce more complex chemical, plastic and rubber products reflects the expansion in downstream activities in the mining and agriculture sectors. The establishment of large local and foreign corporations in these sectors spurred Malaysia's manufacturing capabilities in downstream products, such as petrochemicals, oleochemicals and rubber gloves. Refineries and gas pipelines were constructed for production purposes, further supported by the availability of feedstock inputs given the country's endowment of natural resources[5]. Going forward, Malaysia's downstream production in the oil and gas industry is poised to benefit from the Refinery and Petrochemical Integrated Development (RAPID) operations which are nearing completion.

2 For a more detailed account, please refer to the Box Article on 'The Changing Structure of Malaysia's Exports' in Bank Negara Malaysia's Annual Report 2011.
3 Yusoff et al. 2000. Globalisation, Economic Policy and Equity: The Case of Malaysia; Wong 2013. The Malaysian Electrical and Electronics (E&E) Industry: At an Inflexion Point.
4 For a more detailed account, please refer to the Box Article on 'Shifting Shapes, Turning Tides: The Evolution of Malaysia's Electronics and Electrical (E&E) Industry' in Bank Negara Malaysia's Annual Report 2015.
5 Foo 2015. The Malaysian Chemicals Industry: From Commodities to Manufacturing.

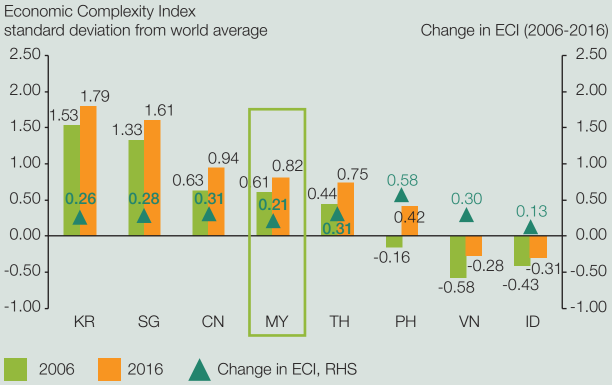
While downstream activities expanded in the past two decades, the product space also shows that Malaysia continues to export raw mineral and agriculture products (*brown and orange dots, respectively*). The centre of the product space also remains relatively sparse, which suggests that Malaysia has yet to develop comparative advantage in some products. These indicate opportunities for further downstreaming in the commodities sector and the development of comparative advantage in new products.

Comparing Malaysia's Economic Complexity to Regional Peers

While Malaysia's economic complexity has grown over the years, the country remains behind advanced and fast-growing regional peers (Chart 5). Among the selected regional countries, Korea is deemed the most complex economy with an ECI of +1.79 in 2016. This is followed by Singapore (+1.61) and PR China (+0.94).

Chart 5: Economic Complexity Index (Malaysia and Selected Regional Countries)

Malaysia's economic complexity lags behind advanced and fast-growing peers, while others are fast catching up



Note: CN = PR China, ID = Indonesia, JP = Japan, KR = Republic of Korea, MY = Malaysia, PH = Philippines, SG = Singapore, TH = Thailand, VN = Vietnam

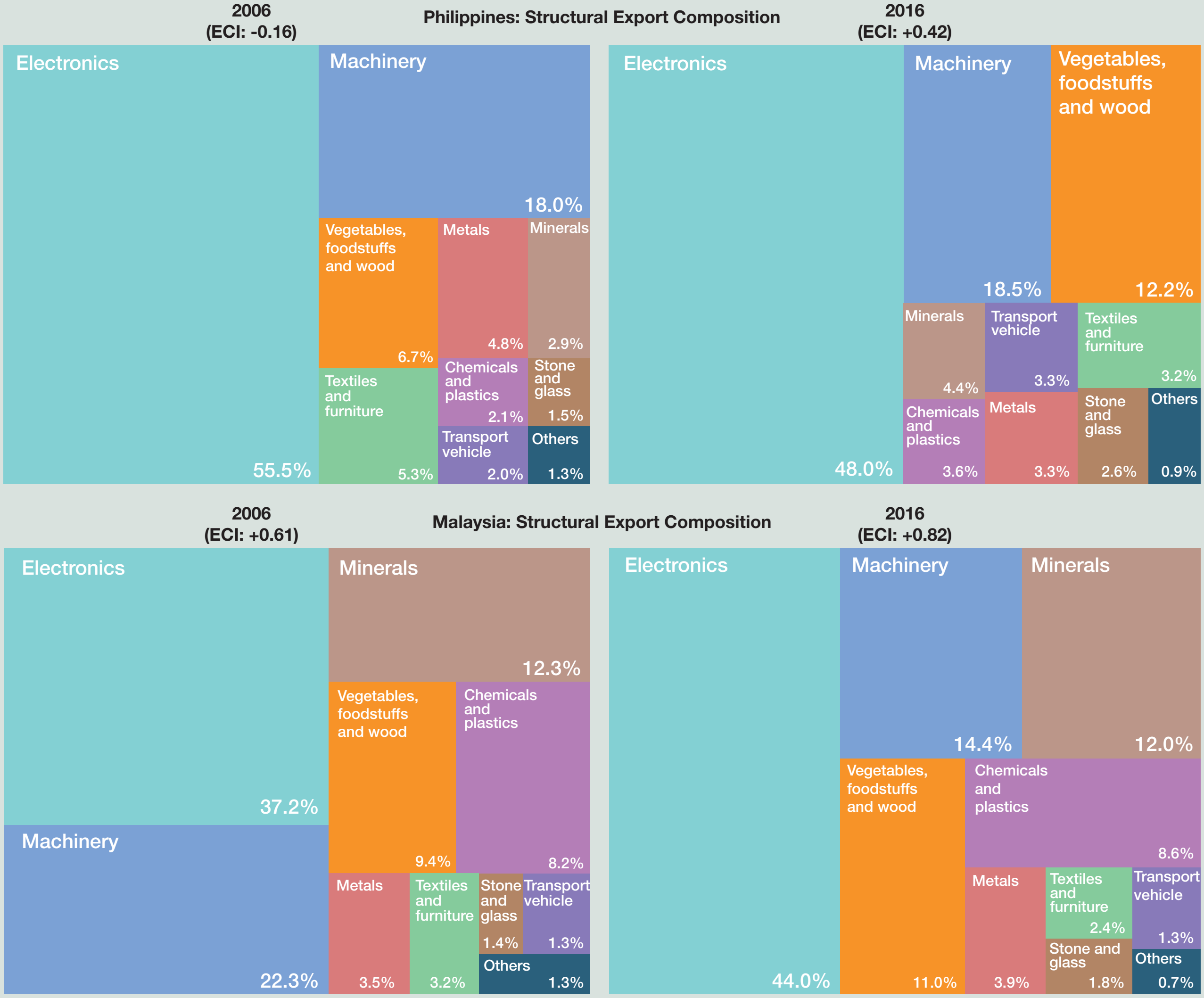
Source: The Atlas of Economic Complexity

Looking at the change in ECI over the recent decade, most regional countries have accomplished greater complexity gains than Malaysia's improvement of +0.21. This suggests that these countries experienced more substantial diversification in their product mix or have ventured faster into highly complex products. Of note, Philippines' economic complexity improved the most in the region by +0.58. This resulted in a shift in its level of complexity from below global average to above global average within ten years. Chart 6 compares the structural changes in the export composition of the Philippines and Malaysia over the last decade. Starting from a lower level of ECI, the greater complexity gains was attributed to the product mix in the export basket of the Philippines which had become more varied. The country lowered its exposure in electronic products, reflected by the decline in its share from 55% in 2006 to 48% in 2016. Conversely, there was greater focus in more complex chemicals, plastics and transport vehicles as the share of these products increased from 4% to 7%. The share of agriculture products also rose from 7% to 12%. More importantly, within the agriculture sector, there was a diversification away from less complex items such as bananas (PCI: -2.28) into the more complex wood carpentry (PCI: +0.09).

In contrast, the improvement in Malaysia's ECI is relatively slower as the export mix diversified by a smaller extent and the entry into new products has yet to materialise significantly. The profile of the products exported offers some insights. Firstly, Malaysia's concentration in electronic products (PCI: +0.76) rose from 37% to 44% share of total exports over the last decade as the country remains firmly plugged in the global value chain. At the same time, exposure in the machinery cluster, which has a higher PCI of +1.00, halved from

Chart 6: Snapshot of the Structural Export Composition of the Philippines and Malaysia (% share of total exports)

Improvement in Malaysia's ECI is relatively slower than Philippines



Note: Figures may not necessarily add up due to rounding

Source: The Atlas of Economic Complexity

22% to 14% share. Within the machinery cluster, while firms shifted their focus away from PC and parts (PCI: +0.64) in line with the global technological shift towards internet-enabled devices, progress in growing the more complex medical and scientific instruments base (PCI: +0.94) remains fairly limited at 4% share of total exports. Finally, Malaysia had only managed to expand incrementally into the more complex chemicals and plastics, as reflected by the small increase in its exports share from 8.2% in 2006 to 8.6% in 2016.

Strategies to Increase Economic Complexity

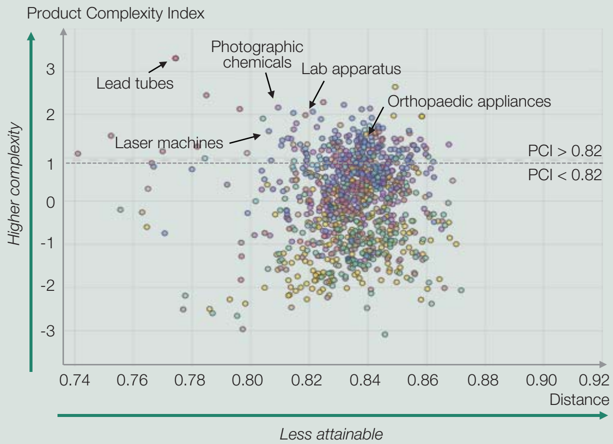
The emergence of overarching megatrends such as technological disruptions, rapid urbanisation and climate change requires countries to rethink their current growth strategies and adapt to new realities. In this regard, there is room for Malaysia to further diversify its product mix and deepen its product complexity in order to maximise the opportunities for the nation in the highly-dynamic global environment. As identified earlier, Malaysia's current product space is relatively sparse at the centre, which suggests room for the country to develop comparative advantages in some of these products.

These are products that are 'rich in complexity' as they are situated at the centre of the product space with tightly connected nodes. Malaysia could leverage on the vast experience and significant productive capabilities it has developed over the years particularly in the electronics and commodity sectors, and increasingly the chemical and plastics industries to diversify into new, more complex products.

The product feasibility map presents a useful tool to identify the range of potential product diversification options and its feasibility (Chart 7). The map demonstrates how attainable it is to produce certain products, given existing capabilities (horizontal axis) and the corresponding product complexity (vertical axis). Increasing Malaysia's complexity would require diversifying into more complex products with PCIs that are above Malaysia's current ECI of +0.82. Such products include *lead tubes*, *laser machines, photographic chemicals* to *laboratory apparatus* and *orthopaedic appliances*. They are also of high complexity and could catalyse production in other more complex products. Based on the map and experience in other countries, it is relatively easier for Malaysia to diversify into *lead tubes, laser machines* and *photographic chemicals* in the near term as they are more closely connected to existing products that Malaysia currently manufactures.

Chart 7: Product Feasibility Map for Malaysia

The product feasibility map indicates the range of potential product diversification for Malaysia



Source : The Atlas of Economic Complexity

To enable further diversification and ventures into more complex industries, focus should be directed towards modernising and augmenting the supporting ecosystem of pertinent industries. The strategy should centre on four key pillars which are proven enablers of rapid diversification in the past: talent, financing, infrastructure and regulations.

Firstly, a sustainable supply of a well-educated and experienced talent pool forms the bedrock for the diffusion of knowledge within and across industries. The emergence of new trends such as Industry 4.0 would have significant consequences on the labour market, requiring an adaptable workforce that can be reskilled and retooled. While institutions were created in the past to address skills shortages, they should now proactively embed joint industry-academia element in new and existing course and training curricula, and research programmes. This will ensure that the talent produced matches the dynamic needs of industries, anchored firmly with strong research skills to drive innovative change. To cater to Industry 4.0, some progress have been made to encourage such industry-driven research and training partnerships in Malaysia. Notable examples include the establishment of Collaborative Research in Engineering, Science and Technology (CREST) in 2012, and more recently the launch of MIMOS-NCIA Advanced Competency Development Centre in 2017. Currently, these efforts are focused primarily on the E&E sector. Extension of such initiatives to the non-E&E and commodity industries, which account for a larger share of exports at 62%, and 23% of total employment[6] in 2017, would upskill a greater share of the labour force. Efforts

[6] Employment in the non-E&E sector is estimated by applying its ratio of employment in the manufacturing sector using the Department of Statistics, Malaysia's Monthly Manufacturing Survey for establishments.

to attract and retain the existing base of high-skilled talent is equally important. In addition to the current efforts by the Government, the private sector can also play a role by ensuring that labour remuneration, including wages and salaries are commensurate with productivity levels.

Secondly, both regulators and private sector players must work closely to encourage more widespread use of alternative financing platforms, such as crowdfunding, peer-to-peer lending and venture capital. This could be an important source of funds for businesses, particularly SMEs, that are involved in innovative or new growth areas which entail higher risks[7]. Bank-based financing may not be the best means to finance these activities. For comprehensive credit risk assessment, banks would require an established credit history and collateral, which start-ups in new growth areas often lack. Multiple policy priorities have been identified to further promote alternative finance. These include, among others, enhancing institutional arrangements to coordinate, streamline and anchor policies in developing alternative finance, and improving the quality, coverage and credibility of alternative financing data to support credit decisions.

Thirdly, user-friendly physical infrastructure remains a critical component of the industrial ecosystem. With the increasing utilisation of digital platforms for the efficient sharing of knowledge and information, more attention should be placed on upgrading virtual and digital infrastructures in Malaysia. This could encompass the integration of big data analytics into national databases, greater use of remote desktops and improving broadband connectivity. Leveraging on existing initiatives to maximise the potential of digital platforms in Malaysia, it is critical to accelerate the integration of private sector data into the National Data Ocean Platform by MAMPU. The pooling of a broader set of data (e.g. consumer preferences revealed through search engine database), complemented by the use of data analytics can create valuable insights for more informed business analyses and decisions to enhance product range, quality and sophistication.

Finally, the regulatory environment will need to adapt to and leverage on the rapid technological change taking place. Ongoing efforts to reduce regulatory redtapes and reorientate incentives (e.g. taxes, subsidies) will encourage quality investments in more innovative and complex industries, particularly those that involve downstreaming and R&D activities, and also technology transfers. In the past, the implementation of the upstream petroleum income tax at 38% in the mining sector had incentivised diversification into the more complex downstream petroleum products. Taking into account the market structure and firms' operating environment, similar strategies could be considered to spur the crude palm oil (CPO) industry to accelerate expansion in downstream activities by reviewing the corporate tax on CPO firms' upstream revenues. Intellectual property rights and certification standards can also be strengthened to foster a safe environment for innovation.

The intended outcome of these strategies is to foster the agility, efficiency and sophistication of local players to push frontiers and remain relevant in a fast-changing environment. Solid public-private coordination and collaboration would ensure that these objectives are achievable.

Economic Complexity and the Impact on Malaysia's Economic Growth Prospects

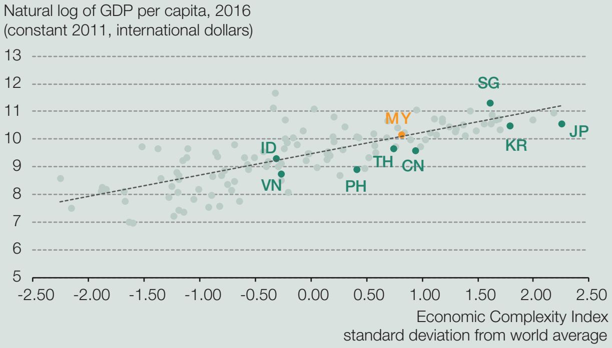
As economic complexity reflects the capabilities embedded in the productive structure of an economy, Hausmann et al. finds that economic complexity has a positive effect on income levels (Chart 8). The gap between a country's complexity and its level of per capita income could be used to predict future GDP growth. If a country's income level is lower than average at a given ECI, income is likely to grow at a faster pace going forward. This is because the country already possesses the necessary productive capabilities to easily diversify into more complex products within a short time-frame. This will allow the country's income to converge to the levels that are consistent with other countries possessing similar levels of economic complexity.

Given the marginal gap between Malaysia's current GDP per capita and complexity, the study projects Malaysia's real GDP to grow by 4.8% up to 2025 (lower compared to the 1990-2017 long-run average of 5.9%). With this projected growth rate and assuming a stable population growth of 1.3% (2017 rate), Malaysia is expected to achieve a per capita income level of about USD11,900 by 2020, which remains slightly below the latest high-income threshold of USD12,236 as defined by

7 Refer to the Box Article on 'The Role of Alternative Finance to Fund the Needs of a New Economy', Bank Negara Malaysia's Financial Stability and Payment Systems Report 2016.

Chart 8: Economic Complexity Index and GDP Per Capita (2016)

Economic complexity has a positive effect on national income levels



Note: CN = PR China, ID = Indonesia, JP = Japan, KR = Republic of Korea,
MY = Malaysia, PH = Philippines, SG = Singapore, TH = Thailand, VN = Vietnam

Source : The Atlas of Economic Complexity, The World Bank

the World Bank. In other words, by this technique, Malaysia's present level of economic complexity is currently insufficient to propel the economy to sustainably achieve high income status by 2020. Therefore, it is imperative that Malaysia implements the necessary strategies that will improve its overall complexity not only to remain competitive against regional peers, but also to meet its high-income aspirations.

Conclusion

As a summary indicator of a country's overall productive capabilities, the concept of 'economic complexity' is an insightful tool towards understanding a nation's structural change and competitive advantage while serving as a useful guide to strategise future development. Over the last two decades, Malaysia has been successful in raising its level of complexity as a result of past structural reforms, supportive business ecosystem and greater presence of FDI. Despite these gains, other developing regional peers are fast catching up, and at its current pace, Malaysia may risk lagging behind its high-income aspiration targets. Therefore, it is imperative to accelerate efforts to further diversify the product mix and deepen product complexity. The product feasibility map presents a viable range of diversification options, leveraging on the knowledge and capabilities that the nation has developed over the years. Implicit to this is the realisation that a dynamic and robust manufacturing base remains a vital aspect in a complex economy. The key policy thrust should therefore be directed towards continuous and deeper structural reforms, particularly in modernising and augmenting the support system of the relevant industries. These include, among others, (i) extending the industry-academia element in research and training programmes beyond the E&E sector, (ii) promoting alternative finance via coordinated efforts among relevant institutions, (iii) elevating the digital National Data Ocean Platform, (iv) reviewing upstream tax to promote downstream activities in the palm oil industry, and (v) explicitly including complexity as an incentive criteria. This would encourage quality domestic and foreign direct investments in new complex growth areas, foster innovation and sophistication, create greater job opportunities and improve income prospects. Higher economic complexity would therefore enable Malaysia to compete and thrive in a fast-changing global environment, ultimately paving the way towards greater prosperity.

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Unlocking Malaysia's Digital Future: Opportunities, Challenges and Policy Responses

By: Punithaa Kylasapathy, Tng Boon Hwa and Ahmad Haris Mohd Zukki

Introduction

The impact of digitalisation on the global economy has been significant but uneven, both within and across economies. The implications are vast and numerous, affecting economic development, simultaneous job creation and destruction, and income and social inequality. Policy debates are no longer about whether we should embrace digitalisation, but rather how economies can maximise their utilisation, while at the same time address the pitfalls. The rapid pace of advancement in digitalisation is clearly evidenced in global data flows expanding 45-fold (McKinsey Global Institute, 2016), while global merchandise trade only grew 1.5 times, from 2005-2016.

This article provides an overview of the digital transformation in its current phase, assesses the digital landscape in Malaysia and draws out key policy implications for Malaysia to successfully incorporate digitalisation as an integral part of its economic development strategy.

Understanding the Digital Economy

There has yet to be a consensus on the definition of the digital economy. Definitions instead evolve when new digital trends emerge and disrupt the status quo. Characterisations of the digital economy began in the 1980s with mass produced personal computers. This was followed by advanced computerised manufacturing in the 1990s and e-commerce and off-shoring in the 2000s (UNCTAD, 2017). The current digital trend is centred on integrating digital technologies into daily life and business operations. Schwab (2016) puts it succinctly by describing this phase of digitalisation as technologies that fuse the digital, physical and biological worlds and permeate across industries and economies. These are underpinned by a myriad of technological trends, in particular, the Internet of Things (IoT), Big Data Analytics, Artificial Intelligence (AI) and Cloud Computing (Table 1).

Table 1

Technological Trends Driving the Digital Economy

	Definition	Examples of Applications	Frontrunners
Big Data Analytics	Real time analysis using high volume of data	• Transaction analysis for targeted advertising • Traffic management	• IBM (USA) • Oracle (USA) • SAP (USA)
Internet of Things	Sensor-enabled objects connected via Internet	• Remote monitoring • Wearables and autonomous cars	• Google (USA) • Samsung (Korea) • Intel (USA) • Siemens (Germany)
Cloud Computing	Large data pool stored on the web instead of hardware	• Alternative for acquiring and managing IT infrastructure • Web-based applications	• Microsoft (USA) • Amazon (USA) • Alibaba (PR China)
Artificial Intelligence	Software that learns and adapts	• Image recognition for early risk detection and treatment in medicine • Develop and execute investment strategies	• NVIDIA (USA) • Google (USA) • Baidu (PR China) • IBM (USA)

A Macroeconomic Perspective of the Digital Landscape in Malaysia

In Malaysia, households, businesses and the Government alike have embraced digitalisation. From 2005-2016, internet users doubled to 21 million; mobile-cellular penetration doubled to 44 million subscriptions; and fixed-broadband users doubled to 3 million (International Telecommunication Union, 2016). As at 2015, 83% of Government services are provided via online platforms (MAMPU, 2016).

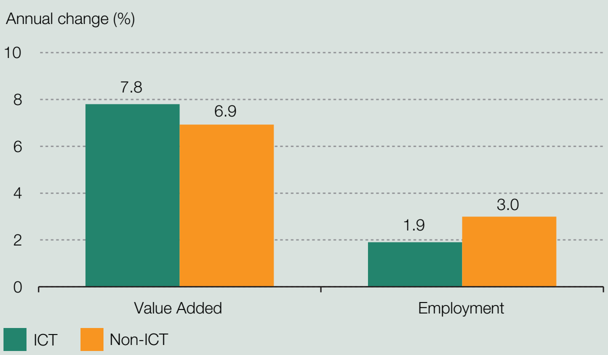
The pervasive nature of digital platforms makes it hard to capture the full extent of digitalisation in Malaysia. A useful start is the performance of the Information and Communication Technology (ICT)[1] sector, where technology intensity is high and digital activities are concentrated. As Chart 1 shows, from 2011-2016, the ICT sector's value-added growth outpaced that of non-ICT sectors (ICT: 7.8% vs non-ICT: 6.9%). Of note, e-commerce activities almost doubled over the same period (2016: RM74.6 billion; 2011: RM44.6 billion). This reflects the rising prominence of digital platforms and, more broadly, the role of technology in driving economic activity. Chart 1 also illustrates that while growth of value-added in ICT has outpaced non-ICT, in contrast, employment in ICT lags behind the non-ICT sectors. In one aspect, this suggests that ICT's productivity is higher vis-à-vis the non-ICT sector. On the other hand, it also potentially reflects the changing labour needs of the economy. Therefore, digital transformation and automation could render some segments of labour redundant and demand new skill requirements in jobs.

Given the pervasiveness of the ICT sector's development for the broader economy, it is necessary to evaluate the linkages between ICT and other sectors in the economy. This is done using the input-output Cumulative Production Structure (CPS) framework to estimate backward and forward linkages[2].

Chart 2 shows multipliers of the backward and forward linkages between ICT & Computer Services[3] and other sectors of the economy. Two key trends are observed: Firstly, the backward linkage multipliers have increased, showing that as the range of ICT and computer services have expanded significantly since 2005, so have the resources that it draws from other sectors in order to provide the services. Secondly, forward linkages have also increased. This reflects firms' increased use of internet, e-commerce and other online services as an integral aspect of their business operations.

Chart 1: Malaysia's Value-Added and Employment in ICT and non-ICT (Avg. Growth 2011-2016)

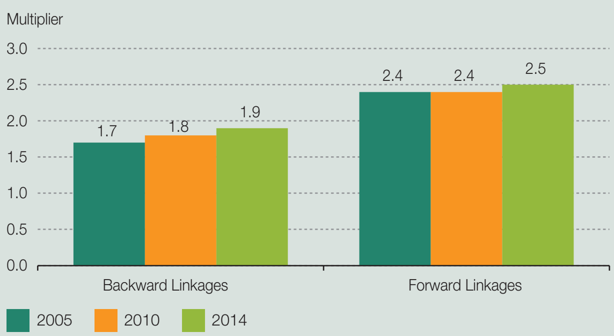
Higher productivity in ICT activities



Source: Department of Statistics, Malaysia (2017)

Chart 2: Backward and Forward Linkages between ICT & Computer Services and Other Sectors in Malaysia

Increasing spillovers from ICT to the broader economy



Source: Bank Negara Malaysia and Department of Statistics, Malaysia

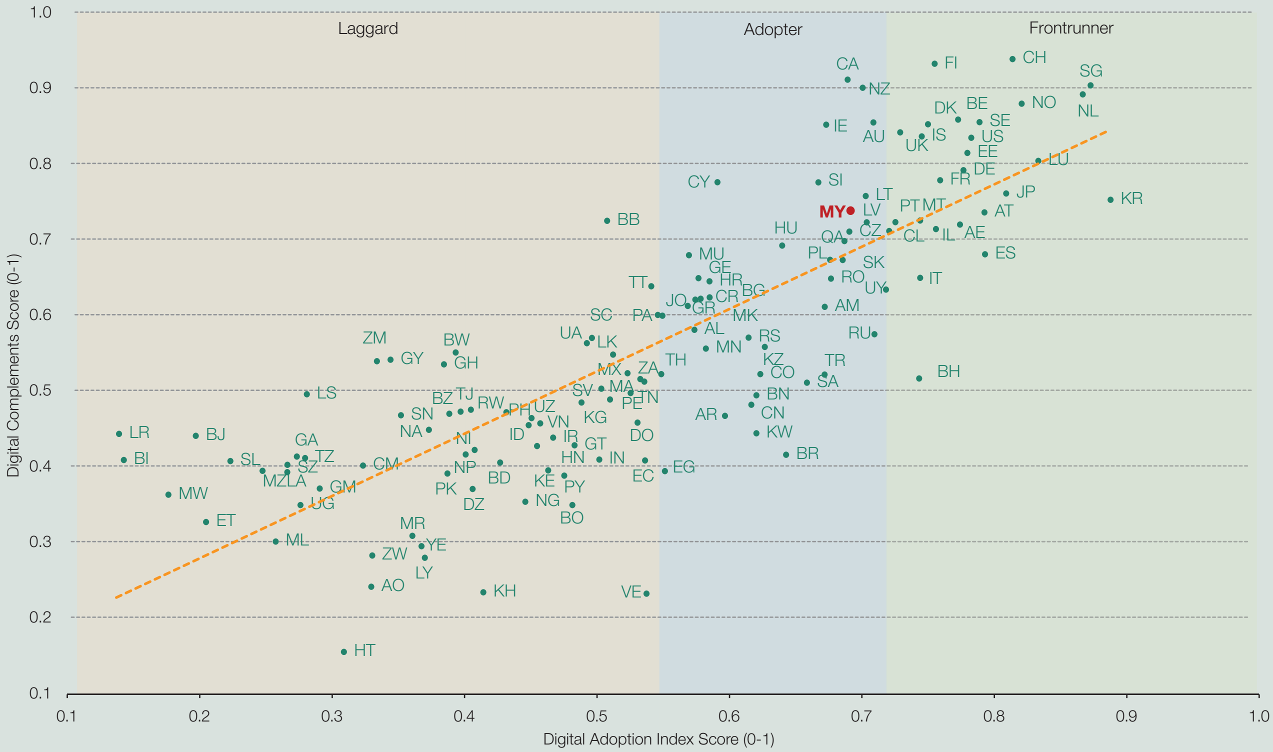
[1] ICT refers to value-added from ICT manufacturing, ICT services, ICT trade, content and media and other industries.
[2] "Backward linkage" describes the digital services sector's use of resources from other sectors as an input of production. "Forward linkages" describes other sectors' use of resources from the digital services sector as an input of production.
[3] This refers to services such as the internet, computer programmes and services provided via online platforms.

Malaysia's Competitive Positioning in the Global Economy

To analyse whether Malaysia's digital progress has kept pace on the global front, it is necessary to benchmark Malaysia with other countries. Chart 3 presents a summary of digital adoption and key complementary enablers that support digital activities. These measures are from the World Bank's Digital Adoption Index (DAI), which reflect accessibility and usage of digital services by consumers, businesses and the Government. Among the key complementary enablers are strong human capital, a facilitative regulatory environment for businesses to compete, governance standards and forward-looking organisations. Countries are classified as "frontrunners", "adopters" and "laggards"[4]. This analysis reveals Malaysia as an "adopter" country. While in some respect, this places Malaysia's digital progress as comparable with some advanced economies, the economy still lags notable "frontrunners" such as the United States, Estonia, South Korea, Japan and Singapore.

Chart 3: Digital Adoption and Complements Score Comparison

Malaysia as an "adopter" country lags behind "frontrunners"



Note: Selected "frontrunners" include United States (US), Estonia (EE), South Korea (KR), Japan (JP) and Singapore (SG). Selected "adopters" include Australia (AU), PR China (CN), Brazil (BR), Russia (RU) and Thailand (TH). Selected "laggards" include Mexico (MX), Vietnam (VN), Philippines (PH), Indonesia (ID) and India (IN).

Source : World Bank (2016)

4 Frontrunners are the top 20%, adopters are the 20-50% and laggards are the bottom 50% of the DAI.

Malaysia must aspire to become a "frontrunner" on the digital front to fully unlock the economic benefits. E-commerce gives firms and consumers access to global markets. The migration to such platforms may also result in structurally lower prices, due to enhanced price discovery and the reduced reliance on intermediaries ("middlemen") to distribute goods and services. The Gig economy facilitates more flexible work arrangements, while online job platforms reduce demand-supply mismatches in the labour force. Capacity in Big Data Analytics and AI tap into previously unutilised information to yield new insights for decision making. Cumulatively, these technological developments will yield more efficient and productive economic outcomes. It is estimated that these technologies can contribute USD15 trillion-USD33 trillion per year to the global economy by 2025 (McKinsey, 2013). For Malaysia, transitioning the economy to "frontrunner" status can yield significant additional growth dividends of between USD100 billion-USD136 billion per year by 2025.

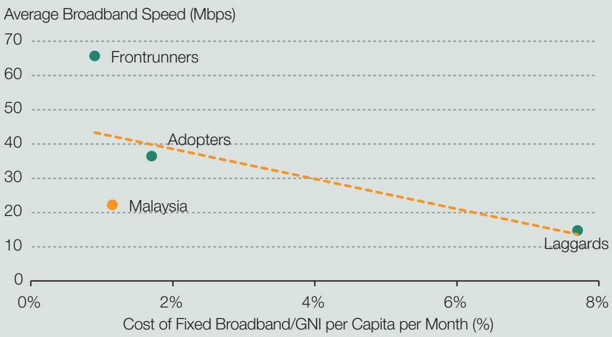
Delving deeper into the factors that propel economies to "frontrunner" status reveals that these economies have successfully addressed three key structural features to support their progression. Firstly, fast and affordable broadband. Secondly, talent tailored for digital progress. Thirdly, high digital adoption among consumers and businesses.

Fast Affordable Broadband

High broadband speed is vital for digital technologies such as the IoT, AI and Cloud Computing to thrive. A market structure that encourages competition among internet service providers ensures high quality and affordable broadband. Chart 4 shows that while broadband in Malaysia is relatively affordable, its average speed is more comparable to that of a "laggard" economy.

Chart 4: Broadband Speed and Affordability Comparison

Malaysia's broadband is affordable but very slow



Source: World Bank (2016) and Ookla (2017)

Talent Tailored for Digital Progress

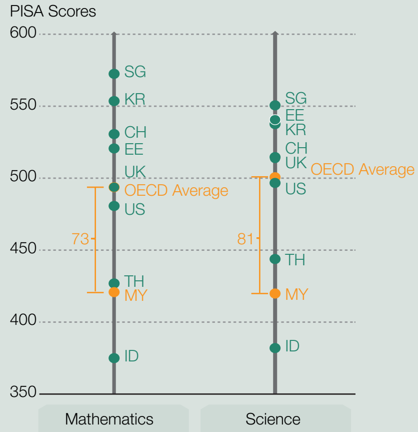
The digital transformation will have a polarising effect on the labour market, with both winners and losers. Labour with requisite skills to participate in this transformation will earn wage premiums between 10-16% (Lim, Wong, Rasep and Selvarajan, 2017). However, research shows that 54% of jobs in Malaysia, of which 80% are mid-skilled jobs, face a high-risk of being automated in the next 10-20 years (Ng, 2017), and that a vast majority of jobs within a decade will require ICT skills (Berg and Frey, 2016).

Developing requisite skills for the digital economy requires a strong foundation in technical subjects such as Science and Mathematics. Currently, Malaysia's standards in technical subjects are improving but still lag most advanced economies (Chart 5). Looking ahead, Chart 6 shows that Malaysia's universities will create substantially more graduates in the Arts and Social Sciences and less so in Science, Technology, Engineering and Mathematics (STEM) and technical fields. Left unaddressed, this development will perpetuate a skills mismatch as economic activity becomes more technologically and digitally advanced.

Chart 5: PISA Scores Comparison

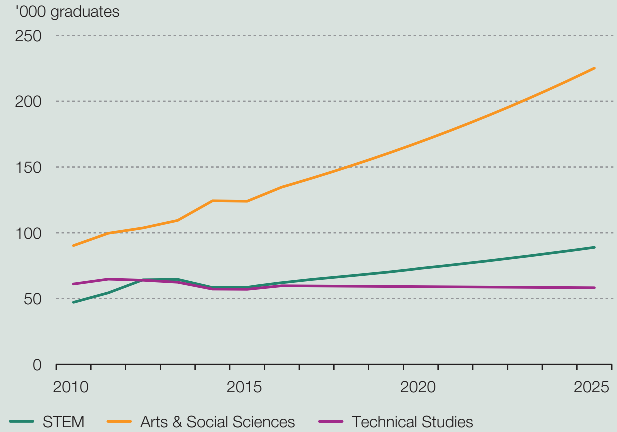
Chart 6: Projected Trend of Graduates

Talent transformation in Malaysia must adapt to thrive in the digital economy



Note: PISA refers to the Programme for International Student Assessment

Source: OECD (2014)



Note: STEM graduates refer to Science and ICT graduates

Source: Ministry of Higher Education and staff estimates

High Digital Adoption

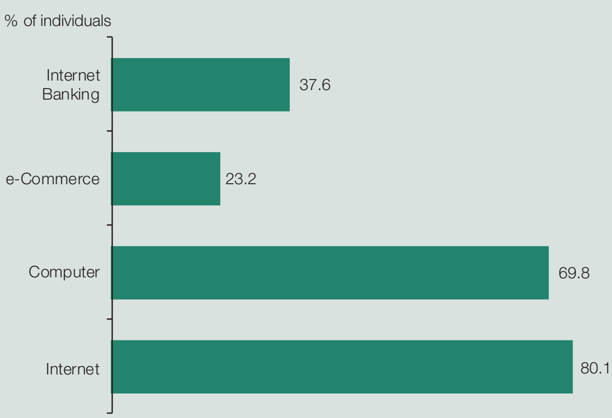
Digital adoption in Malaysia must improve to progress further in the digital economy. Although there is a rising trend in consumers' use of digital services such as e-commerce and internet banking, these figures still remain relatively low (Chart 7). Furthermore, the majority of internet usage in Malaysia is confined to the consumption of content (e.g. downloading movies/music, social media and games), rather than productive activities such as the creation of new content (e.g. mobile applications). For example, 81.2% of Malaysia's internet users download media and play games. In contrast, internet usage in more productive activities - professional networking (9.1%), content creation (11.8%) and learning from formal online courses (4.8%) - is substantially lower.

Malaysian businesses have not fully capitalised on the potential of e-commerce and use of websites for marketing. Only a minority have an online presence. Fixed broadband connectivity still lags behind advanced economies (Chart 8).

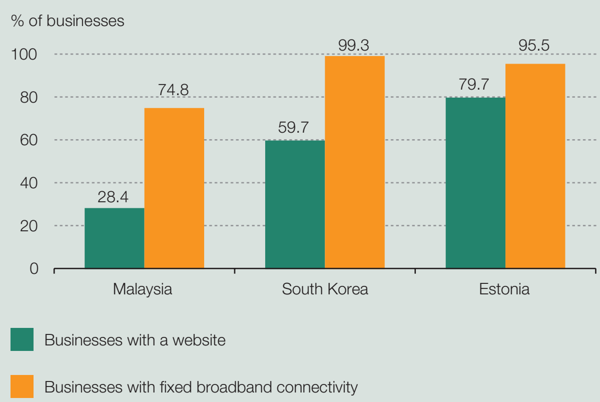
Chart 7: Consumer Digital Adoption (2017)

Chart 8: Business Digital Adoption (2015)

Digital adoption must improve to progress further in the digital economy



Source: Department of Statistics, Malaysia



Source: Department of Statistics, Malaysia and OECD

Policy Implications for Malaysia

Acknowledging the importance of the digital economy, the Government is undertaking concerted efforts to spur digital transformation. The Malaysia Digital Economy Corporation (MDEC) is tasked to spearhead Malaysia's Digital Hub and various Technopreneurship programmes to attract global and local tech start-ups. This resulted in related investments of RM16.3 billion in 2016. The Digital Free Trade Zone (DFTZ) initiative launched in 2017 under the National eCommerce Strategic Roadmap aims to boost SME export contribution to USD38 billion and create 60,000 jobs by 2025. To advance progress in Big Data Analytics, the ASEAN Data Analytics eXchange (ADAX) initiative trains companies and facilitates experimentation of new solutions. On talent, MDEC has developed university and industry-led partnerships to build the requisite expertise in data professionals and cybersecurity.

Lessons drawn from the recent experiences of "frontrunner" economies on digital adoption highlight some immediate policy priorities for Malaysia. Firstly, the education system must emphasise lifelong learning, stimulate more interest in STEM degrees and make ICT literacy skills mandatory (e.g. computational math, robotics, peer-to-peer learning). For instance, the Thomas Jefferson High School for Science and Technology in the US has research labs with experienced computer scientists across all subject areas (e.g. astrophysics and oceanic). As the skills requirements change, Government policy and firms must incentivise upskilling by providing and rewarding skills upgrade via Massive Open Online Courses. A coordinated national framework to continuously upskill the workforce, as adopted by Singapore's Skills Future Programme, will help at-risk workers be redeployed. Currently, only a mere 13% of existing workforce receive upskilling training (HRDF, 2016).

Secondly, a universal digital infrastructure is needed to encourage more digital adoption and participation. This infrastructure consists of high-speed network connectivity, a digital ID, an efficient digital payment network and open data systems. These building blocks allow secure digital identification and authentication for digital services delivery (including legal services to transfer property, telemedicine and financial services). This will reduce costs of services delivery. A notable case study is Estonia, through its public and private sector partnership to develop the "X-Road Initiative" (See box below).

Estonia's Digital Success – "X-Road Initiative"

Almost everything in an Estonian's life is seamlessly integrated digitally, from signing and sharing legal property documents, obtaining medical data records, setting up a company, obtaining banking services, participating in legislation, to the simplest of tasks such as paying for parking. The nation envisions being a borderless country. Anyone can apply for its e-residency digitally. This allows for value creation undertaken in any part of the world to register with Estonia and enjoy privileges such as access to the European Digital Single Market.

Their digital infrastructure, X-Road, leverages on a decentralised approach. A blockchain system allows for a common platform for various databases to openly share data through a unique digital ID. Private and public entities who wish to develop online solutions can apply to join X-Road and leverage on common system services (e.g. unique electronic ID) (Vassil,K. 2015). A fundamental premise is building societal trust through the empowerment of individual data ownership. Citizens can check on who has accessed their data. A demonstrated track record of innovations in cybersecurity also engenders trust in the system through the use of proprietary block chain technology, cybersecurity stress testing and data safe havens.

Having a secure payment system and an efficient financing mechanism are essential for an advanced digital economy. To accelerate the country's migration to e-payment, Bank Negara Malaysia has anchored strategies to displace cash and cheques, by encouraging online credit transfers and promoting wider adoption of debit cards. The Bank is also formulating the Interoperable Credit Transfer Framework (ICTF) to ensure seamless fund transfers between banks and e-money wallets, to drive greater adoption of mobile payments[5]. Peer-to-peer financing built on alternative credit scores and a vibrant venture capital ecosystem have been successful in financing digital start-ups, as evidenced in PR China and UK.

[5] Refer to Chapter on Cross-Sector Developments in the 2017 Financial Stability and Payment Systems Report for detailed discussions of the Bank's progress in payment system and fintech initiatives.

The private sector also plays an important role in stimulating innovation. This can be achieved through building partnerships to share data and resolve common concerns such as interoperability, common technical standards and cybersecurity. A good example is the establishment of the Industrial Internet Consortium, led by global major technology companies such as Intel, Cisco, AT&T, IBM and General Electric, which brought together industry players, academia and Government entities to modernise the manufacturing, healthcare, energy and agriculture sectors.

Thirdly, regulations must continue to be modernised to encourage innovation, investments and participation in the digital ecosystem. Privacy and cybersecurity issues must be addressed to engender trust. In the EU, the General Data Protection Regulation (GDPR)[6] has increased consumer control over data use to manage privacy concerns. All firms, including those outside the EU, who deal with EU citizens must obtain explicit consent on data use ("pre-ticked boxes or inactivity" do not qualify as consent), explain its use and uphold consumers' rights to have their private information be "forgotten". More importantly, consumers can transfer their data across online service providers (i.e. data portability), which spurs competition. While these principles emphasise greater accountability on firms, there are potential implications to the exports of services and cross-border data flows. These include higher cost of doing business from compliance and higher barriers to competition (e.g. the need for data localisation could impact non-EU service providers in cloud computing services). Thus, countries such as New Zealand and Switzerland have developed complementary legal frameworks on data protection to be mutually recognised as a jurisdiction with 'adequate' privacy laws.

Cybersecurity breaches have wide economic, social and sovereign implications. This is evidenced by cyber-attacks on the Bangladesh Bank's SWIFT system in 2016, Equifax (a major credit bureau in the United States) in 2017 and Ukraine's power grid in 2015. The global costs of cybercrime in 2014 was estimated to be between USD375 billion to USD575 billion, or about 0.6 percent of global GDP (McAfee, 2014). In Malaysia, cybersecurity breaches more than doubled in the last 8 years (2017: 7,962 cases; 2009: 3,564 cases) (MyCERT, 2018). A notable incident that occurred in 2014 involved a major data breach of more than 46.2 million mobile subscribers that resulted in a compromise of confidential personal information. Recognising the detriment of this threat, Malaysia plans to introduce cybersecurity laws to tackle the rising incidences of cybercrime. Practices such as mandatory reporting of breaches and stress testing of cybersecurity measures should be adopted to improve security standards and influence the development of a necessary market for cybersecurity insurance. Data is essential. Limited visibility on data breaches and the losses incurred prevent actuarial estimation of the cost of digital risks.

Regulations in the broadband market are critical for a competitive market structure to enable the provision of affordable and high quality digital infrastructure. These include adequate competition in the wholesale market and fair pricing mechanisms between the wholesale and retail markets. Fair access to infrastructure between incumbents and new players could spur investments. The Nationwide Fiberisation Plan (2017-2019) to enable high-speed broadband connectivity is a step in the right direction.

Conclusion

Digital technologies are now wide-spread and pervasive. New opportunities have emerged beyond e-commerce to robots and AI, which are quickly becoming indispensable in some industries. Malaysia has achieved some early success. Modernising regulations, empowering talent with future skills and universal access to world-class infrastructure will accelerate the pace of digitalisation and unlock the next frontier of productivity gains, higher income and social transformation. As a small open economy, Malaysia's competitiveness is no longer limited to its traditional physical factor endowments - land, capital and labour, but will be enhanced by its penchant for unlocking ideas and innovation in the digital economy. Malaysia will thrive with the opportunities that lie ahead with these digital frontiers.

[6] The regulation outlines that failure to comply would result in penalty to the firms of 4-10% of global revenue or €10-20 million, depending on the level of non-compliance.

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Governance, Organisational Development and Communications

Governance, Organisational Development and Communications

EXECUTIVE SUMMARY

Change remains a constant in central banking. This year witnessed change on many fronts. 2017 marked the end of a decade of low interest rates with major economies initiating a gradual tightening of monetary policy. The socio-economic challenges posed by economic inequality, insufficient retirement savings and aging societies are gaining further traction on policymakers' radar the world over. Advancements in technology herald new trends for digital currencies and mobile payment delivery channels. Geo-political risks in the Middle East, Asia and other parts of the world continue to affect policy decisions. While global economic growth shows signs of improvement, it remains affected by uncertainties that influence planning and investment decisions.

In response to such dynamic challenges, the governance, organisational development and communications roles of the Bank continued to evolve to put in place new capabilities to face these new challenges. Organisational transformation progressed to address new needs in the Bank's talent requirements, IT capabilities, support operations and physical security standards.

Critically in this period of change, the Bank's Board of Directors (the Board), supported by the three Board committees, was actively involved to provide strong oversight of the management, operations and performance aspects of the Bank. Managing organisational resilience and state of readiness remains a priority given the rapid nature of change within the organisation, as well as in the domestic and international context. The depth and breadth of risk data and analytics presented to the Board Risk Committee emphasises on emerging risks. In this regard, the Board sets the tone for a robust risk management culture.

The Bank's medium-term business planning integrates strategies with the elements of risk, financial resources, talent management, IT capabilities and sound operations management. Despite the demands on the Bank, the overall permanent staff size remains capped at the current level since three years ago. The Bank achieved this through a two-pronged strategy. First through the targeted use of contract positions for specific expertise but transitionary business issues. Second through making targeted investments in learning and development to grow technical and leadership competencies. This ensures that individuals are of the right calibre for the various roles and positions across the Bank.

The Bank continues to drive forward its four-year IT transformation programme. The focus in 2017 was on building internal IT capabilities and strengthening cybersecurity management standards and tools. Due care was given to effective change management as the different technology platforms were migrated progressively to platforms based on new architecture.

The Bank continues to improve its communication strategy to better reach its diverse stakeholders and obtain a better understanding of the situation on the ground. Mainstream media channels such as newspapers, television, and radio, continue to be used, but new communication channels such as social and alternative media that recently have transformed the pattern of media consumption of certain population segments, have motivated the Bank to be more agile in its communication. The nature of social media, that thrives on bite-sized news and quick interactions have made it a more pervasive and influential communication platform. Social media is also less constrained by the limitations of time and space compared to mainstream media, and allows for a more rapid response to situations and developments which may often arise from events outside of the Bank's control. Timely provision of requisite data and facts is important to correct misperceptions or misinterpretation, before they can give rise to entrenched misunderstanding, negative perception or excessive speculation. A central hallmark of this overall approach is the readiness to disclose relevant facts and data to raise public awareness on financial and economic issues. In many instances, the Bank has leveraged on social media to improve engagement with different stakeholders, including public agencies, NGOs and international counterparts.

GOVERNANCE

The Board plays a critical role in overseeing the Bank's performance and use of resources

The size and composition of the Board in 2017 remained at 11 members similar to the previous year.

The Board comprises four ex-officio directors, namely Governor as the Chairman, two Deputy Governors and the Secretary General of Treasury. The remaining members comprise seven independent non-executive directors. His Majesty the Yang di-Pertuan Agong appoints the Governor, Secretary General of Treasury and seven independent non-executive directors while the Minister of Finance appoints the Deputy Governors. The appointment of Chew Cheng Lian (Jessica), *CB* as Deputy Governor took place on 1 January 2018 following the retirement of Dr. Sukudhew Singh as Deputy Governor on 31 December 2017.

The Board derives its authority from Section 14 of the Central Bank of Malaysia Act 2009. The strong

Diagram 5.1

The Governance of the Bank

Source: Bank Negara Malaysia

oversight by the Board over the performance and use of resources by the Bank lends credence to the effective administration of the Bank. The oversight includes the approval of the budget and operating plan of the Bank, with regular performance and audit reports to keep the Board members informed.

Three committees, namely the Board Governance Committee, the Board Audit Committee and the Board Risk Committee, support the Board. All members of the Board committees consist exclusively of independent non-executive directors.

During the year, the Board deliberated on issues arising from global and domestic economic developments as well as financial sector and financial stability matters. The Board provided independent perspectives on the Bank's policy initiatives in addressing emerging risks. These issues included the level of household debt, the impact of high cost of living on the B40 group, risks pertaining to the oversupply of commercial properties, challenges for fiscal sustainability, opportunities presented by fintech and perspectives on the future of digital currency. The impact of Malaysia's overdependence on foreign labour and emerging trends of the digital economy were also deliberated. In addressing the Bank's resiliency, the Board discussed the management of international reserves, organisational development and staff matters, and risk management that affects the Bank's operations and finances.

Holistic risk management

A risk culture that is responsive to a constantly changing world

The Bank manages risks in an integrated manner through its Enterprise Risk Management (ERM) framework (Table 5.1). The framework, benchmarked with other central banks within the International Operational Risk Working Group (IORWG) as well as with ISO standards, ensures a robust approach to risk management.

The Bank's risk governance framework includes the Board, Board Risk Committee, Risk Management Committee and the Reserves Management Committee. The Bank's risk governance framework embeds risk management practices within business functions, business continuity practices and

Table 5.1

The Bank's Enterprise Risk Management Framework

Governance	Principle 1:	Governance structure with clearly defined roles and responsibilities over risk management
	Principle 2:	Risk reporting mechanism for effective decision making
Policy & Process	Principle 3:	Clearly defined policies to guide the risk management process
	Principle 4:	Standardised approach for risk management process of identification; assessment & measurement; prioritisation & treatment; monitoring & reporting
Tool & Methodology	Principle 5:	Standardised risk management tools to facilitate the process and implementation of ERM practices
	Principle 6:	Clearly defined standards to formulate and assess risk management strategies and internal controls
Effective Practices	Principle 7:	Sound risk management as part of the corporate culture
	Principle 8:	A mechanism and approach on communication to ensure high standards of transparency to internal and external stakeholders
	Principle 9:	A framework and policy for business continuity management to ensure continuity of operations in times of crisis
	Principle 10:	Effective and timely reporting to enable senior management to monitor the effectiveness of risk management; and to assist the Board of Directors in its oversight role

Source: Bank Negara Malaysia

project management. Collectively the governance approach enables a more holistic and forward-looking assessment of risks. The governing framework is illustrated in Chart 5.1.

In ensuring effective governance, the Bank applies the three lines of defence model, namely line departments, Risk Management Department (RMD) and Internal Audit Department (IAD). The line departments are responsible for identifying, mitigating and managing risks within their business areas. RMD serves as an independent oversight function on operational risk matters, including information security and business continuity processes. It is accountable for the adoption and practice of risk management standards within the Bank. Risk management tools, including key risk indicators, incident reporting and risk controls self-assessments, are deployed to monitor and enforce good risk management practices. Finally, the IAD, as the third line of defence, provides independent assurance on the effectiveness of risk management policies, tools and methodologies.

The Bank proactively reviews its risk management practices to nurture a vibrant risk culture attuned to emerging risks throughout the organisation. These measures are summarised in Diagram 5.2.

Diagram 5.2

Strengthening Risk Management Practices in 2017

Newsletter

- Appointment of Departmental Risk Officers as the first line of defence against risk matters
- Quarterly newsletter on emerging risk trends and application of risk management tools
- Regular "Red Teaming" exercises to test the Bank's controls
- Evolving and integrated information security environment
- Periodic Business Continuity Management (BCM) simulation exercises with robust crisis scenarios
- Strengthened cyber resilience through implementation of Cyber Security Incident Response Plan (CSIRP)

Source: Bank Negara Malaysia

Chart 5.1

Structure of the Bank's Risk Management Governance

Board of Directors

↑

Board Risk Committee*

Reserves Management Committee**

- Oversees the risks and investment strategies in the management of the Bank's international reserves
- Reviews the risks emanating from the global economic and financial markets outlook, and the implications for the Bank's investment strategies and financial position

Risk Management Committee**

- Responsible for Bank-wide risk identification and provides strategic direction on risk management

Operational Risk Management Committee***

- Responsible for identifying Bank-wide operational risks and ensuring that such risks are well-managed

Financial Risk Management Committee***

- Responsible for identifying Bank-wide financial risks and ensuring that such risks are well-managed

Crisis Management Team***

- Provides strategic direction on the Bank's Business Continuity Management
- Ensures that crisis situations faced by the Bank are well-managed

* Chaired by an Independent Non-Executive Director of the Bank
** Chaired by the Governor
*** Chaired by the Deputy Governor

Source: Bank Negara Malaysia

In 2017, the new Departmental Risk Officer (DRO) role was initiated to spearhead risk management practices at the operational level. The active DRO community encourages more transparent and regular discussion on risk matters to encourage risk learning and culture building. The DROs are coached to play their roles in different operational settings. The evolution of risk management practices is depicted in Diagram 5.3.

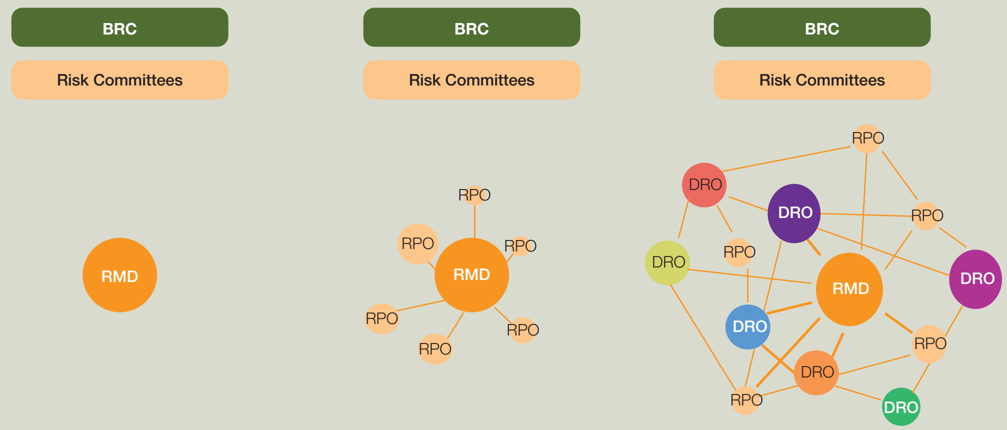
Risk awareness sessions are included in the Bank's onboarding programmes for new recruits, and periodic updates broadcasted Bank-wide to reinforce policies and guidelines. These updates include travel and safety alerts, and proper discipline in the usage of social media and password protection. This serves to protect information security while enabling staff to leverage on technology to perform their work more effectively.

Business continuity management

Business continuity management (BCM) standards continue to adhere to the ISO 22301 standard, coupled with constant benchmarking to best practices with industry groups and central banks. The Bank conducts simulation exercises, including robust crisis scenarios to test readiness in handling crises. The BCM plans are continuously reviewed to reflect emerging risk factors and strategies to ensure the Bank has the flexibility to pre-emptively arrest possible crisis developments early, and the capabilities to restore normalcy. This included the implementation of Cyber Security Incident Response Plan (CSIRP), one of the mandatory controls under the Society for Worldwide Interbank Financial Transaction's (SWIFT) requirements. The Bank continues to be an active participant in the country's national cyber security exercises.

Diagram 5.3

Evolution of Risk Management Practices in the Bank



	2009	2012	2017
Scope	Oversight and management of enterprise risks	Governance of transversal risk	Management of business risks at department level
Governance Structure	Board Risk Committee (BRC), Risk Committees*, Risk Management Department** (RMD)	Risk Policy Owners (RPO)	Departmental Risk Officers (DRO)
Focus Areas	• Tone set at the top • Emphasis on governance structure and policies	• Establish strategies on thematic risks • Horizontal collaboration among RPOs as second line of defence	• Increase awareness and accountability at every level • Strengthening interlinkages between departments

* The various dates of establishment of risk committees – Risk Management Committee: 2002, Crisis Management Team: 2003, Operational Risk Management Committee: 2008, Financial Risk Management Committee: 2008

** Established since 1996

Source: Bank Negara Malaysia

Strengthening internal controls and assurance

The Board Audit Committee (BAC) oversees the accuracy of the Bank's financial reporting, and the effectiveness of internal controls and compliance with legal and regulatory requirements. It also supervises the internal audit function of the Bank. In 2017, the BAC convened six meetings.

The IAD provides assurance to both the management and the BAC on matters relating to governance processes, risk management, internal controls and operational effectiveness. This includes sustaining efficiency in reporting and compliance with policies and procedures, legal and regulatory requirements, and meeting the Bank's mandates.

IAD conducts regular assessments of departments, branches and the Bank's related entities to identify any potential risks in their significant activities. During the year, attention was given to critical areas such as cyber security and business continuity management and operational areas to manage risks related to fraud. IAD undertook a rigorous review of the management of cybersecurity to identify potential vulnerabilities and threats to the Bank's IT systems. Actions were taken to tighten controls and mitigate cybersecurity risks within the Bank. In addition, IAD also performed reviews on new projects, such as the Financial Education Campus, Automated Cash Centre, new requirements for SWIFT and the new Electronic Central Credit Reference Information System.

IAD also undertakes investigations on internal cases involving breaches of the Bank's Code of Ethics and provides advisory as an independent observer in the Bank's various management and project committees. This is to ensure adherence to proper internal controls and governance. IAD continues to provide assurance to the Minister of Finance with an independent quarterly report on the Bank's international reserves management activities. In line with greater transparency, auditors from the National Audit Department are invited to attend all BAC meetings.

To further complement the audit work undertaken by the IAD, periodic consultations and study visits are held with local regulatory authorities and the Heads of Internal Audit of ASEAN Central Bankers. The focus of these consultations are to exchange ideas and best practices in auditing.

The principles espoused by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) Framework are embedded in the audit approaches for assessing the Bank's control environment, risk assessment, control activities, communication and monitoring of activities. As part of IAD's commitment to continuously enhance internal audit processes, the IAD also conducts continuous internal quality assurance and improvement programmes. Areas identified for improvement are communicated to the management of the Bank and reported to the BAC on a quarterly basis. The Bank's internal audit practices remain in conformance with the requirements of The Institute of Internal Auditors' International Standards for the Professional Practice of Internal Auditing (Standards).

In ensuring that auditors discharge their responsibilities effectively, the skill sets of auditors are developed in technical areas such as treasury and settlement, payment, procurement, IT security and fraud identification. The continuous learning and professional development includes pursuing professional certification offered by The Institute of Internal Auditors (IIA), Information Systems Audit and Control Association (ISACA), Business Continuity Management (BCM) and other professional bodies.

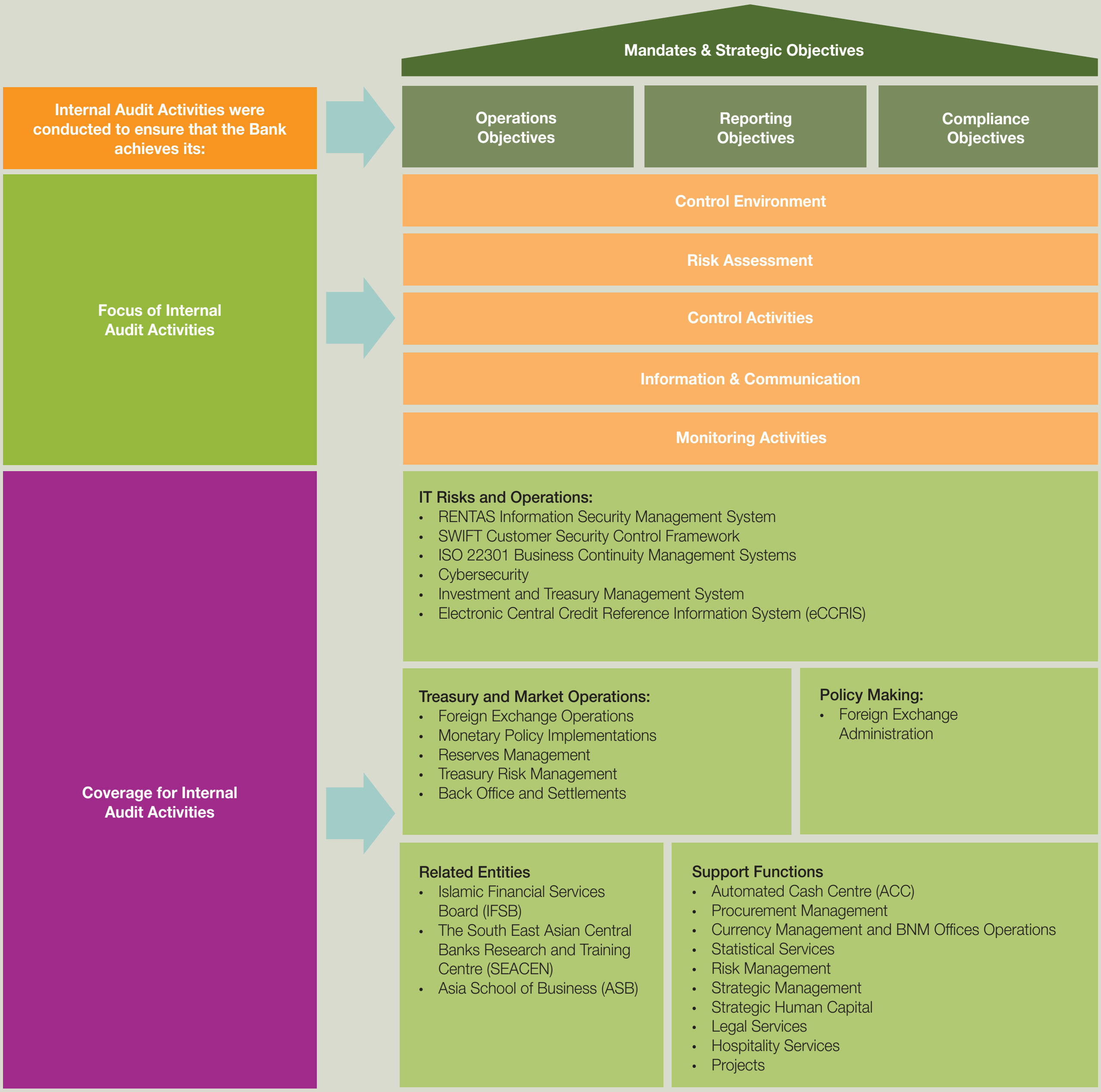
ORGANISATIONAL DEVELOPMENT

The Bank's emphasis is on achieving high-impact outcomes with measurable results, as outlined in the Business Plan 2018-2020

The strategic renewal of organisational capabilities is vital to remain effective under conditions of rapid change. It is also optimal to pursue transformative changes from a position of strength. The Bank has put in place a medium-term organisational business plan, and 2018 marks the fourth cycle of this three-year plan. The formulation of the Business Plan 2018-2020 (BP) will focus on addressing pressing domestic concerns and regional opportunities. The BP approach will stress high-impact outcomes to deliver measurable results. Leveraging on scenario planning and risk analysis, the Bank's medium-term strategies provide an outline plan that will address three issues. First are solutions to ensure an environment conducive for sustainable macroeconomic growth and monetary stability. Second are policy imperatives that aim to increase the state of

Diagram 5.4

Coverage of Internal Audit in 2017



Source: Bank Negara Malaysia

readiness to manage future uncertainties such as cyber threats and geo-political uncertainties. Third are capability development initiatives, particularly sustained investments in people, and development of new systems to ensure effective and productive results. The approach and key focus of the forthcoming BP is articulated in the Box Article on 'Business Plan 2018-2020: Framing the Future with Talent and Technology'.

The Bank's broad developmental role expands the boundaries of the organisation's knowledge and systems requirements. In anticipation of evolving risks and work demands, the Bank is undergoing transformative change in the fields of IT and physical security management, including the adoption of new digital systems for IT architecture, security surveillance and automation of business functions.

Organisational development efforts included improvements to the shared support services and project management. The improvements in project and financial management resulted in a reduction in project delays and better utilisation of planned budgets for the year. This contributed positively to business deliverables, and adherence to the Bank's culture of responsible budgeting.

Procurement management

During 2017, additional measures, such as revisions to the Vendor Code of Conduct, were introduced to ensure the efficiency and integrity of the procurement process. The Bank's vendors are now required to sign a declaration on non-fraudulent practices to enhance transparency and integrity of procurement-related payments. In addition, the introduction of the Vendor's Pledge of Integrity aims to raise awareness among internal and external stakeholders about healthy business practices within the Bank. The management of tender submissions was streamlined to ensure more robust security of tender information, and improving response time to vendors. Other measures included the standardisation of variation orders to promote more objective monitoring and assessment of procurement contracts. Efforts are underway to review the landscape involving information technology vendors, with a view to establishing an internal Centre of Excellence (COE) in supplier management. This is to ensure that the Bank continues to reap optimal benefits from its IT investments by managing its vendors more effectively, including making further improvements to the existing procurement process.

Developing people

The Bank has taken immediate steps to focus on re-skilling and developing a sustainable talent pipeline in meeting future and evolving challenges

The Bank's continued performance is based on the high quality and resilience of its people. New knowledge and skills are evolving on a daily basis. The rising cost of talent calls for higher levels of productivity, through automation and strategic partnerships, to contain the total cost of resources.

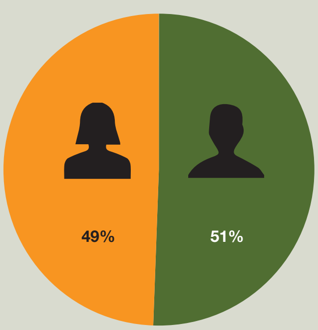
In strengthening the current talent pool, the Bank developed a sustainable pipeline for mission critical positions and sourced talent with critical skills such as IT and data sciences. The Bank's investments in leadership assessment and profiling tools and methodologies are reaping significant dividends. These investments have allowed the Bank to form a holistic view of institutional talent in terms role fit, level of competence, leadership styles, and climate. High-potential talents identified from the succession and feeder pools, supported by leadership profiling and performance data, are better able to assume new and often larger roles in the Bank.

Culture that values diversity

The Bank has a relatively balanced and stable talent profile. There is significant diversity and considerable opportunities for growth, both as students of new knowledge, and as mentors to share unique experiences. The talent management eco-system

Diagram 5.5

Gender Composition



Headcount: 3,047

Job level	Gender composition		Headcount
Senior Management	58%	42%	168
Managers	44%	56%	583
Executives	42%	58%	1,207
Non Executives	62%	38%	1,089

Source: Bank Negara Malaysia

seeks to leverage on this through a variety of knowledge sharing and recognition platforms, to celebrate the Bank's wealth of knowledge. The Bank has identified innovation, agile thinking and risk awareness as behavioural attributes that allow diversity in the work environment to flourish. Staff engagement is much higher as ideas are actively sought across the organisation via the community intranet and social media.

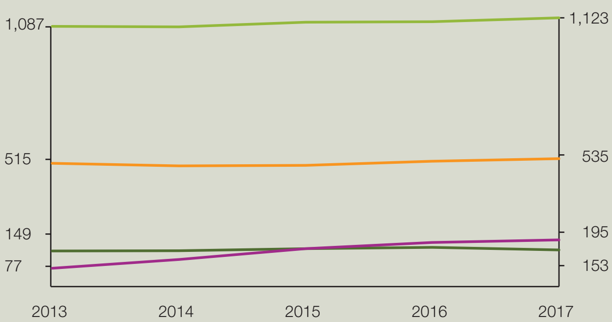
Clear and robust succession planning

The Bank conducted job rotations to broaden individuals' knowledge, skills and perspectives, and to form a deeper familiarity with the Bank's inter-connected policy work. Senior officers are increasingly given the responsibility to serve as spokespersons on behalf of the Bank in their respective areas of expertise. This extended communications role serves to increase the visibility of the Bank's strategic agenda, and ensure transparency of central banking activities.

The Bank has also adopted a broader repertoire of sourcing strategies to recruit specialist talents. Such talents include those with expertise in cyber security, data science, fintech, information technology, innovation management, procurement management and risk management. The Bank invested in codifying current and future skill sets for the structured development of competencies in line with market developments and the Bank's future role expectations. The return on the Bank's investment in talent is illustrated in Charts 5.2 and 5.3, in terms of a stable level of staff strength across all levels, and a relatively low attrition rate.

Chart 5.2

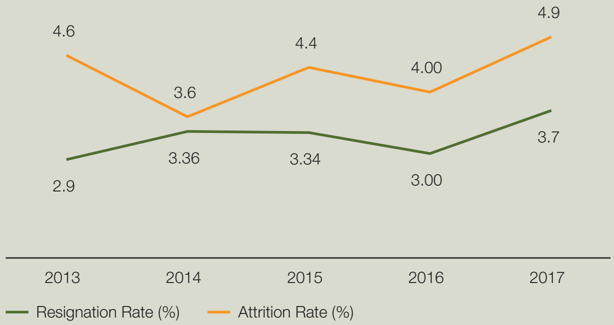
Staff Positions in the Bank (2013 - 2017)



Source: Bank Negara Malaysia

Chart 5.3

Attrition Trend in the Bank (2013 - 2017)



Source: Bank Negara Malaysia

Developing a competent workforce

The continued investments in learning and development reflect the high priority given to growing the talent pool. The overall learning budget increased to 6.02% of total gross salary (2016: 4.5%) comprising leadership and technical development, and scholarships for postgraduate studies. Other opportunities for learning are also through exposure via participation in international meetings and project teams that looked into critical issues concerning the Bank.

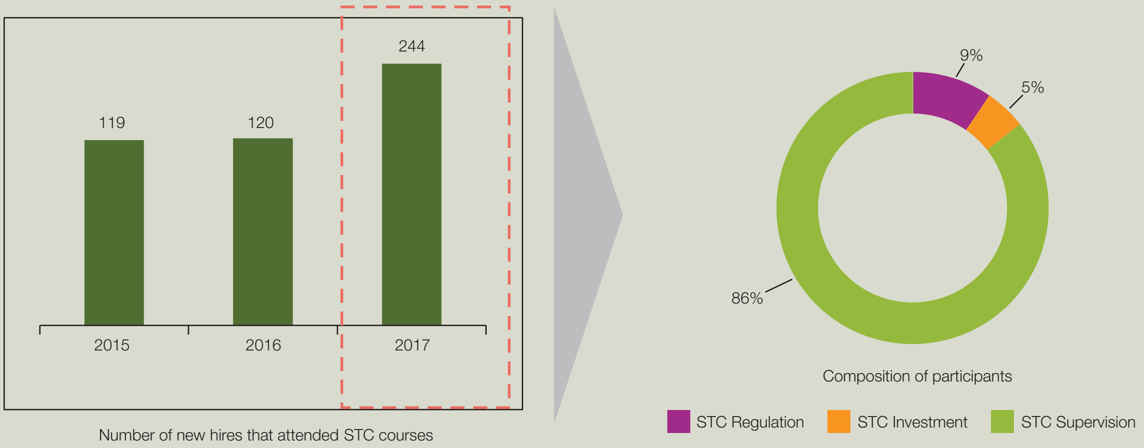
Given the significant and on-going shift in the Bank's staff demographics, time to competence is imperative to maintain the Bank's productivity. To ensure that new staff acquire essential central banking knowledge, the Bank designed and implemented foundational Structured Technical Curriculum (STC) for the Supervision, Investment and Regulation sectors. In 2017, 21 STC programmes were implemented for 381 learners, of which 244 (64%) were new hires with less than three years' experience in the Bank. The composition of participants per curriculum are detailed in diagram 5.6. The Bank focused on developing emerging technical skills in priority areas such as fintech, data science, cybersecurity and anti-money laundering and counter-financing of terrorism.

The Bank is a strong proponent of continuous professional development. In 2017, the Bank provided opportunities for staff to further their professional development and become members of the Asian Institute of Chartered Bankers (AICB) and the Institute of Chartered Accountants in England and Wales (ICAEW). These qualifications chart a clear pathway towards developing higher levels of technical proficiency and specialisation among Bank staff.

To enhance the quality and diversity of leadership, the Bank prioritised development for senior leaders

Diagram 5.6

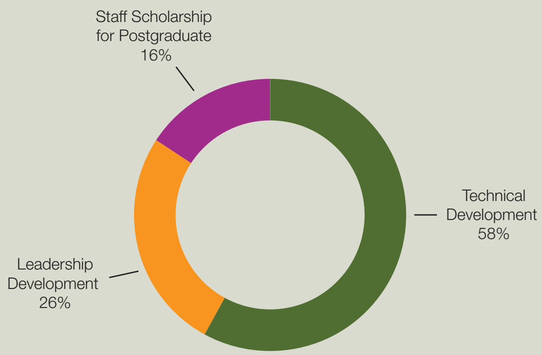
STC Courses for New Hires



Source: Bank Negara Malaysia

Chart 5.4

Learning and Development Investments



Source: Bank Negara Malaysia

through Executive Education Programmes at top business schools. In addition, to nurture 'ready-now' leaders, the Bank invested early in the feeder pool through structured Leadership Development Programmes. Leadership development exposure includes cross-functional assignments and job rotations to elevate their learning agility. In addition, as part of staff's development, the Bank created opportunities for senior leaders and internal faculty to share their expertise and experience in small group conversations with staff and 'leaders teach leaders' programmes.

Capacity building for the domestic financial industry

Another dimension of capacity building is the collective effort with the financial industry to raise professional standards, and innovate on financial services. The Bank has embarked on establishing a designated and integrated area, known as the Financial Education Hub, to promote and ensure continuous world-class learning and development. This education hub will include the new Asia School of Business complex and the Financial Industry Training Centre presently under construction. The International Centre for Education in Islamic Finance (INCEIF) and the International Shariah Research Academy will also be relocated to this area, which is contiguous to the Bank's Sasana Kijang complex. The Hub is envisioned to be a focal point for international learning and research that will nurture a sustainable pool of local talents to support the development of the domestic financial industry.

International engagements for knowledge sharing

The Bank's Sasana Kijang continues to be a centre of excellence for thought leadership, and learning and development in central banking and financial services, by hosting activities promoting collaboration and advancing knowledge in central banking. The Bank hosted the 2017 International Association of Insurance Supervisors (IAIS) Annual Conference. The Conference is an effective platform for insurance supervisors from around the world to exchange views on issues relevant to the supervision and development of insurance markets. Similarly, the Bank hosted the Global Symposium on Development Financial Institutions for DFIs and other relevant stakeholders to learn and exchange ideas on contemporary issues surrounding the development finance domain.

The Bank also had the honour of hosting and organising the BNM-IMF Summer Conference where research papers discussed included international trade, the impact of protectionism and labour migration, and new and innovative trade policies were proposed at the conference. Also held during the year was the BNM Monetary Policy Conference that focused on rethinking the monetary policy framework and how the rapid development in technology may alter and potentially disrupt the financial system.

In 2017, the Bank's technical cooperation programmes in the area of central banking supported regional integration and enhanced collaboration amongst central banks and regulatory agencies. In addition, the Bank partnered with Islamic training institutions to deliver programmes tailored to meet demands from countries that are furthering their Islamic finance agenda.

500 officers from 65 countries participated in various technical cooperation programmes organised by the Bank

The technical cooperation programmes drew on a diverse set of experts from the Bank, and The World Bank, Alliance for Financial Inclusion (AFI), Organisation for Economic Co-operation and Development (OECD), United Nations Capital Development Fund (UNCDF), Behavioural Insights Team and Financial Conduct Authority, United Kingdom. The Bank also continued its partnership with the Asian Development Bank (ADB), Islamic Research and Training Institute (IRTI) and Statistical, Economic Research and Training Centre for Islamic Countries (SESRIC).

Transforming physical security

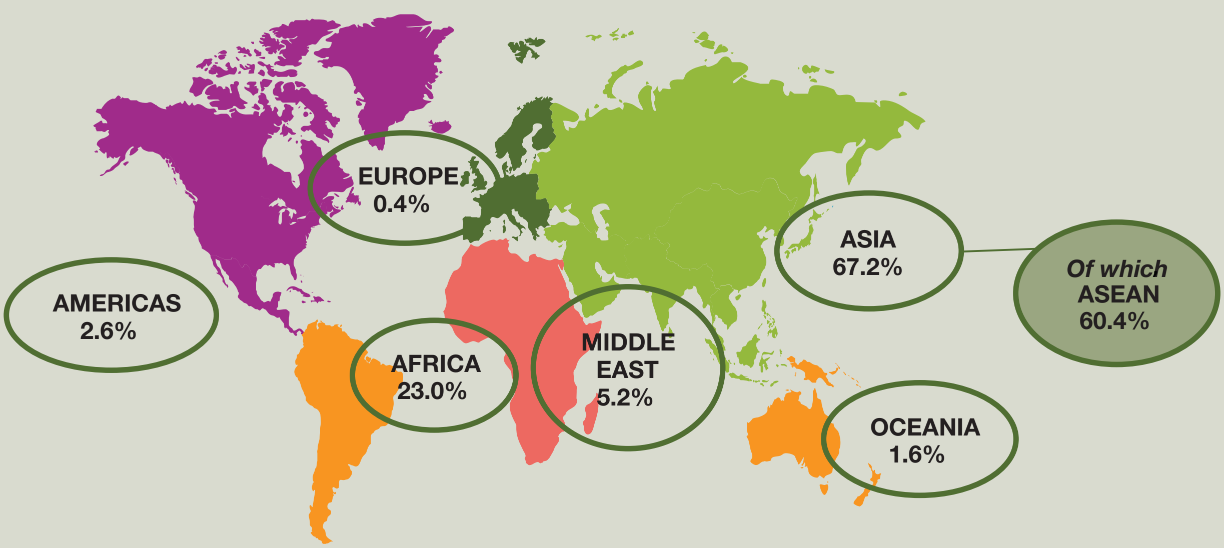
The safety and security of the Bank's people and assets are paramount. The comprehensive review and enhancement of the Bank's security management aims to strengthen the policies and capabilities in view of changes in potential threats in the environment. The scope of transformation included talent reskilling, process reengineering, implementation of new security devices and technology, and inculcating a more security conscious culture.

Key initiatives included the implementation of advanced access control systems, installation of X-Ray baggage scanners and walk-through metal detectors, enhancement of CCTV surveillance systems and development of a structured training curriculum for the Bank's Auxiliary Police. In addition, the Bank strengthened the capabilities of the security management team to undertake effective risk assessments, strategic planning, intelligence gathering and data analytics.

The Security Transformation Plan also focused on technology enhancement through the implementation

Diagram 5.7

The Bank's Technical Cooperation Programmes 2017



Source: Bank Negara Malaysia

of integrated and intelligent access management and surveillance systems for effective monitoring and timely response. The security network infrastructure was upgraded for greater bandwidth for speed and reliable data transmission. Scalability for future requirements was one of the features taken into account.

A major initiative was also undertaken to inculcate the desired security culture across all stakeholders in the Bank where security is recognised as a shared responsibility and reinforced through greater awareness, education and practices. In particular, security policies, procedures and awareness programmes were enhanced to improve the security culture among all staff, vendors and tenants in the Bank's premises to ensure a safe and secure working environment as well as effective protection of the Bank's assets.

The Bank has always given due attention to the welfare of staff as a core organisational value. In 2017, one of the initiatives was to embark on a project to replace several of its existing security quarters at a number of its key operating locations with new facilities that would provide a higher standard of living space for security personnel and their families.

Moving forward with IT transformation

Significant developments in technology requirements driven by the digital economy and financial technology innovations have shaped the Bank's IT transformation initiatives.

At the core of the IT transformation drive is its people. During the year, the Bank conducted recruitment drives to identify and onboard relevant talents to address shortages of specialised IT skills. The new organisational structure promotes clear accountabilities in the areas of enterprise architecture, solution development and deployment, resource planning and management, support and maintenance, and infrastructure management.

To ensure alignment to business needs, the Bank has initiated the adoption of a business-aligned IT portfolio management structure. Initiatives are aligned based on the different sectors and aim to achieve IT scalability, flexibility and adaptability moving forward.

Enhancing cyber resilience

Initiatives to further enhance the cyber resilience of the Bank's IT ecosystem continued to progress well in 2017. The Security Information and Events Management (SIEM) solution was implemented to assist in analysing security incidents within a real-time IT environment. Any threats to enterprise information systems (web sites, applications, databases, data centres and servers, networks, desktops and other endpoints) were assessed and defended. The Bank's cyber threat intelligence is continuously strengthened to ensure the Bank's IT infrastructure stays ahead of more advanced malware.

Pushing the boundaries of innovation

The Bank's Board of Directors and the Management team continue to emphasise the strategic benefits of IT. This includes developing more in-depth expertise in data sciences and big data analytics, and in improving productivity through increased innovation. As a result, the Bank has invested in a project team to spearhead the exploration of big data. This approach will allow the team to ideate and innovate among a small diverse group of skilled individuals to enable faster turnaround and outcomes.

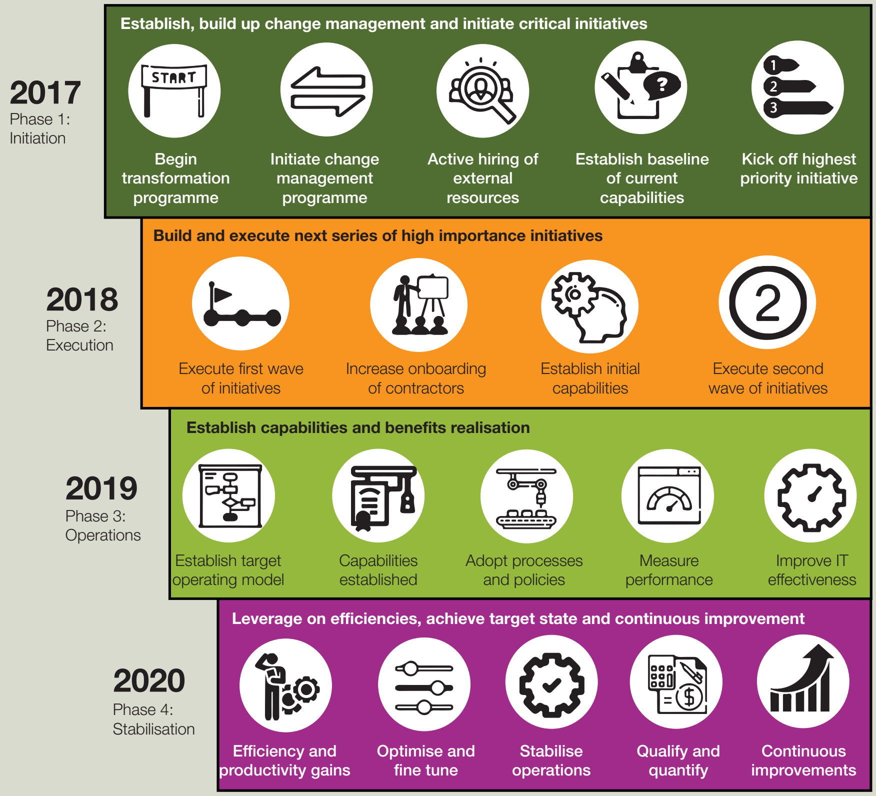
The ever-changing IT environment requires the Bank to adopt two distinct technology approaches (a bi-modal IT approach) in responding to new opportunities; i.e. (i) one that relies on stability and efficiency of the traditional information management framework, while (ii) the other focuses on being agile and flexible, responsive to the immediate needs of the stakeholders for digital innovation. This strategic shift entails IT operating in two vastly different but coherent styles of work, which opens up opportunities for digital innovation.

Robust ICT infrastructure

The renewal of the Bank's certificate under the revised ISO/IEC 27001 Information Security Management System (ISMS) standard for the Real-Time Electronic Transfer of Funds and Securities (RENTAS) IT infrastructure provides affirmation that the Bank's critical IT infrastructure and information assets are on par with international standards and best practices. It also demonstrates compliance with the requirements of the ISO standards for holistic management and governance of information security.

Diagram 5.8

The IT Department's Four-year Transformation Plan



Source: Bank Negara Malaysia

COMMUNICATIONS

The wide use of social media platforms among the public has necessitated the dissemination of quick information, and rapid response to emerging issues and viral postings

The Bank's communication approach in 2017 took on a dynamic change in terms of rapid response. This led to an expansion of methods and channels, quicker response and stronger messaging, and closer public engagements. The wide use of social media platforms among the public has necessitated a faster and more direct approach. Together with alternative media, these channels were used not only for closer communication with the public, but also as an intelligence gathering tool to sense the sentiment on the ground and identify sources of misinformation. In 2017, the Bank on several occasions responded swiftly to the misreporting by the media and other parties through the use of factual videos and easy-to-read infographics. The Bank launched HousingWatch.my and FactWatch.my to provide a centralised fact-checking resource in this regard. The Bank also increased the publication of photographs of its events through multiple channels to increase the visibility of its activities among the public. The Bank continues to use traditional media channels to reach and inform the public, and to profile different spokespersons who are experts in their respective fields to front important issues.

Diagram 5.9

Speeches by Senior Officials

Total Speeches By	
Governor	49
Deputy Governors	14
Assistant Governors	14
Director	1

Source: Bank Negara Malaysia

Expanding engagement with stakeholders

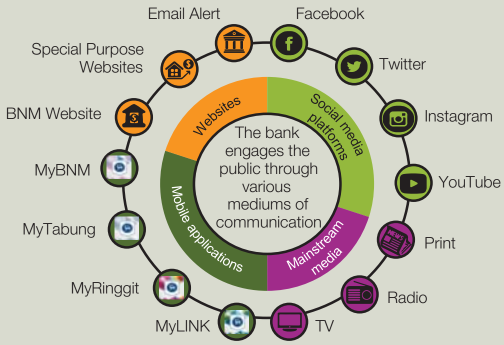
The Bank's Annual Report and Financial Stability and Payment System Report (AR/FSPSR) briefings to various stakeholders are important platforms to ensure all key stakeholders are cognisant of the Bank's policy actions. Similarly, the Bank organised communication sessions with manufacturers, exporters, trade chambers, MNCs and economists/ analysts on the Financial Market Committee's measures to develop our domestic financial markets. Board Briefings to the Finance Minister, senior Economic Ministers and officials enabled the Bank to impart suggestions and observations to key economic policy makers in the Government. In addition, in 2017, the BNM Quarterly Bulletin's (QB) review significantly enhanced communications with the Bank's stakeholders with broader coverage and more visually oriented information.

The Bank's communication continued to focus on addressing issues of public interest. This included issues such as affordable housing via the HousingWatch.my website; an exposure draft to mitigate risks associated with uninformed speculation in digital currencies; benefits of motor insurance liberalisation measures; and the importance of conversion from signatures to Personal Identification Number (PIN) for verification of card payments. In line with the growing preference for mobile apps, the Bank introduced MyLink, MyBNM, MyRinggit and MyTabung to facilitate consumers in making informed financial decisions by providing the latest development and updates on financial matters. In particular, BNM MyLink is a one-stop mobile application which connects consumers to financial institutions in Malaysia to make enquiries, obtain advice and lodge complaints.

The Bank also conducted a Public Perception Survey to gauge the public's awareness and understanding of the Bank's roles and functions. This provided a baseline measure against which to measure the effectiveness of the Bank's education and awareness campaigns. The Bank utilises a variety of communication channels, as explained in Diagram 5.10, to reach out to its diverse stakeholders.

Diagram 5.10

Communicating through Multiple Media Channels



Source: Bank Negara Malaysia

Elevating public awareness through outreach programmes

Significantly in 2017, the Bank's new strategies in outreach programmes made major breakthroughs in public engagements with the public. The programmes are in partnership with other public agencies, NGOs and international partners. The cumulative benefits are expected to be significant, especially in creating a more inclusive financial system and elevating financial literacy. Table 5.2 provides the highlights of new initiatives and on-going programmes.

Nurturing financial awareness through the Museum and Art Gallery

The Bank continues to perform its role as a patron of Malaysian art and heritage through the Bank's own Museum and Art Gallery (Museum). The role of the Museum has continued to expand in the areas of financial education, and as a patron of local art. In 2017, the Museum organised exhibitions on diverse subjects ranging from nature conservation to promotion of financial awareness. Exhibitions that exclusively displayed the works of local artists were 'Lestari Alam/Nature Nurtured', 'The Unreal Deal', 'Art Bazaar' and 'Mini Art Bazaar'. The visibility of the Museum has been elevated through the increased coverage in both traditional and social media. As a result, local and international visitors increased by 13.4% and 29.8% respectively. The Museum was also acknowledged by Tourism Malaysia as a 'Must-See' Museum in Kuala Lumpur and has been a recipient of TripAdvisor's Certificate of Excellence Award for three consecutive years from 2015 to 2017.

Table 5.2

Outreach and Engagement Initiatives

Communication targets	Collaborative partners and channels	Outcome
Enhancing financial knowledge and literacy of financial consumers	• Karnival Kewangan events in Kuala Lumpur, Sabah and Sarawak • Mini Karnival Kewangan at 70 sub-districts • Financial Education to government employees through 76 programmes • Engagements through "Train-the-Trainers" programmes	• Attracted more than 75,000 financial consumers from diverse groups • Benefitted 8,893 people from rural communities and increase in financial literacy by 28% and take-up rate on basic financial products by 14% • Benefitted 8,000 government employees • 181 self-led Financial Education programmes benefitting 9,224 participants
Multi-channel approach for greater awareness on financial crime	• Financial Consumer Alert (FCA) website to alert members of the public on the list of companies and websites which are neither authorised nor approved under the relevant laws and regulations administered by the Bank • Social media, TV and radio channels e.g. "Forum Perdana Hal Ehwal Islam" • Organisations representing women • Religious groups • Business chambers	• 132 entities listed in 2017 in FCA list (2016: 31 entities) • FCA list attracted 255,605 viewers in 2017 • Outreach to more than 1.9 million consumers through social media, TV, radio and strategic alliances
Increasing awareness on various financing and assistance schemes available to SMEs	• Events organised by ministries, key government agencies and financial institutions • Social media channels	• Benefitted 14,000 SMEs • 65,000 information brochures were distributed, providing information on the many different financing initiatives
Conducting "Train-the-Trainers" programmes to provide advisory services on SME financing	• SME Corporation Malaysia • Associations of Financial Institutions [Association of Banks in Malaysia (ABM), Association of Islamic Banking Institutions in Malaysia (AIBIM) and Association of Development Finance Institutions in Malaysia (ADFIM)]	• 17,043 SMEs have benefitted from 341 training sessions conducted by financial institutions on SME financing • 26,125 staff from financial institutions nationwide were trained to provide quality advisory services to SMEs
Introducing Small Debt Resolution Scheme for viable SMEs with impaired financing	• Print media • Radio and TV interviews	• Increased awareness for financially distressed SMEs to seek assistance
Creating awareness on the availability of Disaster Relief Facility to assist SMEs affected by floods in the northern states	• Financial Institutions (FIs) • Insurers • Industry briefing • Dialogue sessions with SMEs and SME-related associations and business chambers • Info blast emails to SME-related associations and business chambers • Distribution of flyers to financial institutions • Online and social media channels	• The Bank announced on 8 November 2017 on the RM500 million facility to alleviate the financial burden and accelerate resumption of SMEs' businesses affected by the floods. • As at end-December 2017, FIs have approved financing totaling RM34 million under the Facility. • Besides these financing, FIs have also provided other assistance to the affected SMEs such as: ¤ restructuring and rescheduling of loans/ financing; ¤ moratorium on repayment of loans/ financing; and ¤ waiver of charges for replacement of ATM cards, cheque books and passbooks
Initiating largest collective impact for corporate social responsibility with the financial industry in Malaysia through the Financial Industry Collective Outreach (FINCO)	• 107 financial institutions	• Focused on increasing English literacy levels and giving life aspiration to underprivileged children from lower income families

Source: Bank Negara Malaysia

Diagram 5.11

The Museum's Activities and Visitors in 2017

ART EXHIBITIONS

4

That showcased the works of local artists

PROGRAMMES

68

Organised including educational programmes and talks

ARTWORKS

2,182

In the collection of which 87% are artworks of local artists

VISITORS IN 2017

67,735

Of which 94% were local visitors

Source: Bank Negara Malaysia

Business Plan 2018-2020: Framing the Future with Talent and Technology

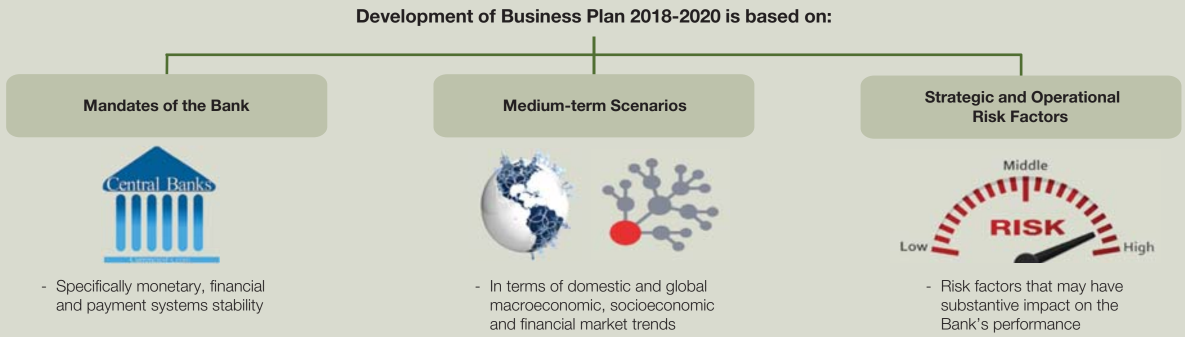
By Kalaiselvi Somasundaram and A. Kanagalingam

Introduction

The Bank's Business Plan 2018-2020 (BP) with the tag line 'Framing the Future with Talent and Technology' provides the lens in setting future priorities. The combination of talent and technology has given rise to several common themes that will have a profound impact on the 21st century organisation. These themes include innovation, productivity, agility and accountability. The themes reflect the new performance attributes required in today's organisation to cope with the rapid changes constantly reshaping the environment in which businesses operate.

Diagram 1

Development of Business Plan 2018-2020

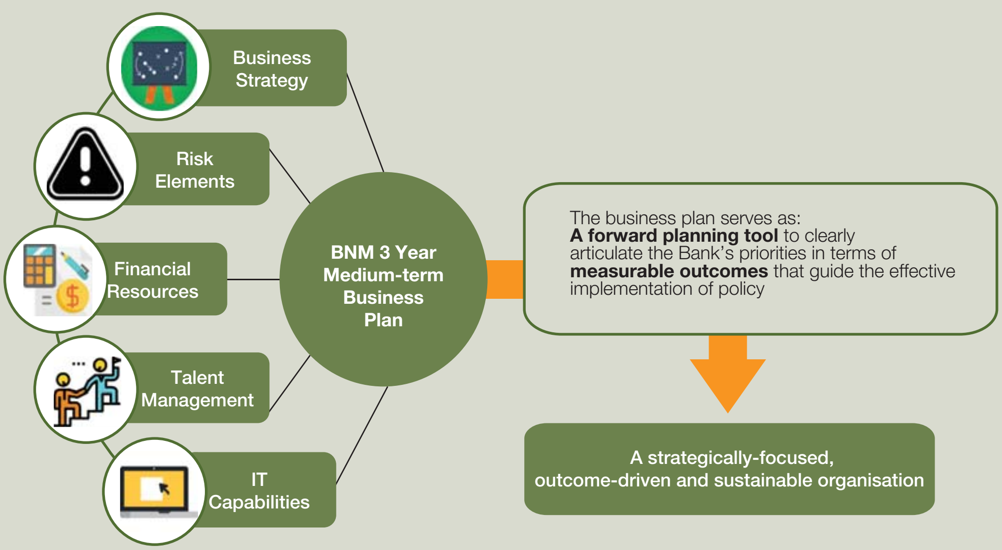


Source: Bank Negara Malaysia

The Bank's medium-term BP is designed as an integrated forward planning tool. It articulates the Bank's priorities in terms of measurable outcomes. These outcomes guide the effective implementation of policy, and align organisational capabilities with business imperatives.

Diagram 2

Business Plan as a Forward Planning Tool



Source: Bank Negara Malaysia

The objective of the BP is to ensure the Bank continues as a strategically-focused, outcome-driven and sustainable organisation. Renewal of the organisation's DNA becomes a pre-requisite for success in terms of new processes, technologies and solutions in the areas the Bank can make the most impact on the nation's socio-economic development, in line with the mandate and objectives of the Bank.

Business Plan in a Changing Economic and Financial Systems Environment

The Bank's medium-term Business Plan is anchored to four focus areas, namely:

Diagram 3

Business Plan Focus Areas

Source: Bank Negara Malaysia

The four focus areas address the Bank's legislated mandates and developmental priorities to nurture a progressive financial system that will be a catalyst for sustainable economic growth. The four focus areas are supported by Strategic Objectives that give greater clarity to the outcomes the Bank seeks to achieve over the medium to long-term. The Strategic Objectives also aim to develop stepping stones for continuous structural reforms and innovations for the economy of tomorrow, and the next generation of financial sector players.

The key strategic objectives and strategies that support game changing outcomes for the Malaysian economy, financial system and society are highlighted in Diagram 4. These strategies focus the Bank's policies on areas that offer significant opportunities for job and wealth creation, or to contain vulnerabilities that may hamper the country's socio-economic progress.

The focus on developing a culture that embraces innovation, agility, productivity and accountability is part of transforming the way the Bank operates in the new environment. New competencies and behaviours must be learnt quickly to adjust and capitalise on the pace of technological development, and to mitigate new risks. Ultimately, the business plan is to deliver results in terms of economic growth, financial stability and broad-based job and business opportunities that meet the expectations of the public, businesses and all stakeholders with a vested interest in the economic and social well-being of the nation.

As with any good plan, performance is reviewed and communicated through the Bank's broad range of publications and communication channels, with appropriate course corrections when necessary.

As the country continues to progress towards becoming a more developed nation, the financial sector and other economic structures must remain supportive of growth and be resilient to risks. The business plan aims to strike the right balance between regulation and allowing technological innovations to take place in our financial system.

Diagram 4

Strategic Outcomes

Sustainable Economic Growth

- Ensure macroeconomic environment conducive for **sustainable growth**
- Ensure a sustainable and balanced **housing market**
- Address pre-emptively the emergence of **risks of imbalances**

Financial System Stability

- Strengthen the **resilience and integrity** of the financial system
- Enhance **financial market capacity** to better intermediate risks
- Ensure **cost-effective supply** of quality and secure banknotes and coins

Digitalisation of Financial Services

- Greater **diffusion of technology** in financial services
- Accelerate **migration to e-payments** by displacing cash and cheques
- **Maximise network effects** through open and interoperable standards, and future-proofing public infrastructure

Domestic Socio-Economic Well-being

- Implement **sustainable social financing** to increase income generating activities and advance socioeconomic mobility for communities
- Ensure financial service providers are **fair in their dealings** with financial consumers
- Enact a **Consumer Credit Act** to impose consistent consumer protection requirements on banks and non-bank credit providers

Increase Professionalism and Skills

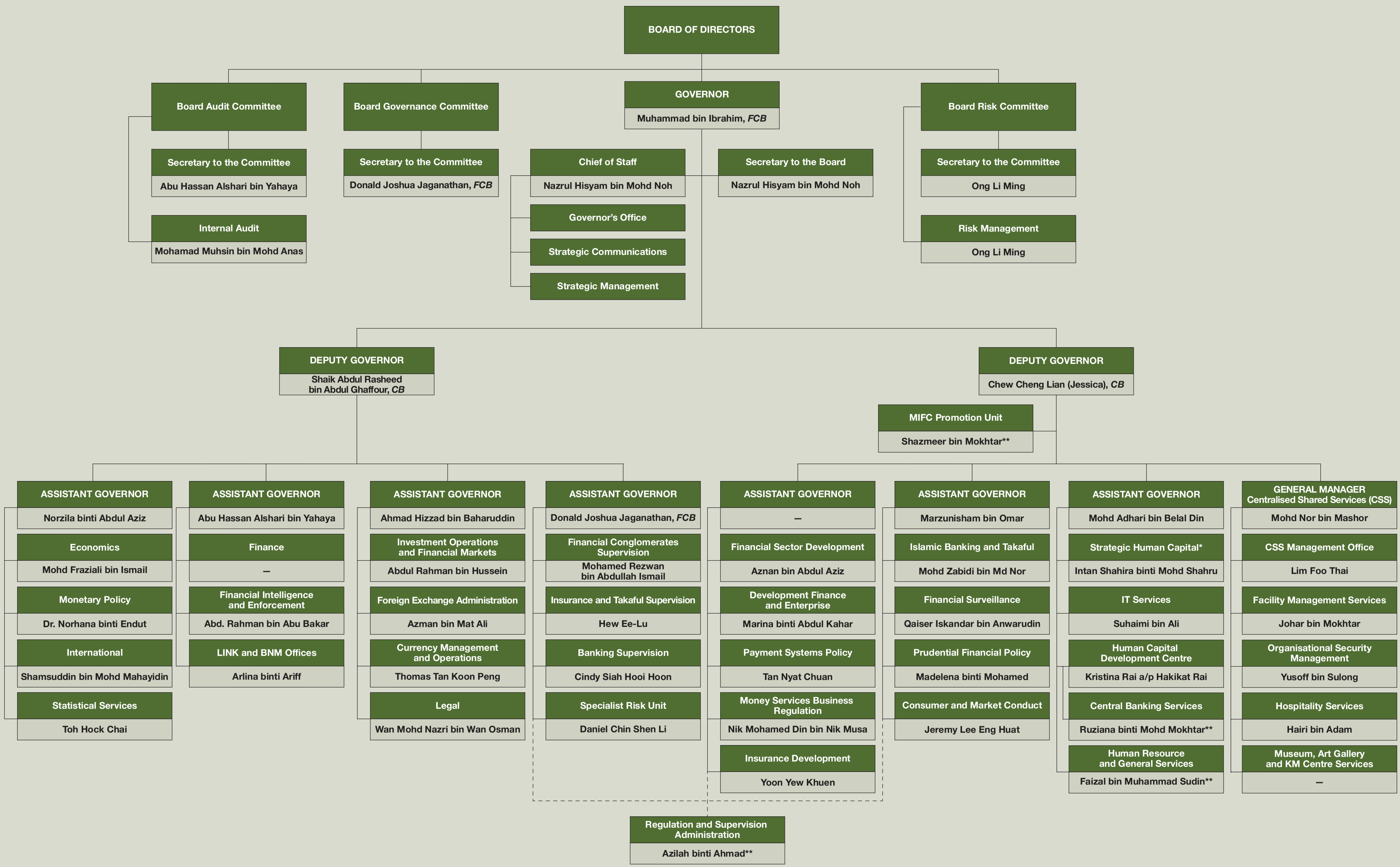
- **Professionalise** financial sector workforce including their intermediaries
- Strengthen **recruitment practises** and introduce **accountability framework** for the financial industry
- Develop the **"Financial Education Hub"** as a focal point for international learning and research to nurture a sustainable pool of local talents

Culture of Innovation and Agile Approaches

- Leadership that actively promotes continuous strategic renewal by encouraging **innovation and creative thinking**
- Adopt **agile approaches** to enable rapid deployment of solutions, including development for the necessary new skillsets
- **Digitalisation of workplace** to enable enhanced mobility, efficient information management and seamless collaboration

Source: Bank Negara Malaysia

BANK NEGARA MALAYSIA
Organisation Structure



* Reports to Governor
** Deputy Director

Governor	Muhammad bin Ibrahim, *FCB*
Deputy Governor	Shaik Abdul Rasheed bin Abdul Ghaffour, *CB*
Deputy Governor	Chew Cheng Lian (Jessica), *CB*
Secretary to the Board	Nazrul Hisyam bin Mohd Noh
Assistant Governor	Norzila binti Abdul Aziz
Assistant Governor	Donald Joshua Jaganathan, *FCB*
Assistant Governor	Abu Hassan Alshari bin Yahaya
Assistant Governor	Marzunisham bin Omar
Assistant Governor	Ahmad Hizzad bin Baharuddin
Assistant Governor	Mohd Adhari bin Belal Din
Chief of Staff	Nazrul Hisyam bin Mohd Noh
Governor's Office	
Strategic Communications	
Strategic Management	
Director	
Internal Audit	Mohamad Muhsin bin Mohd Anas
Risk Management	Ong Li Ming
Economics	
Economics	Mohd Fraziali bin Ismail
Monetary Policy	Dr. Norhana binti Endut
International	Shamsuddin bin Mohd Mahayidin
Statistical Services	Toh Hock Chai
Regulation	
Financial Sector Development	Aznan bin Abdul Aziz
Islamic Banking and Takaful	Mohd Zabidi bin Md Nor
Financial Surveillance	Qaiser Iskandar bin Anwarudin
Prudential Financial Policy	Madelena binti Mohamed
Development Finance and Enterprise	Marina binti Abdul Kahar
Payment Systems Policy	Tan Nyat Chuan
Consumer and Market Conduct	Jeremy Lee Eng Huat
Money Services Business Regulation	Nik Mohamed Din bin Nik Musa
Insurance Development	Yoon Yew Khuen
Supervision	
Financial Conglomerates Supervision	Mohamed Rezwan bin Abdullah Ismail
Insurance and Takaful Supervision	Hew Ee-Lu
Banking Supervision	Cindy Siah Hooi Hoon
Specialist Risk Unit	Daniel Chin Shen Li
Regulation and Supervision Administration	Azilah binti Ahmad*
Financial Intelligence and Enforcement	Abd. Rahman bin Abu Bakar
Investment and Operations	
Investment Operations and Financial Markets	Abdul Rahman bin Hussein
Foreign Exchange Administration	Azman bin Mat Ali
Currency Management and Operations	Thomas Tan Koon Peng
Organisational Development	
Strategic Human Capital	Intan Shahira binti Mohd Shahru
Finance	–
Legal	Wan Mohd Nazri bin Wan Osman
IT Services	Suhaimi bin Ali
Human Capital Development Centre	Kristina Rai a/p Hakikat Rai
Central Banking Services	Ruziana binti Mohd Mokhtar*
Human Resource and General Services	Faizal bin Muhammad Sudin*
LINK and BNM Offices	Arlina binti Ariff
MIFC Promotion Unit	Shazmeer bin Mokhtar*
Centralised Shared Services (CSS)	
General Manager	Mohd Nor bin Mashor
CSS Management Office	Lim Foo Thai
Facility Management Services	Johar bin Mokhtar
Hospitality Services	Hairi bin Adam
Organisational Security Management	Yusoff bin Sulong
Museum, Art Gallery and KM Centre Services	–
Chief Representative	
Beijing Representative Office	Albert See Choon Kwang*
London Representative Office	Raja Syamsul Anwar bin Raja Mohammed Affandi*
New York Representative Office	Harris bin Hassan**
Head	
BNM Office Johor Bahru	Raman a/l Krishnan*
BNM Office Pulau Pinang	Hasjun binti Hashim*
BNM Office Kuching	Rosnani binti Mahamad Zain*
BNM Office Kota Kinabalu	Zambre bin Ismail*
BNM Office Kuala Terengganu	Adlis Khairil Sazli bin Mohd Zaini*

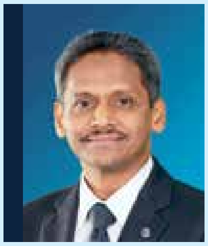
* Deputy Director
** Manager

Board of Directors and Committees of the Bank

Board of Directors

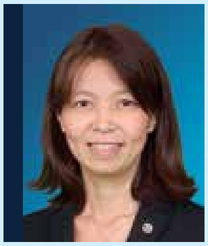
Muhammad bin Ibrahim, *FCB*

Governor and Chairman



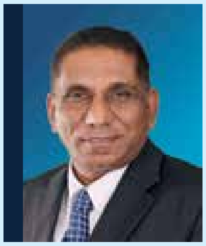
Shaik Abdul Rasheed bin Abdul Ghaffour, *CB*

Deputy Governor



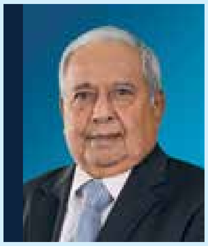
Chew Cheng Lian (Jessica), *CB*

Deputy Governor



Tan Sri Dr. Mohd Irwan Serigar bin Abdullah

Secretary General of Treasury



Dato' N. Sadasivan a/l N.N. Pillay

Member, Board Governance Committee

Member, Board Audit Committee

Tan Sri Dato' Sri Dr. Sulaiman bin Mahbob

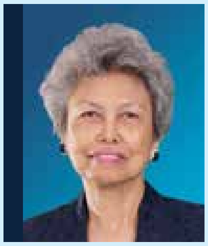
Chairman, Board Governance Committee

Member, Board Audit Committe

Datuk Chin Kwai Yoong

Chairman, Board Audit Committee

Member, Board Governance Committee



Tan Sri Dato' Seri Siti Norma binti Yaakob

Member, Board Governance Committee

Dato Sri Lim Haw Kuang

Chairman, Board Risk Committee

The Board of Directors wishes to extend its appreciation and gratitude to **Tan Sri Datuk Dr. Yusof bin Basiran** and **Dato' Lee Yeow Chor** who completed their terms on 28 February 2018, and **Dr. Sukudhew Singh** who retired as Deputy Governor on 31 December 2017.

Management Committee

Members from left to right

Ahmad Hizzad bin Baharuddin
Assistant Governor

Abu Hassan Alshari bin Yahaya
Assistant Governor

Norzila binti Abdul Aziz
Assistant Governor

Shaik Abdul Rasheed bin Abdul Ghaffour, *CB*
Deputy Governor

Muhammad bin Ibrahim, *FCB*
Governor

Chew Cheng Lian (Jessica), *CB*
Deputy Governor

Donald Joshua Jaganathan, *FCB*
Assistant Governor

Marzunisham bin Omar
Assistant Governor

Mohd. Adhari bin Belal Din
Assistant Governor

Monetary Policy Committee

Monetary policy is formulated independently by the Monetary Policy Committee based on a sound governance framework

The primary objective of monetary policy in Malaysia is to maintain price stability while giving due regard to developments in the economy. Under the Central Bank of Malaysia Act 2009 (CBA 2009), the Monetary Policy Committee (MPC) of Bank Negara Malaysia is charged with the responsibility of formulating monetary policy and the policies for the conduct of monetary policy operations[1]. In this regard, the MPC decides on the policy interest rate, the Overnight Policy Rate (OPR), to influence other interest rates in the economy.

In carrying out this mandate, the MPC determines the direction of monetary policy based on its assessment of the balance of risks to the outlook for both domestic growth and inflation. The MPC also monitors risks of destabilising financial imbalances given their implications for the prospects of the economy. The Committee meets at least six times a year to decide on the OPR and publishes the Monetary Policy Statement (MPS) following each meeting to explain its decisions.

The MPC comprises the Governor, the Deputy Governors, and three to seven other members, including external members who are appointed by the Minister of Finance upon recommendation by the Bank's Board Governance Committee. At present, the MPC has six members, two of which are external members. The membership of the MPC is intended to bring together a diversity of expertise and experiences that is critical for sound decision-making on monetary policy.

Members from left to right

Prof. Tan Sri Dato' Seri Dr. Noor Azlan bin Ghazali
Vice-Chancellor, Universiti Kebangsaan Malaysia

Shaik Abdul Rasheed bin Abdul Ghaffour, *CB*
Deputy Governor

Muhammad bin Ibrahim, *FCB*
Governor and Chairman

Chew Cheng Lian (Jessica), *CB*
Deputy Governor

Prof. Dr. Yeah Kim Leng
Professor of Economics, Sunway University Business School, Sunway University

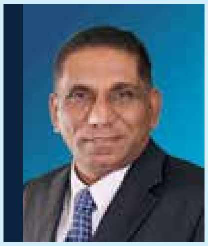
Norzila binti Abdul Aziz
Assistant Governor

[1] For a detailed account of the evolution of the MPC, and its governance and processes, refer to the 'Box Article: Evolution of the Monetary Policy Committee of Bank Negara Malaysia: Key Milestones over the Years' in Bank Negara Malaysia's Annual Report 2015.

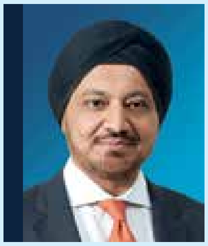
Financial Stability Executive Committee

Muhammad bin Ibrahim, *FCB*
Governor and Chairman

Shaik Abdul Rasheed bin Abdul Ghaffour, *CB*
Deputy Governor



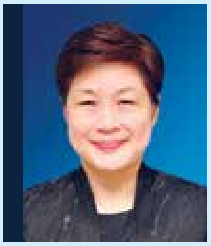
Tan Sri Dr. Mohd Irwan Serigar bin Abdullah
Secretary General of Treasury



Tan Sri Dato' Seri Ranjit Ajit Singh
Chairman of Securities Commission Malaysia

Rafiz Azuan Abdullah
Chief Executive Officer of Perbadanan Insurans Deposit Malaysia

Datuk Johan bin Idris
External Expert



Yoong Sin Min
External Expert

Financial Stability Executive Committee

The Financial Stability Executive Committee (Executive Committee) was established in 2010 pursuant to Section 37 of the Central Bank of Malaysia Act 2009 (CBA 2009). Its primary purpose is to contribute to the fulfilment of the Bank's statutory mandate of preserving financial stability through its powers to decide on specific policy measures that may be taken by the Bank to avert or reduce risks to financial stability. These measures are:

- the issuance of orders to a person or financial institution that is not supervised by the Bank to undertake specific measures;
- the extension of liquidity assistance to a financial institution that is not supervised by the Bank, or to overseas operations of a licensed financial institution in Malaysia; and
- the provision of capital support to a non-viable licensed financial institution in Malaysia.

The Executive Committee is a key component of the accountability framework that has been institutionalised for the exercise of the broad financial stability powers accorded to the Bank under the CBA 2009. It is responsible to ensure that proposed measures within its purview are appropriate, having regard to the Bank's assessment of risks to financial stability. The Executive Committee meets at least twice a year.

The Executive Committee consists of seven members, a majority of whom must be non-executive members who are independent of the Bank's Management. Members are subject to the Executive Committee's Code of Ethics and Conflict of Interest, which serve to preserve the integrity of the Executive Committee's decisions.

Shariah Advisory Council

Shariah Advisory Council

The Shariah Advisory Council of Bank Negara Malaysia (SAC) was established in May 1997 as the highest Shariah authority in Islamic banking and takaful in Malaysia. In the Central Bank of Malaysia Act 2009 (CBA 2009), the roles and functions of the SAC were further reinforced as the authority for the ascertainment of Islamic law for the purposes of Islamic financial activities which are supervised and regulated by the Bank.

The SAC assumes a pivotal role in ensuring the consistency of Shariah rulings applied in the Islamic banking and takaful industry. The Shariah rulings by the SAC serve as a main reference for Islamic financial institutions to ensure end-to-end Shariah compliance in the structure and implementation of their financial products and services. In addition, the CBA 2009 provides that, any questions on Shariah matters in a court or arbitration proceeding must be referred to the SAC, whose opinions shall be binding.

The SAC provides the Shariah basis for the development of a comprehensive Shariah contract-based regulatory framework for Islamic banking and takaful in Malaysia. In this regard, the SAC defines the essential features of the contracts taking into consideration the various Shariah views, research findings, as well as custom and market practices. Moving forward, the SAC, through its members, individually and collectively, will expand its sphere of influence to support more product innovation and encourage harmonisation of Shariah interpretation locally and globally.

The appointment of the SAC members is made upon approval by the Yang di-Pertuan Agong, on the advice of the Minister of Finance after consultation with the Bank. Currently, the SAC has ten (10) members consisting of prominent Shariah scholars, jurists and legal experts.

Members from left to right

Burhanuddin bin Lukman
Head of Takaful Unit, International Shariah Research Academy for Islamic Finance (ISRA)

Prof. Dr. Asmadi bin Mohamed Naim
Dean, Islamic Business School, Universiti Utara Malaysia

Prof. Dr. Mohamad Akram bin Laldin
Executive Director, ISRA

Sahibus Samahah Datuk Dr. Zulkifli bin Mohamad Al-Bakri
Mufti of Wilayah Persekutuan

Prof. Dr. Ashraf bin Md. Hashim (Deputy Chairman)
Chief Executive Officer, ISRA Consultancy

Datuk Dr. Mohd Daud bin Bakar (Chairman)
Founder and Executive Chairman, Amanie Group

Dato' A. Aziz bin A. Rahim
Chairman, Enforcement Agencies Integrity Commission

Tan Sri Sheikh Ghazali bin Abdul Rahman
Shariah Legal Advisor, Attorney General Chambers

Prof. Dr. Engku Rabiah Adawiah binti Engku Ali
Professor, IIUM Institute of Islamic Banking and Finance (IIiBF), International Islamic University Malaysia (IIUM)

Dr. Shamsiah binti Mohamad
Senior Researcher, ISRA

Financial Stability Committee

Muhammad bin Ibrahim, *FCB*
Governor and Chairman

Shaik Abdul Rasheed bin Abdul Ghaffour, *CB*
Deputy Governor

Chew Cheng Lian (Jessica), *CB*
Deputy Governor

Donald Joshua Jaganathan, *FCB*
Assistant Governor

Marzunisham bin Omar
Assistant Governor

Ahmad Hizzad bin Baharuddin
Assistant Governor

Financial Stability Committee

The Financial Stability Committee (FSC) is a high-level internal committee of the Bank. It is responsible for monitoring and taking actions to reduce or avert risks to financial stability stemming from both system-wide and institutional developments. Section 29 of the Central Bank of Malaysia Act 2009 defines "risk to financial stability" as a "risk which in the opinion of the Bank disrupts, or is likely to disrupt, the financial intermediation process including the orderly functioning of the money market and foreign exchange market, or affects, or is likely to affect, public confidence in the financial system or the stability of the financial system".

The FSC reviews and decides on:

- macroprudential policies to reduce or avert identified risks to the financial system as a whole;
- significant supervisory responses to address risks arising in individual financial institutions which are regulated by the Bank;
- actions to resolve a financial institution that has ceased, or is about to cease, to be viable. This includes notifying Perbadanan Insurans Deposit Malaysia (PIDM) for the purpose of resolution actions by PIDM where applicable; and
- recommendations to the Financial Stability Executive Committee on the exercise of powers within its remit.

An important part of the FSC's role is to monitor the effectiveness of policies and actions taken; and ensure they remain appropriate, taking into account risk developments.

The FSC is chaired by the Governor and its members comprise all Deputy Governors and the Assistant Governors responsible for regulation, supervision, treasury operations and payment systems. The meeting is generally held four times a year and is also attended by selected senior officers of the Bank.

Annual Financial Statements

Annual Financial Statements

REPORT OF THE AUDITOR GENERAL ON THE FINANCIAL STATEMENTS OF BANK NEGARA MALAYSIA FOR THE YEAR ENDED 31 DECEMBER 2017

Report on the Financial Statements

Opinion

I have audited the Financial Statements of Bank Negara Malaysia which comprise the Statement of Financial Position as at 31 December 2017 and Income Statement for the year then ended, a summary of significant accounting policies and other explanatory information.

In my opinion, the Financial Statements give a true and fair view of the financial position of Bank Negara Malaysia as at 31 December 2017 and of the financial performance and the results of its operations for the year then ended, in all material respects, in accordance with the Central Bank of Malaysia Act 2009 and the financial reporting standards approved in Malaysia to the extent that it is, in the opinion of the Directors, appropriate to do so, having regard to the objects and functions of the Bank. The preparation of the Financial Statements differs in some aspects, from the approved accounting standards in Malaysia.

Basis for Opinion

I conducted the audit in accordance with the Audit Act 1957 and the International Standards of Supreme Audit Institutions. My responsibilities are further described in the paragraph of Auditor's Responsibilities for the Audit of the Financial Statements in this report. I believe that the audit evidence I have obtained is sufficient and appropriate to provide a basis for my opinion.

Independence and Other Ethical Responsibilities

I am independent of Bank Negara Malaysia and have fulfilled other ethical responsibilities in accordance with the International Standards of Supreme Audit Institutions.

Key Audit Matters

Key Audit Matters are those matters that, in my professional judgment, were of most significance in the audit of the Financial Statements of Bank Negara Malaysia for the year 2017. I have determined that there are no Key Audit Matters to communicate in my report.

Information Other Than the Financial Statements and Auditor General's Report Thereon

The Directors of Bank Negara Malaysia are responsible for other information in the Annual Report. My opinion on the Financial Statements of Bank Negara Malaysia does not cover the information other than the Financial Statements and the Auditor General's Report thereon and I do not express any form of assurance conclusion thereon.

Directors' Responsibility for the Financial Statements

The Directors are responsible for the preparation and fair presentation of the Financial Statements in accordance with the Central Bank of Malaysia Act 2009 and applicable financial reporting standards approved in Malaysia to the extent that it is, in the opinion of the Directors, appropriate to do so, having regard to the objects and functions of the Bank. The Directors are also responsible for such internal control as the Directors determine is necessary to enable the preparation of the Financial Statements that are free from material misstatement or omission, whether due to fraud or error.

In preparing the Financial Statements of Bank Negara Malaysia, the Directors are responsible for assessing Bank Negara Malaysia's ability to continue as a going concern, disclosing as applicable, and using the going concern as basis of accounting.

Auditor's Responsibility for the Audit of the Financial Statements

My objectives are to obtain reasonable assurance about whether the Financial Statements of Bank Negara Malaysia as a whole are free from material misstatement, whether due to fraud or error, and to issue Auditor General's Report that includes my opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with the International Standards of Supreme Audit Institutions will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these Financial Statements.

As part of an audit in accordance with the International Standards of Supreme Audit Institutions, I exercise professional judgement and maintain professional scepticism throughout the audit. I also:

a. Identify and assess the risks of material misstatement of the Financial Statements of Bank Negara Malaysia, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for my opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

b. Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of Bank Negara Malaysia's internal control.

c. Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the Directors.

d. Conclude on the appropriateness of the Directors' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on Bank Negara Malaysia's ability to continue as a going concern. If I conclude that a material uncertainty exists, I am required to draw attention in the Auditor General's Report to the related disclosures in the Financial Statements of Bank Negara Malaysia or, if such disclosures are inadequate, to modify my opinion. My conclusions are based on the audit evidence obtained up to the date of the Auditor General's Report.

e. Evaluate the overall presentation including the disclosures of whether the Financial Statements of Bank Negara Malaysia represent fair presentation.

I communicated with the Directors regarding, among other matters, the planned scope and timing of the audit, including internal control and significant audit findings.

Report on Other Legal and Regulatory Requirements

In accordance with the requirements of Section 9, Central Bank of Malaysia Act 2009, I also report that in my opinion, the accounting and other records required by the Act to be kept by Bank Negara Malaysia have been properly kept in accordance with the provisions of the Act.

Other Matters

This report is made solely to the Directors and for no other purpose. I do not assume responsibility to any other person for the content of this report.

AUDITOR GENERAL
MALAYSIA

PUTRAJAYA
8 MARCH 2018

STATEMENT BY CHAIRMAN AND ONE OF THE DIRECTORS

We, Muhammad bin Ibrahim and Chin Kwai Yoong, being the Chairman and one of the Directors of Bank Negara Malaysia, do hereby state that in the opinion of the directors, the financial statements are drawn up so as to give a true and fair view of the state of affairs of Bank Negara Malaysia as at 31 December 2017 and of the results of operations for the year ended on that date, in accordance with the Central Bank of Malaysia Act 2009 and applicable Malaysian Financial Reporting Standards (MFRS) to the extent that it is, in the opinion of the directors, appropriate to do so, having regard to the objects and functions of the Bank.

On behalf of the Board,

GOVERNOR MUHAMMAD BIN IBRAHIM, *FCB*
CHAIRMAN

28 FEBRUARY 2018
KUALA LUMPUR

On behalf of the Board,

CHIN KWAI YOONG
DIRECTOR

28 FEBRUARY 2018
KUALA LUMPUR

DECLARATION BY THE OFFICER PRIMARILY RESPONSIBLE FOR THE FINANCIAL MANAGEMENT OF BANK NEGARA MALAYSIA

I, Affendi bin Rashdi, being the officer primarily responsible for the financial management of Bank Negara Malaysia, do solemnly and sincerely declare that the financial statements for the year ended 31 December 2017, are to the best of my knowledge and belief, correct and I make this solemn declaration conscientiously believing the same to be true and by virtue of the provisions of the Statutory Declarations Act, 1960.

Subscribed and solemnly declared)
by the abovenamed at Kuala Lumpur)
this 28 February 2018.)

Before me,

PESURUHJAYA SUMPAH
W 703
MOHD FITRY ABDUL GHANI
MALAYSIA

NO. 58A, JALAN BUKIT RAJA
TAMAN SEPUTEH
58000 KUALA LUMPUR

BANK NEGARA MALAYSIA

STATEMENT OF FINANCIAL POSITION AS AT 31 DECEMBER 2017

		2017 RM million	2016 RM million
ASSETS	**Note**		
Gold and Foreign Exchange	3	406,798	415,506
International Monetary Fund Reserve Position	4	3,116	3,467
Holdings of Special Drawing Rights	4	4,737	4,956
Malaysian Government Papers	5	4,226	4,265
Deposits with Financial Institutions	6	8,913	1,528
Loans and Advances	7	7,593	7,740
Land and Buildings	8	4,180	2,114
Other Assets	9	10,283	11,403
Total Assets		**449,846**	**450,979**
LIABILITIES AND CAPITAL			
Currency in Circulation		103,585	97,752
Deposits from: Financial Institutions		181,718	170,249
Federal Government		7,479	9,441
Others	10	1,456	534
Bank Negara Papers		7,268	8,602
Allocation of Special Drawing Rights	4	7,759	8,118
Other Liabilities	11	3,762	11,446
Total Liabilities		313,027	306,142
Paid-up Capital	12	100	100
General Reserve Fund	13	14,744	14,666
Risk Reserve	14	118,657	126,741
Land Revaluation Reserve	15	752	752
Unappropriated Profits	16	2,566	2,578
Total Capital		136,819	144,837
Total Liabilities and Capital		**449,846**	**450,979**

Notes on the following pages form part of these financial statements.

BANK NEGARA MALAYSIA

INCOME STATEMENT FOR THE YEAR ENDED 31 DECEMBER 2017

	Note	2017 RM million	2016 RM million
Total Income	17	**10,043**	**9,024**
Less:			
Recurring Expenditure	18	(1,287)	(1,124)
Development Expenditure	19	(1,247)	(1,373)
Total Expenditure		**(2,534)**	**(2,497)**
Net Profit Before Tax		**7,509**	**6,527**
Less: Taxation	20	(43)	(49)
Net Profit After Tax		**7,466**	**6,478**
Less: Transfer to Risk Reserve	14	(4,900)	(3,900)
Unappropriated Profits of the year		**2,566**	**2,578**

Notes on the following pages form part of these financial statements.

NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 DECEMBER 2017

1. General Information

Bank Negara Malaysia (the Bank) is a statutory body established under the Central Bank of Malaysia Act 1958 which has been repealed by the Central Bank of Malaysia Act 2009. The principal place of business is located at Bank Negara Malaysia, Jalan Dato' Onn, 50480 Kuala Lumpur.

The principal objects of the Bank are to promote monetary stability and financial stability conducive to the sustainable growth of the Malaysian economy. In this regard, the Bank's primary functions are as follows:
(a) to formulate and conduct monetary policy in Malaysia;
(b) to issue currency in Malaysia;
(c) to regulate and supervise financial institutions which are subject to the laws enforced by the Bank;
(d) to provide oversight over money and foreign exchange markets;
(e) to exercise oversight over payment systems;
(f) to promote a sound, progressive and inclusive financial system;
(g) to hold and manage the foreign reserves of Malaysia;
(h) to promote an exchange rate regime consistent with the fundamentals of the economy; and
(i) to act as financial adviser, banker and financial agent of the Government.

The Board of Directors approved the annual financial statements on 28 February 2018.

2. Accounting Policies

The principal accounting policies applied in the preparation of these financial statements are set out below. These accounting policies are consistently applied to both of the financial years presented, unless otherwise stated.

2.1 Basis of Preparation of Financial Statements

(a) These financial statements have been prepared in accordance with the Central Bank of Malaysia Act 2009 and applicable Malaysian Financial Reporting Standards (MFRS). Section 10 of the Central Bank of Malaysia Act 2009 provides that the Bank, in preparing its financial statements, shall comply with accounting standards to the extent that it is, in the opinion of the directors, appropriate to do so, having regard to the objects and functions of the Bank. The directors, having considered its responsibilities for the formulation and conduct of effective monetary policy and promoting financial stability, are of the opinion that, it is appropriate to differ, in certain aspects, from the MFRS.

(b) The preparation of the financial statements on the basis stated in 2.1 (a) requires the management to make judgements, estimates and assumptions based on available information that may affect the application of accounting policies and the reported amounts of assets and liabilities as well as disclosure of contingent assets and liabilities at the date of the financial statements, and the reported amounts of income and expenses during the financial year. Although these estimates are based on the management's best knowledge of current events and actions, the actual results could differ from those estimates.

2.2 **Measurement Base and Accounting Basis**
The financial statements have been prepared on an accrual basis, using the historical cost convention, except as otherwise disclosed.

2.3 **Foreign Currency Translation**
(a) The financial statements have been prepared using Ringgit Malaysia, the currency of the primary economic environment in which the Bank operates.
(b) Assets and liabilities in foreign currencies are translated into Ringgit Malaysia using the exchange rate prevailing as at the end of the financial year. Transactions in foreign currencies during the year are translated into Ringgit Malaysia using the exchange rate prevailing at the transaction dates.
(c) All foreign exchange unrealised gains or losses arising on translation on foreign currency assets and liabilities are recognised in Risk Reserve while realised gains or losses upon settlement on other assets and other liabilities are recognised in the Income Statement.

2.4 **Gold**
Gold is carried at fair value. Unrealised gains and losses from changes in the fair value on gold are recognised in Risk Reserve. Realised gains or losses from the sale of gold are recognised in the Income Statement.

2.5 **Foreign Securities**
Foreign securities are stated at amortised cost or fair value. Fair value changes are recognised in Risk Reserve or in the Income Statement. Upon derecognition, realised gains or losses are recognised in the Income Statement.

2.6 **Net Profit**
The net profit of the Bank is appropriated in accordance with section 7 of the Central Bank of Malaysia Act 2009 and only realised gains are available for distribution to shareholder.

2.7 **Repurchase and Reverse-Repurchase Agreements**
The amount under repurchase agreements is reported under Other Liabilities and the difference between the sale and repurchase price is recognised as interest expense in the Income Statement. Conversely, the amount under reverse repurchase agreements is reported under Other Assets and the difference between purchase and resale price is recognised as interest income in the Income Statement.

2.8 **Land and Buildings**
(a) The Bank capitalises all its land while buildings are maintained at nominal cost of RM10 each.
(b) The amount of land capitalised at initial recognition is the purchase price along with any further costs incurred in bringing the land to its present condition.
(c) After initial recognition, land is stated at revalued amount. Professional valuations of the Bank's land will be carried out once every ten years with any surplus arising on revaluation to be recognised directly in the Land Revaluation Reserve.
(d) Gain or loss arising from the disposal of land is determined as the difference between the net disposal proceeds and the carrying amount of the land. Upon disposal of land, any surplus previously recorded in Land Revaluation Reserve is transferred to Unappropriated Profit.

(e) Land (freehold and leasehold) is not amortised but revalued once in 10 years and fair value is determined from market based evidence undertaken by professionally qualified valuer. Buildings are not depreciated but revalued to a nominal value in the year of acquisition.

2.9 **Other Fixed Assets**
All other fixed assets are completely written-off in the year of acquisition.

3. **Gold and Foreign Exchange**

	2017 RM million	**2016 RM million**
Gold	6,348	6,411
Foreign Securities	373,925	345,024
Foreign Deposits	4,999	6,306
Balances with Other Central Banks	9,507	41,415
Others	12,019	16,350
	406,798	415,506

4. **International Monetary Fund (IMF) Reserve Position, Holdings of Special Drawing Rights (SDR) and Allocation of Special Drawing Rights**
The IMF objectives are to foster global monetary cooperation, secure financial stability, facilitate international trade, promote high employment and sustainable economic growth and reduce poverty around the world. The IMF also provides advice and temporary funding to member countries in the event of balance of payments difficulties.

IMF Reserve Position
This consists of the reserve tranche position of Malaysia's quota, lending under the Financial Transaction Plan (FTP) and New Arrangements to Borrow (NAB). The IMF quota determines the member country's voting strength, the financial contributions to the IMF, the amount of financing the member can access in the event of balance of payment difficulties and the amount of SDRs allocated to the member. Both FTP and NAB programmes are used to provide loans if the IMF has a need for funds in excess of quota resources.

Holdings of Special Drawing Rights
Holdings of Special Drawing Rights (SDR) are an international reserve asset created by the IMF. SDR is periodically allocated to IMF member countries on the basis of the size of member countries' quota. A member may use SDR to obtain foreign exchange reserves from other members and to make international payments, including to the IMF.

Allocation of Special Drawing Rights
This liability to the IMF represents an equivalent amount of SDR received since its inception.

5. **Malaysian Government Papers**
Malaysian Government Papers refer to holdings of Government debt instruments that are among the instruments that can be used in the Bank's monetary policy operations.

	2017 RM million	2016 RM million
Malaysian Government Securities	3,859	3,916
Malaysian Government Investment Certificates	367	349
	4,226	4,265

6. **Deposits with Financial Institutions**
Deposits with financial institutions comprise deposits placed by the Bank with financial institutions under section 75(i) and section 100 of the Central Bank of Malaysia Act 2009.

7. **Loans and Advances**
Loans and advances comprise mainly of advances extended by the Bank to the participating institutions under various schemes such as Fund for Small and Medium Industries and New Entrepreneur Fund aimed at promoting growth and development of small and medium business establishments. The extensions of these advances are provided under section 48, section 49 and section 100 of the Central Bank of Malaysia Act 2009.

8. **Land and Buildings**

	2017 RM million	2016 RM million
Land, at cost		
Freehold	3,316	1,250
Land, at revaluation		
Freehold	694	694
Leasehold	170	170
	4,180	2,114

	2017 RM	2016 RM
Buildings, at nominal value		
Freehold	2,230	2,160
Leasehold	1,380	1,380
	3,610	3,540

During the year, the Bank acquired a parcel of freehold land costing RM2,066 million. The land valuation was mutually agreed on between the Bank and the Government of Malaysia based on the valuation process conducted by an appointed independent private sector valuer. The acquisition cost of the land is subject to a final survey of the area involved.

Freehold and leasehold land, at revaluation, were revalued by an independent valuer on 1 August 2014.

9. **Other Assets**
Included in other assets are securities purchased under reverse-repurchase agreements of RM4,735 million (2016: RM5,735 million) and investments in shares and bonds of RM4,602 million (2016: RM4,602 million) acquired under section 48(1) and section 100 of the Central Bank of Malaysia Act 2009.

10. **Deposits from Others**
A substantial part of these deposits comprises deposits from national institutions, government agencies and public authorities.

11. **Other Liabilities**
Other liabilities include securities sold under repurchase agreements of RM876 million (2016: RM9,248 million).

12. **Paid-up Capital**
The paid-up capital of RM100 million is owned by the Government of Malaysia.

13. **General Reserve Fund**

	2017 RM million	**2016 RM million**
At 1 January	14,666	14,572
Amount approved and transferred to the General Reserve Fund during the year	78	94
As at 31 December	14,744	14,666

Appropriations of net profits to the General Reserve Fund and dividends to the Government are recognised upon the approval by the Minister as provided under section 7 of the Central Bank of Malaysia Act 2009.

The transfer to the General Reserve Fund for the year ended 2016 of RM78 million was approved by the Minister on 9 March 2017.

14. **Risk Reserve**
The Risk Reserve are financial buffers comprising cumulative transfers of net profits, unrealised gains or losses on translation of foreign currency assets and liabilities and fair value changes from securities carried at fair value.

A market risk measurement framework is used to estimate financial buffers required to cushion unexpected loss arising from unfavourable circumstances not within the control of the Bank.

15. **Land Revaluation Reserve**
Land Revaluation Reserve relates to unrealised surplus of land upon their revaluation.

16. **Unappropriated Profits**

	2017 RM million	2016 RM million
Balance 1 January	2,578	3,094
Less: Appropriations approved during the year		
Transfer to General Reserve Fund	(78)	(94)
Dividend paid to the Government	(2,500)	(3,000)
	-	-
Current year's unappropriated profits	2,566	2,578
Balance 31 December	2,566	2,578

In accordance with section 7 of the Central Bank of Malaysia Act 2009, appropriations to the General Reserve Fund and declaration of dividends to the Government are subject to the approval of the Minister, and if approved will be recognised in the next financial year ending 31 December 2018.

The dividend paid to the Government for the year ended 2016 amounted to RM2.5 billion was approved by the Minister on 9 March 2017.

For the year ended 31 December 2017, the Board recommends a transfer to the General Reserve Fund of RM66 million and dividend payable of RM2.5 billion to the Government.

17. **Total Income**

Total income comprises revenue from foreign reserves management which includes interest and dividends, non-treasury income, realised capital gains or losses, and is stated at net of amortisation/accretion of premiums/discounts and monetary policy cost.

18. **Recurring Expenditure**

Recurring expenditure are expenses incurred in the management and administration of the day-to-day operations of the Bank.

19. **Development Expenditure**

Development expenditure are expenses incurred mainly to finance developmental and long term projects undertaken by the Bank that are in line with its principal objects and functions.

20. **Taxation**

The Bank is exempted from payment of income tax and supplementary income tax as set out in the Income Tax (Exemption) (No. 7) Order 1989. Tax expenses relates to unclaimable withholding taxes on income from foreign dividend and interest and capital gains taxes on sale of foreign investments.

21. **Contingencies and Commitments**

21.1 **Contingent Assets**

Total contingent assets as at 31 December 2017 amounted to RM1,400 million. These comprise the Bank's total contributions to International Centre for Leadership in Finance (ICLIF) Trust Fund of RM800 million and International Centre for Education in Islamic Finance (INCEIF) Trust Fund of RM600 million to finance activities related to training, research and development of human resource in banking and financial services managed by The ICLIF Leadership and Governance Centre and INCEIF, respectively. It is provided in the Trust Deeds that the total contributions will be returned to the Bank when the Centres become self-sufficient in the future.

21.2 **Commitments**

Total commitments as at 31 December 2017 comprise the following:

	Note	2017 RM million	2016 RM million
Total Commitments			
International Monetary Fund (IMF)	(a)		
Unpaid Quota	(i)	18,050	18,020
New Arrangement to Borrow (NAB)	(ii)	1,743	1,737
Bilateral Contribution	(iii)	4,048	4,486
Investment with Bank for International Settlements (BIS)	(b)	70	72
Liquidity Investment Arrangement with IILM	(c)	2,429	2,692
Swap Arrangements	(d)		
ASEAN Swap Arrangement	(i)	1,214	1,346
Bilateral Currency Swap Arrangement (PBOC)	(ii)	90,000	90,000
Bilateral Currency Swap Arrangement (BOK)	(ii)	15,000	15,000
Chiang Mai Initiative Multilateralisation	(iii)	37,000	41,000
Repurchase Agreement with EMEAP Members	(iv)	20,000	22,000
		189,554	196,353

(a) **Membership with IMF**

(i) The Bank has an obligation to pay to IMF SDR3,131 million, equivalent to RM18,050 million (2016: SDR2,988 million, equivalent to RM18,020 million) or in other convertible currencies which represents the unpaid portion of Malaysia's quota in the IMF under the Articles of Agreement.

(ii) The Bank has participated in the New Arrangements to Borrow (NAB), a set of credit arrangements between the IMF and its member countries to provide a supplementary source of financing to IMF for the purpose of safeguarding the stability of the international monetary system. As at 31 December 2017, the amount of undrawn credit under the NAB is SDR302 million, equivalent to RM1,743 million (2016: SDR288 million, equivalent to RM1,737 million).

(iii) On 23 July 2012, the Bank has pledged a USD1,000 million, equivalent to RM4,048 million (2016: USD1,000 million, equivalent to RM4,486 million) bilateral contribution to the IMF for precautionary and financial crisis resolution purposes.

(b) **Investment with Bank for International Settlements (BIS)**
The Bank has a commitment of SDR12 million, equivalent to RM70 million (2016: SDR12 million, equivalent to RM72 million) which refers to the uncalled portion of the 3,220 units of shares held by the Bank in the BIS based on the nominal value of SDR5,000 each using the SDR rate at the date of the Statement of Financial Position.

(c) **Liquidity Investment Arrangement (LIA) with International Islamic Liquidity Management Corporation (IILM)**
In December 2016, the Bank as member of the International Islamic Liquidity Management Corporation (IILM) entered into a Liquidity Investment Arrangement (LIA) to further solidify support for the entity. As at 31 December 2017, due to the joint and several liability of the agreement, the total commitment of participating members under the LIA is USD600 million equivalent to RM2,429 million (2016: USD600 million, equivalent to RM2,692 million). However, the Bank's net commitment is capped at USD100 million equivalent to RM405 million (2016: USD100 million, equivalent to RM449 million) as the arrangement allows for counterclaim of USD500 million equivalent to RM2,024 million (2016: USD500 million, equivalent to RM2,243 million) against the other participating members. During the financial year, there was no request for liquidity from any participating members.

(d) **Swap Arrangements**

(i) **ASEAN Swap Arrangement**
The Bank has participated in the multilateral ASEAN Swap Arrangement (ASA) together with other ASEAN central banks and monetary authorities to provide short-term foreign currency liquidity support to member countries with balance of payments difficulties. As at 31 December 2017, the Bank's total commitment amounted to USD300 million, equivalent to RM1,214 million (2016: USD300 million, equivalent to RM1,346 million) and there was no request for liquidity support under ASA from any member country during the financial year.

(ii) **Bilateral Currency Swap Arrangement**

(a) On 20 April 2015, the Bank renewed the Bilateral Currency Swap Arrangement (BCSA) agreement with the People's Bank of China with the objective of promoting and facilitating trade settlement in the local currency between the two countries. As at 31 December 2017, the Bank's total commitment under the BCSA is RM90 billion (2016: RM90 billion) and there has been no request to activate the BCSA during the financial year.

(b) On 25 January 2017, the Bank renewed the Bilateral Currency Swap Arrangement (BCSA) agreement with the Bank of Korea with the objective of promoting bilateral trade and facilitating trade settlement in local currency between the two countries. As at 31 December 2017, the Bank's total commitment under the BCSA is RM15 billion and there has been no request to activate the BCSA during the financial year.

(iii) **Chiang Mai Initiative Multilateralisation Arrangement**
The Bank has participated in the Chiang Mai Initiative Multilateralisation (CMIM) arrangement to provide financial support to ASEAN+3 member countries facing balance of payments and short-term liquidity difficulties. The effective date of the CMIM Agreement is 24 March 2010. Under the CMIM arrangement, member countries facing balance of payments and short-term liquidity constraints can obtain financial support in US dollar through swap arrangements against their respective local currencies. As at 31 December 2017, the Bank's total commitment is USD9.1 billion, equivalent to RM37 billion (2016: USD9.1 billion, equivalent to RM41 billion) and there was no request for liquidity support from any member country.

(iv) **Repurchase Agreement with Central Banks and Monetary Authorities**
The Bank has entered into repurchase agreements totalling USD5 billion, equivalent to RM20 billion (2016: USD5 billion, equivalent to RM22 billion) with various central banks and monetary authorities under the Executives' Meeting of East Asia-Pacific Central Banks (EMEAP) to provide liquidity assistance in times of emergency. As at 31 December 2017, there was no request for liquidity assistance from any counterpart.

22. **Financial Risk Management**
The Reserve Management Committee oversees the assessment, measurement and the control of the investment risks in the management of reserves to be within acceptable levels to ensure that the objectives of capital preservation, liquidity and reasonable returns are met. In undertaking this function, the major risks of the investments fall into the following areas:

(a) **Market Risk**
Market risk is the exposure of the Bank's investments to adverse movements in market prices related to foreign exchange rates, interest rates and prices of bonds and equities. Market risk is assessed and monitored on a daily basis. A benchmark policy approved by the Board of Directors reflects the long-term objectives and acceptable risk-return profile of the investments. Investments may be made in instruments that are different from those in the benchmark. This deviation in investment is controlled through a set of risk management limits, governance arrangements and investment guidelines that are also approved by the Board of Directors. Sensitivity analysis and stress testing are undertaken to assess emerging risks and potential marked-to-market losses from adverse movements and volatility in the market, as well as liquidity conditions.

(b) **Credit Risk**
Credit risk is the risk of default of the issuer of the debt or failure of the counterparty to perform its contractual obligation to the Bank resulting in the Bank not receiving its principal and/or interest that has fallen due in a timely manner. A comprehensive credit risk framework governs the permissible investments and the risk appetite of the Bank. This ensures investments are placed with issuers and counterparties of high credit standing and the probability of losses from this risk is low. The framework, which is approved by the Board, also incorporates market-based credit indicators such as ratings implied from financial market prices, and internal credit assessment. This enhances the credit framework by providing a more dynamic and forward-looking credit assessment.

(c) **Operational Risk**
Operational risk is the risk of financial losses due to failed internal processes, inadequate controls and procedures, or any other internal or external events that impede operations. Operational risk is mitigated through a governance framework and effective implementation of risk controls and limits. A comprehensive operational risk surveillance mechanism is in place to support the identification of emerging risks in the Bank's operations to allow for action to be taken in managing gaps and in mitigating financial losses.

23. **Bank Negara Malaysia Staff Welfare Account (SWA) and Bank Negara Malaysia Staff Welfare Account (Medical Fund) (termed as the 'Medical Fund Account')**
The SWA was established on 1 March 1991 under section 15 (5) and (6) of the Central Bank of Malaysia Act 1958 while the Medical Fund Account was established on 21 June 2006 under section 15 (6) of the Central Bank of Malaysia Act 1958. Both the SWA and the Medical Fund continue to exist under section 83 (4) and (5) of the Central Bank of Malaysia Act 2009.

The SWA is governed under the Bank Negara Malaysia Staff Welfare Account Trust Directions 1991. As stipulated in the Trust Directions 1991, the SWA shall be administered by a committee authorised by the Board (Authorised Committee of the Board). The accounts of the SWA are to be maintained separately from the other accounts of the Bank and shall be audited in the same manner of the Bank's Account. The objective of the SWA is to provide loans to the staff for certain allowable activities, finance the activities of the staff's associations and give education excellence awards to the children of staff. The SWA also manages the insurance compensation of the deceased staff received by beneficiaries who have yet to attain the legal age.

The Medical Fund Account is governed under the Bank Negara Malaysia Staff Welfare Account (Medical Fund) Trust Directions 2006 and Supplementary Trust Directions 2017. The objective is to assist the Bank to meet the medical expenses of eligible retirees and their dependents. As stipulated in the Staff Welfare Account (Medical Fund) Trust Directions 2006, the Medical Fund shall be administered by a Medical Fund Committee. The Medical Fund Account is to be maintained separately under the Staff Welfare Account and shall be audited in the same manner of the Staff Welfare Account.

Annex

Annex

CONTENTS

Key Economic and Financial Statistics

Table A.1

Gross Domestic Product by Kind of Economic Activity at Constant 2010 Prices

	2013	2014	2015	2016	2017*p*	2018*f*
	RM million					
Agriculture	91,181	93,048	94,249	89,465	95,894	99,325
Mining and quarrying	87,789	90,707	95,508	97,563	98,596	100,419
Manufacturing	219,152	232,527	243,903	254,725	269,966	285,873
Construction	38,590	43,115	46,630	50,103	53,443	57,347
Services	507,791	541,412	569,258	601,341	638,752	677,981
Plus: Import duties	10,577	11,639	13,808	15,030	16,981	19,180
GDP at purchasers' prices[1]	**955,080**	**1,012,449**	**1,063,355**	**1,108,227**	**1,173,632**	**1,240,125**
	Annual change (%)					
Agriculture	2.0	2.0	1.3	-5.1	7.2	3.6
Mining and quarrying	1.2	3.3	5.3	2.2	1.1	1.8
Manufacturing	3.4	6.1	4.9	4.4	6.0	5.9
Construction	10.6	11.7	8.2	7.4	6.7	7.3
Services	5.9	6.6	5.1	5.6	6.2	6.1
Plus: Import duties	5.7	10.0	18.6	8.8	13.0	12.9
GDP at purchasers' prices	**4.7**	**6.0**	**5.0**	**4.2**	**5.9**	**5.5 ~ 6.0**

[1] Numbers may not necessarily add up due to rounding
p Preliminary
f Forecast

Source: Department of Statistics, Malaysia and Bank Negara Malaysia

Annex

Table A.2

Growth in Manufacturing Production (2010=100)

	2014	2015	2016	2017	2015	2016	2017
	Index				Annual change (%)		
Export-oriented industries	**120.8**	**126.7**	**132.6**	**141.2**	**4.8**	**4.7**	**6.5**
Electronics and electrical products cluster	**131.1**	**143.1**	**153.1**	**165.4**	**9.2**	**7.0**	**8.0**
Electronics	141.8	142.9	155.6	172.1	0.7	8.9	10.6
Electrical products	110.0	145.2	151.9	156.6	32.0	4.6	3.1
Primary-related cluster	**116.0**	**118.9**	**122.8**	**129.7**	**2.5**	**3.3**	**5.6**
Chemicals and chemical products	125.4	131.1	138.0	143.5	4.6	5.2	4.0
Petroleum products	109.2	110.5	113.9	117.9	1.2	3.1	3.5
Textiles, wearing apparel and footwear	113.5	122.0	130.2	140.5	7.5	6.7	7.9
Wood and wood products	107.7	115.3	123.4	129.8	7.0	7.0	5.2
Rubber products	132.8	139.5	144.9	154.0	5.1	3.9	6.3
Off-estate processing	117.2	113.1	107.4	126.3	-3.5	-5.0	17.5
Paper products	114.2	117.7	123.1	128.6	3.0	4.6	4.4
Domestic-oriented industries	**130.6**	**136.7**	**140.9**	**147.6**	**4.7**	**3.0**	**4.8**
Construction-related cluster	**125.5**	**131.2**	**137.0**	**143.5**	**4.5**	**4.4**	**4.7**
Non-metallic mineral products	122.9	131.3	138.6	145.9	6.8	5.5	5.3
Basic iron and steel and non-ferrous metals	101.4	102.9	105.2	109.5	1.6	2.2	4.1
Fabricated metal products	159.9	167.3	175.8	184.1	4.6	5.1	4.7
Consumer-related cluster	**135.8**	**142.3**	**144.8**	**151.7**	**4.8**	**1.7**	**4.8**
Food products	123.0	126.1	136.3	140.9	2.5	8.0	3.4
Transport equipment	150.7	158.6	153.7	161.8	5.2	-3.1	5.2
Beverages	121.6	135.8	149.3	162.9	11.7	9.9	9.1
Tobacco products	106.2	115.9	119.4	121.7	9.1	3.0	2.0
Others	116.6	108.8	106.4	105.0	-6.7	-2.2	-1.3
Total	**123.0**	**128.9**	**134.4**	**142.6**	**4.8**	**4.3**	**6.1**

Source: Department of Statistics, Malaysia

Table A.3

Services Sector Performance at Constant 2010 Prices

	2013	2014	2015	2016	2017*p*	2013	2014	2015	2016	2017*p*
	Annual change (%)					Share to GDP (%)				
Services	**5.9**	**6.6**	**5.1**	**5.6**	**6.2**	**53.2**	**53.5**	**53.5**	**54.3**	**54.4**
Intermediate services	5.4	6.0	4.6	5.5	6.6	20.5	20.5	20.4	20.7	20.8
Finance and insurance	*2.0*	*2.3*	*-0.7*	*2.5*	*4.7*	*7.6*	*7.3*	*6.9*	*6.8*	*6.7*
Real estate and business services	*8.0*	*8.0*	*6.5*	*6.9*	*7.4*	*4.2*	*4.2*	*4.3*	*4.4*	*4.5*
Transport and storage	*4.6*	*5.4*	*5.7*	*5.6*	*6.2*	*3.5*	*3.5*	*3.5*	*3.6*	*3.6*
Information and communication	*9.1*	*10.0*	*9.4*	*8.1*	*8.4*	*5.3*	*5.5*	*5.7*	*5.9*	*6.0*
Final services	6.3	7.0	5.5	5.7	6.0	32.6	33.0	33.1	33.6	33.6
Wholesale and retail trade	*6.3*	*8.9*	*6.9*	*6.2*	*7.1*	*14.0*	*14.4*	*14.6*	*14.9*	*15.1*
Food & beverages and accommodation	*5.9*	*6.5*	*6.4*	*7.1*	*7.4*	*2.7*	*2.7*	*2.8*	*2.8*	*2.9*
Utilities	*4.4*	*3.8*	*3.6*	*5.4*	*2.9*	*2.6*	*2.6*	*2.6*	*2.6*	*2.5*
Government services	*7.4*	*6.3*	*4.0*	*4.9*	*4.9*	*8.8*	*8.8*	*8.7*	*8.8*	*8.7*
Other services	*5.6*	*4.8*	*4.7*	*4.8*	*5.4*	*4.5*	*4.4*	*4.4*	*4.4*	*4.4*

p Preliminary
Note: Numbers may not necessarily add up due to rounding

Source: Department of Statistics, Malaysia

Table A.4

GNI by Demand Aggregates

	2013	2014	2015	2016	2017*p*	2018*f*
	at Current Prices (RM million)					
Consumption	667,456	727,460	778,385	829,543	913,068	983,320
Private consumption	*527,749*	*579,985*	*626,267*	*674,838*	*748,615*	*817,858*
Public consumption	*139,707*	*147,475*	*152,118*	*154,704*	*164,452*	*165,462*
Investment	269,699	287,393	302,640	316,787	342,194	365,842
Private investment	*162,791*	*183,885*	*198,640*	*211,283*	*234,821*	*260,733*
Public investment	*106,908*	*103,508*	*104,000*	*105,504*	*107,373*	*105,109*
Change in stocks[1]	-5,500	-11,030	-11,894	1,498	2,175	300
Exports of goods and services	770,368	816,483	817,370	832,388	966,662	1,031,937
Imports of goods and services	683,408	713,863	728,778	750,096	871,623	934,641
GDP at purchasers' value	1,018,614	1,106,443	1,157,723	1,230,120	1,352,477	1,446,758
Balance of primary income	-33,975	-36,624	-32,112	-34,640	-36,137	-39,110
GNI	984,639	1,069,819	1,125,611	1,195,480	1,316,340	1,407,648
	at Constant 2010 Prices (RM million)					
Consumption	622,410	662,389	699,910	734,357	783,358	829,393
Private consumption	*490,798*	*525,038*	*556,541*	*589,667*	*630,792*	*675,956*
Public consumption	*131,612*	*137,351*	*143,369*	*144,690*	*152,566*	*153,437*
Investment	252,162	264,242	273,724	281,036	298,457	314,081
Private investment	*151,698*	*168,550*	*179,132*	*186,909*	*204,273*	*222,920*
Public investment	*100,464*	*95,692*	*94,592*	*94,127*	*94,184*	*91,161*
Change in stocks[1]	-3,140	-8,872	-1,491	280	326	100
Exports of goods and services	732,856	769,794	771,739	780,600	855,242	930,107
Imports of goods and services	649,208	675,105	680,527	688,046	763,750	833,556
GDP at purchasers' value	955,080	1,012,449	1,063,355	1,108,227	1,173,632	1,240,125
Balance of primary income	-38,357	-39,913	-24,362	-23,331	-22,871	-25,159
GNI	916,722	972,535	1,038,993	1,084,896	1,150,761	1,214,966

[1] Includes statistical discrepancy
p Preliminary
f Forecast

Source: Department of Statistics, Malaysia and Bank Negara Malaysia

Table A.5

Savings-Investment Gap

	2013	2014	2015	2016	2017*p*
	RM million				
Public savings	96,131	85,823	51,134	77,802	84,125
Public gross domestic capital formation	106,908	103,508	104,000	105,504	107,373
Deficit/surplus	-10,777	-17,685	-52,866	-27,702	-23,248
Private savings	203,553	239,093	274,767	269,507	300,539
Private gross domestic capital formation	157,291	172,855	186,746	212,781	236,996
Deficit/surplus	46,262	66,238	88,021	56,726	63,543
Gross national savings	299,684	324,916	325,901	347,309	384,664
(as % of GNI)	30.4	30.4	29.0	29.1	29.2
Gross domestic capital formation	264,199	276,363	290,746	318,286	344,369
(as % of GNI)	26.8	25.8	25.8	26.6	26.2
Balance on current account	35,485	48,554	35,155	29,023	40,295
(as % of GNI)	3.6	4.5	3.1	2.4	3.1

p Preliminary

Source: Department of Statistics, Malaysia and Ministry of Finance, Malaysia

Table A.6

Labour Market: Selected Indicators

	2013	2014	2015	2016	2017*p*
	(number of positions/persons)				
Vacancies by Industry[1]					
Agriculture, forestry and fishing	306,542	240,552	269,469	174,751	264,216
Mining and quarrying	1,880	2,605	9,929	1,857	2,730
Manufacturing	456,478	352,784	313,396	376,349	617,308
Construction	308,783	202,878	208,912	127,985	255,851
Services	329,007	275,199	287,050	173,102	333,271
Electricity, gas and water supply[2]	*7,043*	*8,339*	*5,834*	*2,974*	*6,473*
Wholesale and retail trade; accommodation and food services	*95,966*	*87,385*	*99,310*	*31,908*	*109,834*
Transport and storage; information and communication	*14,864*	*19,375*	*39,068*	*10,762*	*15,648*
Finance and insurance; real estate and business services[3]	*96,399*	*75,936*	*70,784*	*70,865*	*87,834*
Public administration and defence; compulsory social security	*4,020*	*2,485*	*1,360*	*3,736*	*1,558*
Community, social and other service activities	*110,715*	*81,679*	*70,694*	*52,857*	*111,924*
Total vacancies	**1,402,690**	**1,074,018**	**1,088,756**	**854,044**	**1,473,376**
Layoffs by Industry[4]					
Agriculture, forestry and fishing	217	90	235	664	256
Mining and quarrying	68	810	2,255	2,470	987
Manufacturing	25,852	17,887	9,203	17,287	25,370
Construction	663	812	521	535	83
Services	6,286	6,318	26,285	16,743	8,401
Electricity, gas and water supply[2]	-	*67*	*135*	*85*	*104*
Wholesale and retail trade; accommodation and food services	*1,077*	*2,801*	*2,360*	*8,287*	*2,751*
Transport and storage; information and communication	660	*1,151*	*1,483*	798	*1,524*
Finance and insurance; real estate and business services[3]	2,158	1,315	20,584	7,100	2,667
Public administration and defence; compulsory social security	*1,029*	*445*	*1,293*	-	*636*
Community, social and other service activities	*1,362*	*539*	*430*	*473*	*719*
Total layoffs	**33,086**	**25,917**	**38,499**	**37,699**	**35,097**
Employment by Industry[5] ('000 persons)					
Agriculture, forestry & fishing	1,759	1,694	1,754	1,610	1,635
Mining & quarrying	88	85	104	96	99
Manufacturing	2,316	2,373	2,323	2,391	2,477
Construction	1,292	1,278	1,310	1,252	1,262
Services	8,089	8,422	8,575	8,814	8,985
Electricity, gas & water supply[2]	145	147	134	154	144
Wholesale & retail trade; accommodation & food services	*3,303*	*3,474*	*3,512*	*3,689*	*3,818*
Transport & storage; information & communication	*821*	*811*	*829*	*839*	*877*
Finance & insurance; real estate & business services[3]	*1,265*	*1,392*	*1,420*	*1,448*	*1,480*
Public administration & defence; compulsory social security	*761*	*742*	*751*	*748*	*743*
Community, social & other service activities	*1,793*	*1,857*	*1,929*	*1,935*	*1,922*
Total employment	**13,545**	**13,853**	**14,068**	**14,164**	**14,459**
Labour force participation rate (% of working-age population)	**67.3**	**67.6**	**67.9**	**67.7**	**67.8**
Unemployment rate (% of labour force)	**3.1**	**2.9**	**3.1**	**3.4**	**3.4**

1 Refers to vacancies reported by employers through the JobsMalaysia portal. Data from 2012 onwards are not compareable to previous years due to a reclassification exercise.
2 Refers to electricity, gas, steam, and air conditioning supply; water supply, sewerage, waste management and remediation activities
3 Refers to finance and insurance/takaful, real estate, professional, scientific and technical; administrative and support service activities
4 Figures for layoffs for 2013 onwards includes VSS and refers to revised data from the Department of Labour
5 For preliminary estimates of 2017, based on average employment for the period of 1Q-4Q 2017
p Preliminary

Source: Department of Statistics, Malaysia, Ministry of Human Resources and Bank Negara Malaysia

Table A.7

Balance of Payments

	2014			2015		
	+	-	Net	+	-	Net
	RM million					
Goods[1]	**678,865**	**565,538**	**113,327**	**681,275**	**572,051**	**109,224**
Services	**137,618**	**148,325**	**-10,706**	**136,095**	**156,727**	**-20,632**
Transportation	15,617	41,666	-26,050	16,365	40,930	-24,565
Travel	73,951	40,718	33,233	68,675	41,734	26,941
Other services	47,774	65,315	-17,541	50,687	73,092	-22,405
Government transactions n.i.e.	278	626	-349	369	971	-603
Balance on goods and services	**816,483**	**713,863**	**102,620**	**817,370**	**728,778**	**88,592**
Primary income	**52,395**	**89,019**	**-36,624**	**48,674**	**80,786**	**-32,112**
Compensation of employees	5,170	10,071	-4,902	6,405	12,000	-5,595
Investment income	47,225	78,948	-31,722	42,270	68,786	-26,517
Secondary income	**10,496**	**27,939**	**-17,443**	**11,925**	**33,251**	**-21,325**
Balance on current account	**879,374**	**830,821**	**48,554**	**877,970**	**842,815**	**35,155**
% of GNI			**4.5**			**3.1**
Capital account			**344**			**-1,136**
Financial account			**-79,954**			**-55,350**
Direct investment			-17,974			-1,810
Assets			*-52,623*			*-39,698*
Liabilities			*34,649*			*37,888*
Portfolio investment			-39,354			-26,122
Assets			*-28,112*			*-9,098*
Liabilities			*-11,242*			*-17,024*
Financial derivatives			-975			-663
Other investment			-21,652			-26,755
Official sector			*1,083*			*-1,878*
Private sector			*-22,735*			*-24,877*
Balance on capital and financial accounts			**-79,610**			**-56,486**
Errors and omissions			**-5,451**			**25,082**
of which:						
Foreign exchange revaluation gain (+) / loss (-)			7,573			57,303
Overall balance (surplus + / deficit -)			**-36,507**			**3,750**
Bank Negara Malaysia international reserves, net[2]						
RM million			405,345			409,096
USD million			115,930			95,283
Reserves as months of retained imports			8.3			8.4

[1] Adjusted for valuation and coverage to the balance of payments basis
[2] All assets and liabilities in foreign currencies have been revalued into ringgit at rates of exchange ruling on the balance sheet date and the gain/loss has been reflected accordingly in the Bank's account
p Preliminary
f Forecast
n.i.e. Not included elsewhere
Note: Numbers may not necessarily add up due to rounding

Source: Department of Statistics, Malaysia and Bank Negara Malaysia

2016			2017*p*			2018*f*		
+	-	Net	+	-	Net	+	-	Net
RM million								
686,075	**584,693**	**101,382**	**808,869**	**690,764**	**118,105**	**865,866**	**745,322**	**120,544**
146,313	**165,403**	**-19,090**	**157,793**	**180,859**	**-23,065**	**166,071**	**189,320**	**-23,248**
16,792	40,305	-23,513	18,727	48,454	-29,727	21,055	53,479	-32,425
74,975	43,449	31,526	78,797	45,802	32,995	82,184	46,891	35,293
54,185	80,600	-26,415	59,887	84,790	-24,903	62,429	87,088	-24,659
361	1,050	-689	382	1,813	-1,431	403	1,861	-1,458
832,388	**750,096**	**82,292**	**966,662**	**871,623**	**95,040**	**1,031,937**	**934,641**	**97,295**
47,320	**81,960**	**-34,640**	**54,269**	**90,406**	**-36,137**	**54,442**	**93,552**	**-39,110**
6,569	12,205	-5,636	7,018	11,735	-4,716	6,135	11,670	-5,535
40,751	69,755	-29,004	47,251	78,671	-31,421	48,307	81,882	-33,575
15,988	**34,617**	**-18,629**	**16,661**	**35,270**	**-18,608**	**16,522**	**35,854**	**-19,332**
895,696	**866,673**	**29,023**	**1,037,593**	**997,298**	**40,295**	**1,102,900**	**1,064,047**	**38,853**
		2.4			**3.1**			**2~3**
		108			**86**			
		-1,126			**2,282**			
		14,131			12,357			
		-42,095			*-26,709*			
		56,226			*39,066*			
		-15,419			-9,210			
		-15,011			*-16,539*			
		-408			*7,329*			
		-802			478			
		964			-1,343			
		-3,033			*-614*			
		3,997			*-729*			
		-1,019			**2,368**			
		-13,226			**-51,945**			
		8,918			-25,691			
		14,779			**-9,283**			
		423,874			414,591			
		94,488			102,431			
		8.7			7.2			

Annex

Table A.8

Gross Exports

	2015	2016	2017*p*	2016	2017*p*	2017*p*
	RM million			Annual change (%)		% share
Manufactures	**625,429**	**645,768**	**767,637**	**3.3**	**18.9**	**82.1**
of which:						
Electrical and electronic products	277,922	287,810	343,017	3.6	19.2	36.7
Semiconductors	*137,462*	*144,655*	*178,141*	*5.2*	*23.1*	*19.0*
Office machines and automatic data processing equipment	*51,945*	*53,534*	*62,679*	*3.1*	*17.1*	*6.7*
Electrical machinery, apparatus and appliances, and parts	*47,865*	*49,236*	*58,256*	*2.9*	*18.3*	*6.2*
Telecommunications and sound-recording and reproducing equipment	*40,650*	*40,385*	*43,942*	*-0.7*	*8.8*	*4.7*
Petroleum products	54,528	54,662	71,987	0.2	31.7	7.7
Chemicals and chemical products	55,133	59,077	68,582	7.2	16.1	7.3
Machinery, equipment and parts	36,159	37,498	40,167	3.7	7.1	4.3
Manufactures of metal	34,904	33,352	38,002	-4.4	13.9	4.1
Optical and scientific equipment	26,085	28,747	32,419	10.2	12.8	3.5
Rubber products	20,184	20,253	26,308	0.3	29.9	2.8
Processed food	18,009	19,989	21,141	11.0	5.8	2.3
Wood products	15,442	15,680	16,389	1.5	4.5	1.8
Agriculture	**67,247**	**70,424**	**78,121**	**4.7**	**10.9**	**8.4**
of which:						
Palm oil and palm oil-based agricultural products	45,597	48,275	53,846	5.9	11.5	5.8
Sawn timber and moulding	4,001	4,212	4,740	5.3	12.5	0.5
Natural rubber	4,025	3,614	4,726	-10.2	30.8	0.5
Minerals	**80,194**	**65,056**	**80,597**	**-18.9**	**23.9**	**8.6**
of which:						
Liquefied natural gas (LNG)	44,603	32,709	40,460	-26.7	23.7	4.3
Crude petroleum	26,075	22,319	27,971	-14.4	25.3	3.0
Others	**4,485**	**5,717**	**9,038**	**27.5**	**58.1**	**1.0**
Total	**777,355**	**786,964**	**935,393**	**1.2**	**18.9**	**100.0**

p Preliminary

Source: Department of Statistics, Malaysia

Table A.9

Gross Imports

	2015	2016	2017*p*	2016	2017*p*	2017*p*
	RM million			Annual change (%)		% share
Capital goods	**95,551**	**100,245**	**115,621**	**4.9**	**15.3**	**13.8**
Capital goods (except transport equipment)	85,254	88,432	102,469	3.7	15.9	12.2
Transport equipment industrial	10,296	11,813	13,152	14.7	11.3	1.6
Intermediate goods	**399,526**	**399,033**	**478,936**	**-0.1**	**20.0**	**57.1**
Food and beverages, mainly for industry	19,696	17,506	19,141	-11.1	9.3	2.3
Industrial supplies	167,171	172,305	199,910	3.1	16.0	23.9
Fuel and lubricants	40,277	31,093	47,887	-22.8	54.0	5.7
Parts and accessories of capital goods (except transport equipment)	147,335	151,461	183,267	2.8	21.0	21.9
Parts and accessories of transport equipment	25,047	26,666	28,731	6.5	7.7	3.4
Consumption goods	**62,430**	**66,977**	**71,043**	**7.3**	**6.1**	**8.5**
Food and beverages, mainly for household consumption	25,484	26,681	28,875	4.7	8.2	3.4
Transport equipment non-industrial	1,052	904	942	-14.1	4.2	0.1
Consumer goods, n.e.s	35,894	39,392	41,226	9.7	4.7	4.9
Others	**128,272**	**132,564**	**172,545**	**3.3**	**30.2**	**20.6**
of which:						
Dual use goods	22,003	15,754	25,054	-28.4	59.0	3.0
Re-exports	103,184	113,968	144,457	10.5	26.8	17.2
Total	**685,778**	**698,819**	**838,145**	**1.9**	**19.9**	**100.0**

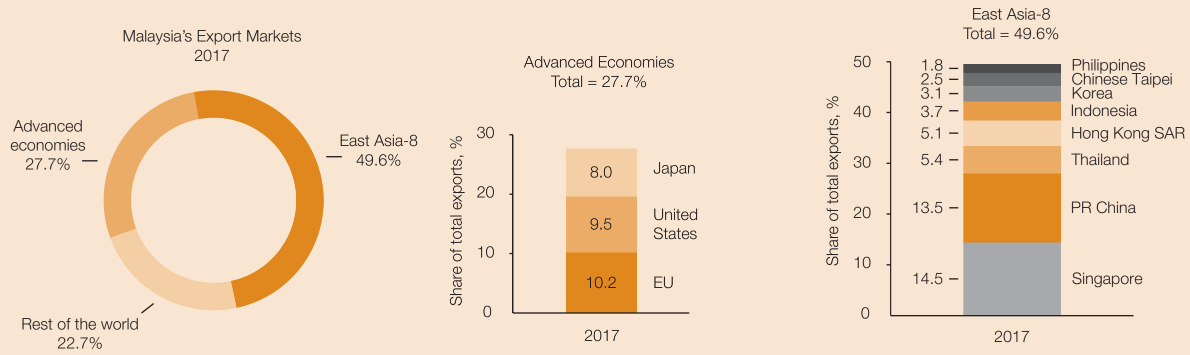
p Preliminary
n.e.s. Not elsewhere specified
Note: Numbers may not necessarily add up due to rounding

Source: Department of Statistics, Malaysia and Bank Negara Malaysia

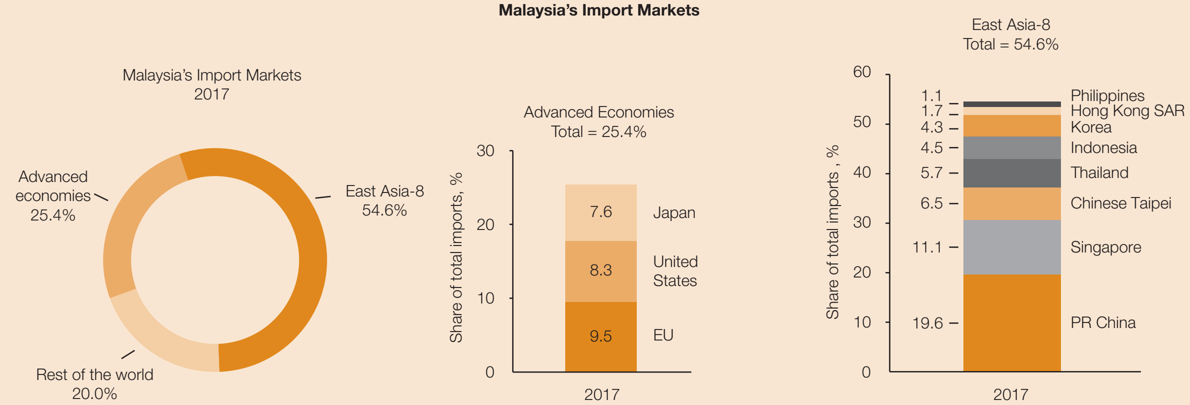
Chart A.10

Malaysia's Trading Partners

Malaysia's Export Markets



Malaysia's Import Markets



Malaysia's Total Trade by Markets

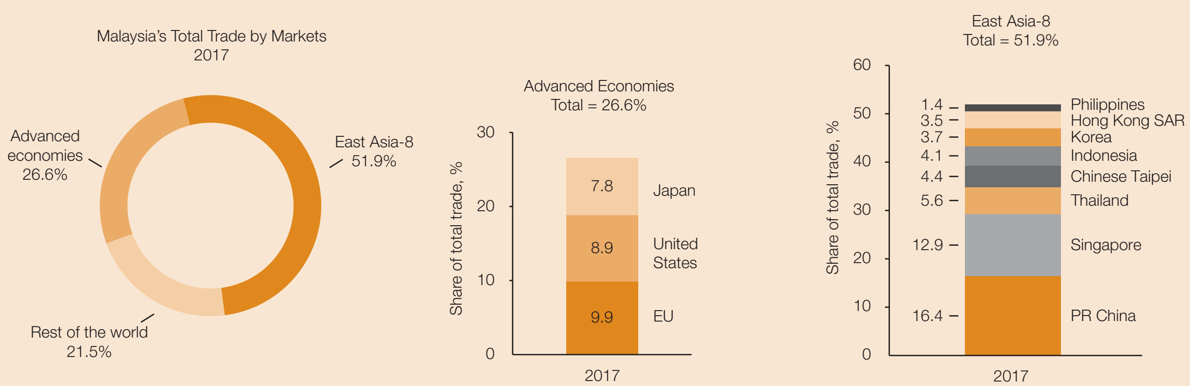


Table A.11

Outstanding External Debt and Debt Servicing

	2013	2014	2015	2016	2017*p*
	RM million (unless stated otherwise)				
Total external debt	**696,592**	**747,757**	**836,985**	**916,119**	**883,368**
USD million equivalent	*209,792*	*211,895*	*192,991*	*202,265*	*215,450*
% GNI	*70.7*	*69.9*	*74.4*	*76.6*	*67.1*
Annual change (%)	*15.7*	*7.3*	*11.9*	*9.5*	*-3.6*
By instrument					
Bonds and notes	107,811	117,146	159,771	169,116	155,208
Interbank borrowing	113,528	149,272	161,345	170,978	172,585
Intercompany loans	62,516	70,072	93,062	137,478	126,387
Loans	40,233	43,189	52,597	53,754	52,975
NR holdings of domestic debt securities	229,655	223,289	211,347	214,204	207,389
NR deposits	77,325	78,050	81,615	86,184	91,093
Others[1]	65,524	66,739	77,249	84,406	77,731
Maturity profile					
Medium- and long-term	357,745	383,697	485,108	539,128	506,257
Short-term	338,847	364,061	351,876	376,991	377,111
Currency composition (% share)	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Ringgit	*45.9*	*41.0*	*36.0*	*34.0*	*34.3*
US dollar	*43.2*	*47.5*	*51.5*	*53.9*	*51.1*
Japanese yen	*2.6*	*2.4*	*2.6*	*2.4*	*2.2*
Others	*8.3*	*9.1*	*9.8*	*9.7*	*12.4*
Total servicing (including short-term interest payment)	**141,923**	**155,685**	**185,772**	**206,719**	**214,017**
of which:					
Medium- and long-term debt	**140,716**	**154,311**	**184,272**	**204,659**	**211,449**
Repayment[2]	**130,603**	**143,190**	**172,391**	**191,142**	**198,443**
of which:					
Redemption of matured domestic debt securities held by NR	23,490	23,698	27,695	24,403	27,105
Interest payment	**10,113**	**11,121**	**11,881**	**13,517**	**13,006**
of which interest payment on:					
NR holdings of domestic debt securities	5,694	6,941	6,575	7,409	5,943
Debt service ratio (% of exports of goods and services)					
Total debt	**18.4**	**19.1**	**22.7**	**24.8**	**22.1**
Medium- and long-term debt of which:	18.3	18.9	22.5	24.6	21.9
NR holdings of domestic debt securities	3.8	3.8	4.2	3.8	3.4

[1] Comprises trade credits, IMF allocation of SDRs and other debt liabilities
[2] Includes prepayment
p Preliminary
Note: Numbers may not necessarily add up due to rounding
NR refers to non-residents

Source: Ministry of Finance, Malaysia and Bank Negara Malaysia

Table A.12

Consumer Price Index

	Weights (%) (2010=100)	2014	2015	2016	2017
		Annual change (%)			
Total	**100.0**	**3.2**	**2.1**	**2.1**	**3.7**
Food and non-alcoholic beverages	30.2	3.3	3.6	3.8	4.0
Alcoholic beverages and tobacco	2.9	11.6	13.5	17.2	0.2
Clothing and footwear	3.3	-0.2	0.5	-0.4	-0.3
Housing, water, electricity, gas and other fuels	23.8	3.4	2.5	2.4	2.2
Furnishings, household equipment and routine household maintenance	3.8	1.0	2.7	2.4	2.1
Health	1.7	2.9	4.5	2.7	2.5
Transport	13.7	4.9	-4.5	-4.6	13.2
Communication	5.2	-0.7	1.9	-1.5	-0.4
Recreation services and culture	4.9	1.5	1.7	2.5	1.9
Education	1.1	2.4	2.4	2.1	1.7
Restaurants and hotels	2.9	4.7	4.1	2.8	2.5
Miscellaneous goods and services	6.5	0.7	4.1	2.9	1.2

Source: Department of Statistics, Malaysia

Table A.13

Producer Price Index[1]

	Weights (%) (2010=100)[2]	2014	2015	2016	2017
		Annual Change (%)			
Total	**100.0**	**1.5**	**-7.4**	**-1.1**	**6.7**
Crude materials for further processing	20.3	-2.1	-20.5	3.4	14.8
Foodstuffs and feedstuffs	4.1	4.3	1.2	1.8	6.2
Non-food materials	16.2	-3.7	-26.5	4.0	17.9
Intermediate materials, supplies and components	53.6	3.4	-6.2	-3.2	6.7
Materials & components for manufacturing	27.9	2.7	-2.7	2.2	5.6
Materials & components for construction	5.3	0.7	0.8	0.3	2.0
Processed fuel & lubricants	13.2	5.6	-18.7	-16.6	15.3
Containers	0.5	0.5	0.3	1.5	5.5
Supplies	6.7	2.5	5.3	0.5	0.3
Finished goods	26.1	0.8	1.2	0.4	0.9
Finished consumer goods	8.4	1.3	1.2	0.9	1.7
Capital equipment	17.7	0.6	0.9	0.3	0.5

[1] The series is for local production. Starting from January 2016, PPI for the domestic economy, import and export have been discontinued
[2] Effective from 2015, the Producer Price Index has been revised to the new base year 2010=100, from 2005=100 previously

Source: Department of Statistics, Malaysia

Table A.14

Broad Money (M3)

	Annual change					As at end
	2013	2014	2015	2016	2017	2017
	RM million					
Broad money (M3)[1]	107,470	100,993	41,277	49,315	76,659	1,720,561
Currency in circulation[2]	5,913	5,319	8,613	8,817	6,887	92,348
Demand deposits	32,013	13,333	5,087	11,439	34,724	329,037
Broad quasi-money	69,545	82,341	27,577	29,058	35,048	1,299,177
Fixed deposits	*66,957*	*39,956*	*25,342*	*26,002*	*49,777*	*821,965*
Savings deposits	*8,025*	*3,166*	*659*	*9,538*	*5,376*	*150,505*
NIDs	*-1,626*	*4,005*	*-8,922*	*-928*	*-172*	*8,154*
Repos	*100*	*-2,090*	*0*	*0*	*0*	*0*
Foreign currency deposits	*4,434*	*15,397*	*42,034*	*-9,468*	*-8,582*	*119,496*
Other deposits	*-8,345*	*21,905*	*-31,536*	*3,915*	*-11,351*	*199,056*
Factors Affecting M3						
Net claims on Government	21,164	34,317	-8,858	17,727	16,630	129,829
Claims on Government	*15,794*	*31,336*	*-1,566*	*12,647*	*20,246*	*186,677*
Less: Government deposits	*-5,370*	*-2,981*	*7,292*	*-5,080*	*3,616*	*56,848*
Claims on private sector	118,033	117,955	120,267	89,257	96,398	1,745,190
Loans	*107,934*	*111,388*	*106,122*	*83,999*	*56,683*	*1,537,100*
Securities	*10,099*	*6,568*	*14,145*	*5,258*	*39,715*	*208,090*
Net foreign assets[3]	13,298	-9,952	22,003	-6,015	-2,241	518,192
Bank Negara Malaysia	*14,185*	*-35,003*	*1,027*	*14,669*	*-8,924*	*406,832*
Banking system	*-888*	*25,051*	*20,976*	*-20,685*	*6,683*	*111,360*
Other influences	-45,024	-41,328	-92,135	-51,654	-34,129	-672,650

[1] Excludes interplacements among banking institutions
[2] Excludes holdings by the banking system
[3] Includes exchange rate revaluation losses/gains
Note: Numbers may not add up due to rounding

Annex

Table A.15

Money Supply: Annual Change and Growth Rates

	2013		2014		2015		2016		2017	
	RM million	%	RM million	%	RM million	%	RM million	%	RM million	%
M3[1]	107,470	7.9	100,993	7.0	41,277	2.7	49,315	3.1	76,659	4.7
M1[2]	37,768	13.0	18,820	5.7	14,042	4.1	20,383	5.7	41,904	11.0
Currency in circulation	5,449	9.5	5,189	8.2	8,699	12.8	8,794	11.4	6,904	8.1
Demand deposits with commercial and Islamic banks	32,318	13.9	13,630	5.2	5,343	1.9	11,589	4.1	34,999	11.9
Other deposits with commercial and Islamic banks[3]	73,696	7.1	88,888	8.0	30,325	2.5	28,822	2.3	36,979	2.9
Deposits with other banking institutions[4]	-3,993	-20.5	-6,715	-42.3	-3,091	-33.8	110	1.8	-2,224	-36.1

[1] Comprising M1 plus other deposits of the private sector placed with commercial and Islamic banks and deposits of the private sector placed with other banking institutions, namely the investment banks
[2] Comprising currency in circulation and demand deposits of the private sector
[3] Comprising savings and fixed deposits, negotiable instruments of deposits (NIDs), repos and foreign currency deposits of the private sector placed with commercial and Islamic banks
[4] Comprising call deposits, fixed deposits, negotiable instruments of deposits (NIDs), repos and foreign currency deposits of the private sector placed with investment banks. Excludes interplacements among the banking institutions
Note: Numbers may not add up due to rounding

Table A.16

Interest Rates (%)

	As at end-year						
	2011	2012	2013	2014	2015	2016	2017
Overnight interbank	2.99	3.00	2.99	3.23	3.05	3.00	2.91
1-week interbank	3.01	3.01	3.02	3.30	3.13	3.02	3.03
1-month interbank	3.05	3.06	3.20	3.38	3.45	3.10	3.08
Commercial banks							
Fixed deposit							
3-month	2.99	2.97	2.97	3.13	3.13	2.92	2.94
12-month	3.22	3.15	3.15	3.31	3.31	3.06	3.10
Savings deposit	1.15	1.03	0.99	1.07	1.04	0.99	0.97
Base lending rate (BLR)	6.53	6.53	6.53	6.79	6.79	6.65	6.68
Weighted average base rate (BR)					3.77	3.62	3.64
Treasury bills (91 days)[1]	2.99	3.04	3.00	3.42	2.74	3.06	2.86
Malaysian Government Securities[1]							
1-year	2.82	3.01	3.03	3.48	2.59	3.26	2.89
5-year	3.23	3.24	3.66	3.84	3.47	3.70	3.56
Corporate bond[1]							
AAA							
3-year	3.65	3.53	3.71	4.00	4.13	4.25	4.13
5-year	3.99	3.80	3.96	4.27	4.37	4.40	4.33
AA							
3-year	4.29	4.04	4.16	4.33	4.49	4.61	4.46
5-year	4.65	4.30	4.41	4.60	4.73	4.78	4.64
A							
3-year	6.57	6.34	6.32	6.25	6.34	6.13	5.73
5-year	7.11	6.98	7.02	6.87	6.97	6.66	6.36
BBB							
3-year	10.21	10.06	10.02	10.16	9.90	9.17	8.59
5-year	11.24	11.14	11.17	11.17	11.13	10.12	9.62
BB & below							
3-year	12.62	12.53	12.52	13.03	12.55	11.31	10.80
5-year	14.13	13.76	13.70	14.60	13.89	12.69	12.08

[1] Source: FAST, Bank Negara Malaysia

Table A.17

Movements of the Ringgit

	RM to one unit of foreign currency[1]			Annual change (%)		Change (%)
	2005	2016	2017	2016	2017	21 Jul. '05 -
	21 Jul.[2]	End-Dec.				Dec. '17
SDR	5.5049	6.0394	5.7428	-0.8	5.2	-4.1
US dollar	3.8000	4.4860	4.0620	-4.3	10.4	-6.5
Singapore dollar	2.2570	3.1016	3.0392	-2.1	2.1	-25.7
100 Japanese yen	3.3745	3.8442	3.6020	-7.3	6.7	-6.3
Pound sterling	6.6270	5.5108	5.4660	15.4	0.8	21.2
Australian dollar	2.8823	3.2436	3.1659	-3.4	2.5	-9.0
Euro	4.6212	4.7238	4.8510	-0.7	-2.6	-4.7
100 Thai baht	9.0681	12.517	12.433	-4.7	0.7	-27.1
100 Indonesian rupiah	0.0386	0.0334	0.0300	-6.9	11.4	28.9
100 Korean won	0.3665	0.3720	0.3801	-1.8	-2.1	-3.6
100 Philippine peso	6.8131	9.0516	8.1232	1.1	11.4	-16.1
100 New Taiwan dollar	11.890	13.915	13.682	-6.2	1.7	-13.1
Chinese renminbi	0.4591	0.6455	0.6230	2.4	3.6	-26.3

[1] US dollar rates are the average of buying and selling rates at noon in the Kuala Lumpur Interbank Foreign Exchange Market
Rates for foreign currencies other than US dollar are cross rates derived from rates of these currencies against the US dollar and the RM/US dollar rate

[2] Ringgit was unpegged against the US dollar

Annex

Table A.18

Financing of the Economy

By customer / By financing type/institution	Businesses[1]		Households	Government	Total Financing
	Total	*of which: SMEs*			
	RM million				
Net Change in Financing (2016)					
Financial Intermediaries					
Banking Institutions	29,847	*24,698*	43,243	3,277	76,367
Development Financial Institutions (DFIs)[2]	1,852	*646*	5,894	-	7,746
Other Domestic Intermediaries[3]	-8,431	*-65*	7,605	-	-825
Capital Markets					
Bond Market[4]	29,074	-	-	37,859	66,933
Equity Market[5]	7,090	-	-	-	7,090
External Financing					
Foreign Direct Investment	47,182	-	-	-	47,182
Offshore Borrowing[6]	55,219	-	-	-391	54,828
Total	**161,833**	***25,279***	**56,743**	**40,745**	**259,321**
Net Change in Financing (2017*p*)					
Financial Intermediaries					
Banking Institutions	12,190	*17,198*	44,319	6,430	62,939
Development Financial Institutions (DFIs)[2]	-2,063	*-1,264*	2,279	-	216
Other Domestic Intermediaries[3]	-381	*-255*	7,300	-	6,919
Capital Markets					
Bond Market[4]	75,101	-	-	40,750	115,851
Equity Market[5]	12,232	-	-	-	12,232
External Financing					
Foreign Direct Investment	39,183	-	-	-	39,183
Offshore Borrowing[6]	-21,389	-	-	-4,519	-25,909
Total	**114,872**	***15,679***	**53,899**	**42,660**	**211,431**

[1] Businesses include domestic banking institutions, domestic non-bank financial institutions, domestic other entities and foreign entities
[2] Refers to DFIs governed under the Development Financial Institutions Act, 2002
[3] Other domestic intermediaries include insurance companies, Employees Provident Fund (EPF), housing credit institutions, leasing and factoring companies, and Lembaga Pembiayaan Perumahan Sektor Awam (previously Treasury Housing Loans Division)
[4] Refers to the change in outstanding corporate bonds and Government securities (Malaysian Government Securities and Government Investment Issues), held by both residents and non-residents. Data excludes issuances by Cagamas and non-residents; and short-term papers
[5] Refers to issuances during the year, excluding issuances by non-residents
[6] Refers to all offshore borrowings under the redefined external debt effective first quarter 2014, except short-term offshore borrowings by the banking sector
p Preliminary
Note: Numbers may not add up due to rounding

Table A.19

Consolidated Public Sector Finance

	2014	2015	2016	2017*p*	2018*f*
	RM billion				
Revenue[1]	202.0	216.0	222.3	229.2	242.4
% growth	*5.0*	*6.9*	*2.9*	*3.1*	*5.8*
Operating expenditure	241.3	243.3	235.8	246.2	261.2
% growth	*1.8*	*0.8*	*-3.1*	*4.4*	*6.1*
Current balance of NFPCs[2]	122.0	78.2	81.6	99.7	111.9
Total public sector current balance	**82.7**	**50.9**	**68.1**	**82.8**	**93.1**
% of GDP	***7.5***	***4.4***	***5.5***	***6.1***	***6.4***
Development expenditure[3]	164.5	140.4	158.1	146.7	146.8
% growth	*18.0*	*-14.6*	*12.6*	*-7.3*	*0.1*
General Government[4]	49.6	47.5	51.1	54.0	56.4
NFPCs	114.9	92.9	107.0	92.6	90.4
Overall balance	**-81.8**	**-89.5**	**-90.0**	**-63.9**	**-53.7**
% of GDP	***-7.4***	***-7.7***	***-7.3***	***-4.7***	***-3.7***

[1] Excludes transfers within General Government
[2] Refers to 28 NFPCs from 2017 onwards
[3] Adjusted for transfers and net lending within public sector
[4] Comprises Federal Government, state and local governments, and statutory bodies
p Preliminary
f Forecast
Note: Numbers may not add up due to rounding

Source: Ministry of Finance, Malaysia and Non-Financial Public Corporations (NFPCs)

Glossary, Acronyms and Abbreviations

Glossary

Aggregate outstanding ringgit liquidity placed with the Bank
Surplus liquidity absorbed by Bank Negara Malaysia, through its monetary operations and Statutory Reserve Requirement (SRR). The main borrowing instruments used for this purpose include, among others, direct money market borrowing, repurchase agreements (repo), *Qard* acceptance, Commodity Murabahah Programme (CMP), sell-buy swaps, Bank Negara Monetary Notes (BNMN) and Bank Negara Interbank Bills (BNIB).

Asset purchase programme
A form of expansionary monetary policy undertaken by several advanced economies' central banks following the Global Financial Crisis, whereby central banks purchase predetermined amounts of government bonds or other financial assets in order to stimulate the economy and lower long-term interest rates.

B40
The bottom 40% of households by income, with monthly income below RM4,360 in Malaysia in 2016.

Backward linkages
Economic interdependence with suppliers and service providers which creates spillover effects when demand for the final product or service increases or decreases.

Balance of payments
A statistical summary of economic transactions between residents and non-residents in a country during a specific time period.

Bank Negara Interbank Bills (BNIB)
A short-term discounted note with maturity of up to one year and qualifies as Level 1 high-quality liquid assets (HQLA). BNIB can only be purchased by and traded among licensed banks and investment banks.

Banker's acceptance (BA)
A bill of exchange drawn on and accepted by a bank in Malaysia to finance the drawer's business-related purchases from or sales of goods to another person, evidenced by proper and adequate documentation.

Binding wage floor
A wage floor is the minimum wage established either by law or by an agreed-upon wage bracket. A wage floor is binding if it is set above the equilibrium wage, i.e. the wage level at which labour demand equals labour supply.

Brexit
The United Kingdom's decision to leave the European Union.

Business Continuity Management
A holistic risk management process that identifies potential incidents that will potentially threaten an organisation and provides a framework for building capability for an effective response which safeguards the interest of its key stakeholders, reputation, credibility and value creating activities in order to deliver the Bank's mandate and strategic objectives.

Collective bargaining
The negotiation of employment conditions between employers and a group of employees. For example, in France, the collective bargaining process was decentralised, such that the negotiation shifted from an industry-level to a company level.

Core inflation
A measure of underlying inflation. One common method of calculation is by excluding items whose price fluctuations are deemed transitory from the Consumer Price Index (CPI) basket. These items include price-volatile and price-administered goods and services.

Corporate bond spread
The difference between the yields on a corporate bond and a government bond of similar maturity. This spread is typically used to measure the compensation demanded by investors for bearing the risk associated with holding a corporate bond over a risk-free asset of similar maturity.

Cross-border carry trade
Trade whereby an investor borrows funds in a country with low interest rates and invests in a country with higher interest rates.

Demand-driven price pressure
The upward pressure on prices that arises when aggregate demand exceeds aggregate supply.

Digital Currency
A digital representation of value that functions as a medium of exchange and is interchangeable with any money (including through the crediting or debiting of an account), but excludes electronic money.

Direct investment abroad (DIA)
A category of cross-border investment associated with the objective of establishing a lasting interest in a non-resident direct investment enterprise abroad by a resident direct investor in Malaysia. A 'lasting interest' is a long-term relationship in which the direct investor has a significant degree of influence on the management of another enterprise (e.g. an ownership of at least 10% of the voting power).

Equity market capitalisation
The total value of the equity market, as computed by the share price multiplied by the number of outstanding shares.

Exchange rate valuation effect
The changes in ringgit equivalent value of Malaysia's foreign-currency denominated external financial assets and liabilities, and export and import values due to changes in the ringgit exchange rate.

Expansionary policy
Monetary or fiscal policy implemented in order to stimulate economic growth by increasing aggregate demand in an economy.

Financial Markets Committee (FMC)
A committee established in May 2016 to discuss current issues and formulate strategies to enhance and develop the Malaysian financial market. It comprises participants/representatives from Bank Negara Malaysia, financial institutions, corporations, financial service providers and other institutions or stakeholders which have prominent roles in the financial markets.

Fiscal Sustainability
The ability of a government to sustain spending and tax in the long run without undermining government solvency.

Foreign direct investment (FDI)
A category of cross-border investment associated with the objective of establishing a lasting interest in a direct investment enterprise in Malaysia by a non-resident direct investor. A 'lasting interest' is a long-term relationship in which the direct investor has a significant degree of influence on the management of another enterprise (e.g. an ownership of at least 10% of the voting power).

Forward linkages
Economic interdependence with customers and clients which creates spillover effects when demand for the initial product or service increases or decreases.

General Government
A sector which consists of the Federal Government, State Governments, local authorities and statutory bodies.

Headline inflation
The annual price increase for a basket of items that are commonly consumed by an average household. For Malaysia, headline inflation is computed based on the Consumer Price Index (CPI) basket.

Hedging
An investment strategy to reduce investment risk by using financial derivatives such as options, swaps and futures contracts.

Household
A person or group of related or unrelated persons sharing the same dwelling and contributing resources towards joint expenses, such as for food.

Import partners' inflation
The weighted-average of an economy's main import partners' inflation rates. The weights are calculated based on the share of imports from the importing countries to the economy.

Incident Reporting
An operational incident is an event caused by people, processes, technology or external events, which have resulted or at worst, could have resulted (near-miss) in a negative impact on reputation, business objectives, financial, and/or safety, health and environment. Incident reporting is required for all unexpected events, errors and exceptions, near-misses and all incidents causing disruption to business and operations.

Information Security Risk
Possibility of information leakage, misuse, theft or loss resulting from failure to preserve confidentiality, integrity and availability of information.

International investment position (IIP)
The external balance sheet, detailing the country's outstanding financial assets and liabilities position relative to the rest of the world. A positive net IIP denotes Malaysia's position as a net creditor nation, and vice versa.

Key Risk Indicator
Risk metric/statistic that provides insight into business operations' risk exposure, operational and control weaknesses, through the monitoring of the main drivers of exposure associated with the key risk.

Level 1 high-quality liquid assets (HQLA)
Assets that can be converted easily and immediately in private markets into cash to meet banks' liquidity needs for a 30-calendar day liquidity stress scenario. The Level 1 HQLA category, as defined by the Bank for International Settlements (BIS), generally includes cash, central bank reserves, and certain marketable securities backed by sovereigns and central banks.

Liquidity injection operations
The use of monetary operations to provide liquidity to the banking system through instruments such as reverse repurchase agreements (reverse repos) and foreign exchange swap facilities.

Monetary Policy Committee (MPC)
The body responsible for formulating monetary policy and the policies for the conduct of monetary policy operations, as stipulated in the Central Bank of Malaysia Act 2009.

Monetary policy normalisation
Actions by central banks to return the stance of monetary policy back to more normal levels, which is consistent with the medium-term objective of achieving macroeconomic stability.

Negotiable instrument of deposits (NID)
Interest-bearing deposit certificates issued by banks that can be traded in the wholesale secondary money market. NIDs issued in the Malaysian financial market can be based on either fixed, zero coupon or floating rates or a combination of either of the three.

Net domestic borrowing of the Federal Government
The Federal Government's gross domestic borrowings, in the form of Malaysian Government Securities (MGS) and Malaysian Government Investment Issues (MGII), less repayments.

Net errors and omissions
Balancing or residual item which occurs when the current, capital and financial accounts do not mirror the change in reserves due to imperfections in data source and compilation (e.g. incomplete data sources, difference in timing of recording, valuation factors).

Net external borrowing of the Federal Government
The Federal Government's gross external borrowings, in the form of project and market loans, less repayments.

Non-resident entity
An institutional unit which engages in economic activities and transactions for a period of one year or longer from a location outside of Malaysia.

Outstanding corporate bonds
Current stock of corporate bonds plus net issuances of corporate bonds during the period. Net issuances of corporate bonds refers to issuances of corporate bonds, less repayments.

Outstanding loans
Current stock of loans plus net loans disbursed during the period. Net loans disbursed refers to loan disbursements, less loan repayments. Includes loans extended by the banking system and non-bank financial institutions, and loans sold to Cagamas.

Overnight Policy Rate (OPR)
The indicator of the monetary policy stance for Malaysia. The level of the OPR is decided by the MPC. It also serves as the target rate for the day-to-day liquidity operations of the Bank, which will influence other interest rates in the economy.

Primary income
Income earned from the contribution to production processes, provision of financial assets and renting of natural resources. These include compensation of employees (e.g. wages, salaries), investment income (e.g. dividends) and rent transactions between residents and non-residents.

Public corporation
A corporation that is controlled by the Government. Control can be determined by: the ownership of the majority of the voting interest; control of the board or other governing body; control of the appointment and removal of key personnel; control of key committees of the entity; golden share and options; regulation and control; control by a dominant customer; and control attached to borrowing from the Government.

***Qard* acceptance**
A contract of lending money by a lender to a borrower where the latter is bound to return an equivalent replacement amount to the lender.

Red Teaming
Activities undertaken by an independent group, that challenges an organisation to improve its effectiveness by assuming an adversarial role.

Resident entity
An institutional unit which engages in economic activities and transactions for a period of one year or longer from a location in Malaysia.

Risk Control Self-Assessment
A tool to facilitate the identification as well as evaluation of related risks and controls by departments.

"Risk-off'
Periods of perceived high financial risk during which investors take on less risk or unwind their exposure to riskier investments. They usually correspond to periods of outflows from emerging market assets.

"Risk-on"
Periods of perceived low financial risk which encourage investors to take on more risk. They usually correspond to periods where global investors invest in emerging market assets, which are considered relatively riskier than advanced economies' assets.

Scenario Planning
Scenario planning is a structured way for organisations to think about the future and answers questions such as "what if", "what could be" and "what's next".

Secondary income
Current transfers (provision of goods, services, or financial assets) between residents and non-residents with no corresponding economic returns. These include transfers by the general government, personal transfers (e.g. remittance by foreign workers) and other transfers in cash or kind.

Social assistance
Transfers in the form of cash or in-kind benefits that are usually targeted at the poor and vulnerable.

Standing Facilities
Lending/funding facility and deposit/acceptance facility offered by Bank Negara Malaysia in the event of residual liquidity surpluses or shortages in the interbank market.

Structured Technical Curriculum
Holistic programme of modules designed based on technical competencies using a blended learning approach. The objective of the curriculum is to equip learners with the requisite knowledge and skills to accelerate time to competence.

Terms of trade
The ratio of a country's export prices to its import prices. It can also be interpreted as the amount of imported goods a country can purchase per unit of exported goods. Improving terms of trade indicates that for every unit of exports sold, more units of imported goods can be purchased, and vice versa.

Trade openness
A country's sum of exports and imports as a share of its GDP, representing a country's total exposure to international trade.

Transversal risk
Risks that are commonly experienced by departments within the Bank. These risks are managed by several departments known as Risk Policy Owner (RPO).

Underlying inflation
The persistent trend component of inflation. It is typically constructed by removing the transitory and seasonal components from headline inflation.

US dollar index
The foreign exchange value of the US dollar against a basket of currencies of major US trade partners.

US Tech Pulse Index
A coincidence index which tracks the health of the US information technology sector. The index comprises indicators such as investment in IT goods, consumption of personal computers and software, employment in the IT sector, industrial production of the technology sector, and shipments by the technology sector.

Weighted average base rate
Effective 2 January 2015, the base rate (BR) is the main reference rate for new retail floating rate loans. The BR is determined by financial service providers' (FSPs) benchmark cost of funds and the Statutory Reserve Requirement (SRR). Other components of loan pricing such as borrower credit risk, liquidity risk premium, operating costs and profit margin would be reflected in a spread above the BR. The average BR of FSPs is weighted by the amount of outstanding floating rate loans.

Window dressing
An accounting strategy used to improve the appearance of financial statements, to be presented to shareholders and clients.

Yield curve
Draws out the yields of a bond with respect to its different maturities. For example, the yield curve for Malaysian Government Securities (MGS) plots the yields from the 1-year to 30-year bond maturities.

Acronyms and Abbreviations

ABM	Association of Banks in Malaysia
ACC	Automated Cash Centre
ADB	Asian Development Bank
ADFIM	Association of Development Finance Institutions in Malaysia
AFI	Alliance for Financial Inclusion
AI	Artificial Intelligence
AIBIM	Association of Islamic Banking Institutions in Malaysia
AICB	Asian Institute of Chartered Bankers
AOIR	average overnight interbank rate
ASA	ASEAN Swap Arrangement
ASB	Asia School of Business
ASEAN	Association of Southeast Asian Nations
BA	banker's acceptance
BAC	Board Audit Committee
BCM	business continuity management
BCSA	Bilateral Currency Swap Arrangement
BIS	Bank of International Settlements
BNIB	Bank Negara Interbank Bills
BNMN	Bank Negara Monetary Notes
BOE	Bank of England
BP	Business Plan 2018-2020
BR	base rate
BR1M	Bantuan Rakyat 1Malaysia
BRC	Board Risk Committee
CB	Chartered Banker
CBA 2009	Central Bank of Malaysia Act 2009
CIA	Collection Intelligence Arrangement
CMT	Crisis Management Team
COE	Centre of Excellence
COF	cost of funds
COSO	Sponsoring Organisations of the Treadway Commission
CPI	Consumer Price Index
CPO	crude palm oil
CSIRP	Cyber Security Incident Response Plan
DFIs	development financial institutions
DFTZ	Digital Free Trade Zone
DIA	Direct investment abroad
DRO	Departmental Risk Officer
E&E	electronics and electrical
E&O	errors and omissions
ECB	European Central Bank
eCCRIS	Electronic Central Credit Reference Information System
ECI	Economic Complexity Index
EIS	Employment Insurance Scheme
EMBI	Emerging Market Bond Index
EMEAP	Executives' Meeting of East Asia-Pacific Central Banks
EPF	Employees Provident Fund
EPU	Economic Planning Unit
ERM	Enterprise Risk Management
ERP	Enterprise Risk Management
EU	European Union
FAO	Food and Agriculture Organisation of the United Nations
FBM KLCI	FTSE Bursa Malaysia Kuala Lumpur Composite Index
FCA	Financial Consumer Alert
FCB	Fellow, Chartered Banker
FD	fixed deposit
FDI	foreign direct investment
FEA	foreign exchange administration
FEC	Financial Education Campus

Fed	Federal Reserve
FI	financial institutions
FINCO	Financial Industry Collective Outreach
Fintech	financial technology
FMC	Financial Markets Committee
FRMC	Financial Risk Working Group
FSC	Financial Stability Committee
FTP	Financial Transaction Plan
GDP	Gross Domestic Product
GFC	Global Financial Crisis
GFCF	gross fixed capital formation
GII	Government Investment Issues
GLC	government-linked companies
GNI	gross national income
GNS	gross national savings
GST	Goods and Services Tax
GVC	global value chains
HDRF	Human Resource Development Fund
HQLA	high-quality liquid asset
IAD	Internal Audit Department
IAIS	International Association of Insurance Supervisors
ICAEW	Institute of Chartered Accountants in England and Wales
ICLIF	International Centre for Leadership in Finance
ICT	Information and Communication Technology
IFSB	Islamic Financial Services Board
IIA	Institute of Internal Auditors
IILM	International Islamic Liquidity Management Corporation
IIP	International Investment Position
ILO	International Labour Organisation
IMF	International Monetary Fund
INCEIF	International Centre for Education in Islamic Finance
IORWG	International Operational Risk Working Group
IoT	Internet of Things
IPO	initial public offering
IRS	interest rate swaps
IRTI	Islamic Research and Training Institute
ISACA	Information Systems Audit and Control Association
ISMS	Information Security Management System
ISO	International Organisation for Standardisation
ISRA	International Shariah Research Academy for Islamic Finance
IT	information technology
KLIBOR	Kuala Lumpur Interbank Offered Rate
KLSE	Kuala Lumpur Stock Exchange
LDP	Leadership Development Programme
LIA	Liquidity Investment Arrangement
LNG	liquefied natural gas
LSPG	Labour Statistics Planning Group
MBLS	Malaysian Bureau of Labour Statistics
MEF	Malaysian Employers Federation
MFRS	Malaysian Financial Reporting Standards
MGII	Malaysian Government Investment Issues
MGS	Malaysian Government Securities
MNC	multinational corporation
MPC	Monetary Policy Committee
MPS	Monetary Policy Statement
MSCI EM	Morgan Stanley Capital International Emerging Market
NAB	New Arrangements to Borrow
NEER	nominal effective exchange rate
NID	negotiable instrument of deposits
NR	non-resident
OECD	Organisation for Economic Co-operation and Development
OPEC	Organisation of Petroleum Exporting Countries
OPR	Overnight Policy Rate
PC	personal computer
PCI	Product Complexity Index
PIN	Personal Identification Number
PR China	The People's Republic of China
RENTAS	Real-Time Electronic Transfer of Funds and Securities
RES	Regional Economic Surveillance
RMD	Risk Management Department
ROA	return on assets
SAC	Shariah Advisory Council
SDR	Special Drawing Rights
SESRIC	Statistical, Economic and Social Research and Training Centre for Islamic Countries

SIEM	Security Information and Events Management
SMEs	small and medium enterprises
STC	Structured Technical Curriculum
STEM	Science, Technology, Engineering and Mathematics
SWIFT	Society for Worldwide Interbank Financial Transaction
UK	United Kingdom
UNCDF	United Nations Capital Development Fund
US	United States

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