BANK NEGARA MALAYSIA
CENTRAL BANK OF MALAYSIA

The BNM Quarterly Bulletin presents a quarterly review of Malaysia's economic, monetary and financial developments. It includes the Bank's latest assessments on the direction of the economy going forward. The Bulletin also provides insights on current economic and financial issues, including highlights of policy initiatives undertaken by Bank Negara Malaysia in pursuit of its mandates.

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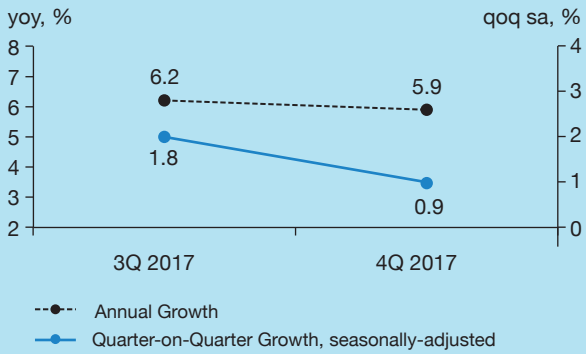
Key Highlights on

Economic and Financial Developments in 4Q 2017

Strong GDP growth of 5.9%

Continued expansion in domestic demand and across most economic sectors

Real GDP Growth



Private sector demand continued to be the primary driver of growth

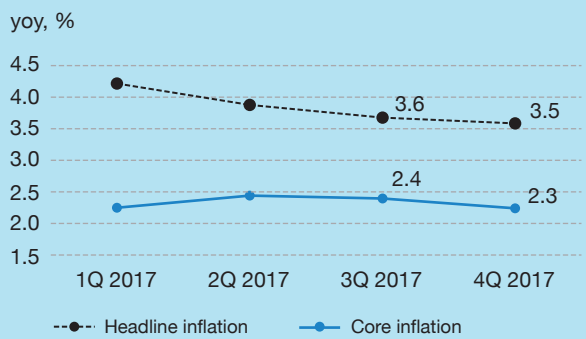
External demand provided further support to growth

On the supply side, the manufacturing and services sectors remained the key drivers of growth

Both headline and core inflation moderated in 4Q 2017

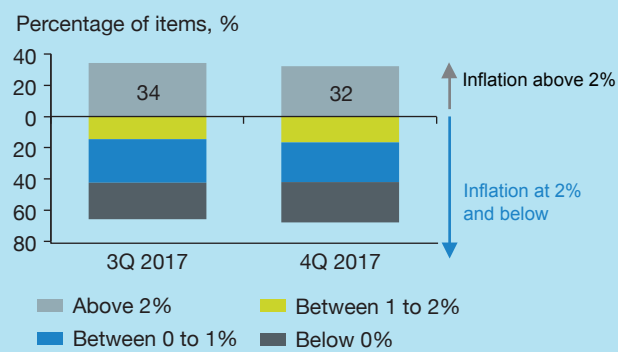
Core inflation moderated to 2.3% in 4Q 2017 (3Q 2017: 2.4%)

Headline and Core Inflation



Lower percentage of items that registered above 2% inflation

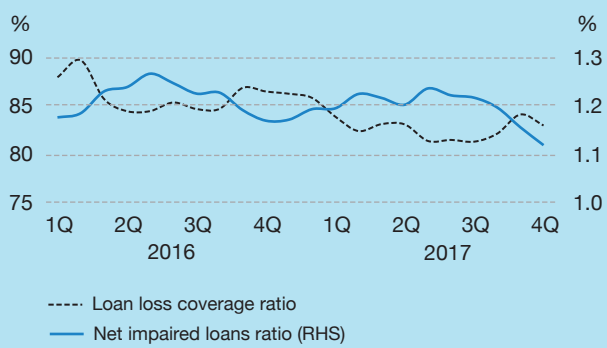
Inflation Pervasiveness



Financial system soundness preserved

Healthy asset quality observed in the banking system

Banking System Asset Quality



Businesses and households continued to have access to financing

Banking System Loan Disbursement to Businesses and Households



Source: Department of Statistics, Malaysia and Bank Negara Malaysia unless stated otherwise
For more information, visit www.bnm.gov.my

Key Highlights on

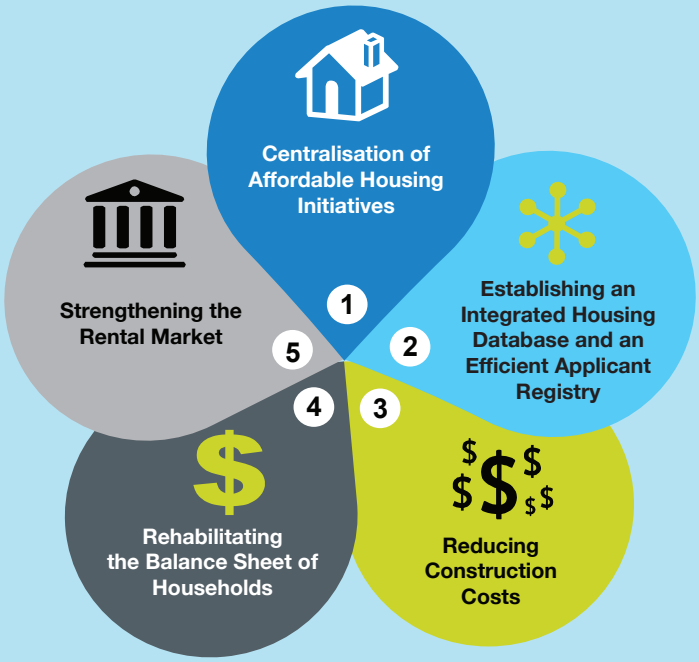
Box and Feature Articles

Affordable Housing: Challenges and the Way Forward

Challenges in Affordable Housing

- Affordable housing provision is fragmented and uncoordinated
- Lack of an integrated housing database and registry
- High construction costs as one of the barriers to supply
- High household indebtedness coupled with house price growth exceeding household income growth
- Rental market is currently still underdeveloped given the insufficient legal safeguards

Five Policy Solutions as Ways Forward



Open Application Programming Interface (API): A Financial Revolution

An Open API strategy is viewed as a key lever to increase efficiency, broaden access, promote greater innovation, and encourage competition in the financial sector

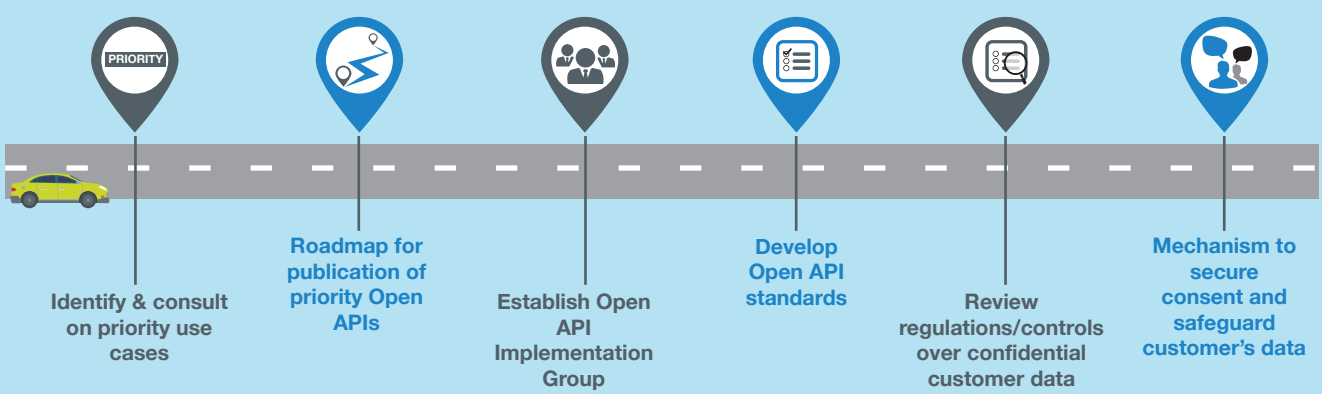
- Market competition
- Fintech & financial institution collaboration
- Regulatory mandates

Financial and payments-related Open APIs poised to grow exponentially

Reservations on Open API

- Security & privacy
- Third party credibility
- Threat of disintermediation
- Tech readiness/Prohibitive cost

Moving Forward with Open APIs for 2018



Source: Department of Statistics, Malaysia and Bank Negara Malaysia unless stated otherwise
For more information, visit www.bnm.gov.my

International Economic Environment

HIGHLIGHTS

- The global economy continued to expand at a strong pace.
- Robust export growth due to broad-based improvements in global demand.
- High financial market volatility.

Global growth expanded further

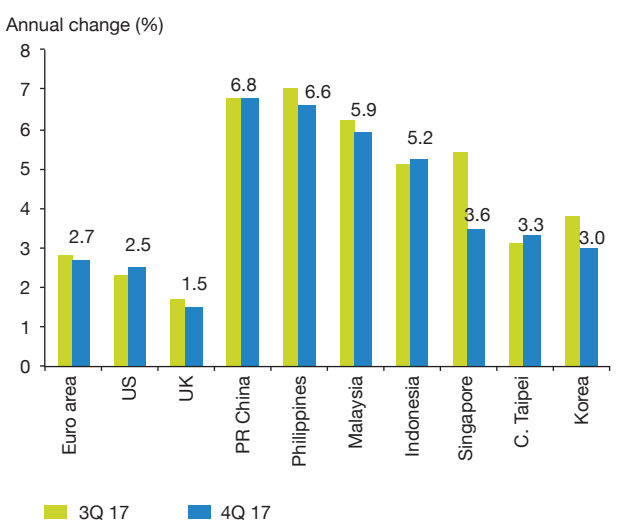
In the fourth quarter of 2017, the global economy continued to expand at a strong pace. Most major and emerging market economies registered growth rates which are close to the performance seen in the third quarter of 2017.

In the advanced economies, growth was mainly driven by continued expansion in private consumption and improvements in investment activity. Household spending was supported by modest improvements in wage growth as labour markets continued to tighten. Of significance, unemployment rates in the US and euro area reached post-crisis lows in the fourth quarter. Resilient demand, coupled with firms' desire to expand production capacities amid a more positive business outlook, underpinned the strength in investment. In particular, capital spending on machinery and equipment remained on an upward trajectory. These developments contributed to improvements in global demand and trade activity.

Growth in Asia continued to benefit from the expansion in global economic activity. PR China recorded sustained growth as the improvements in exports complemented the expansion in domestic demand, offsetting some of the impact from ongoing economic reforms. In other Asian economies, robust exports coincided with continued growth in domestic economic activity. Policy support and higher infrastructure spending accompanied resilient expansions in domestic demand.

Faster global economic expansion in 4Q 2017

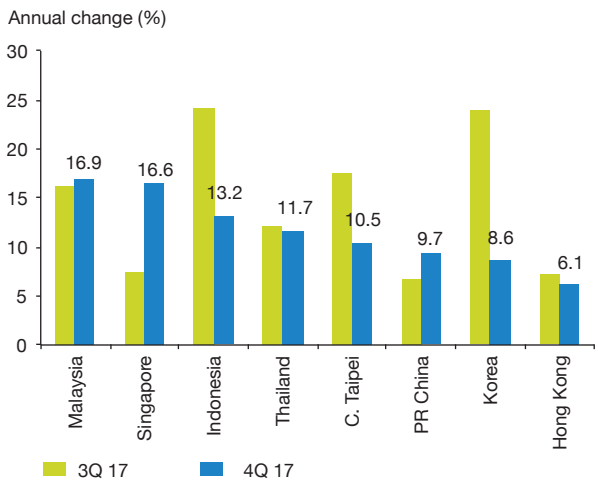
Chart 1: GDP Growth



Source: National authorities

Robust export performance in 4Q 2017

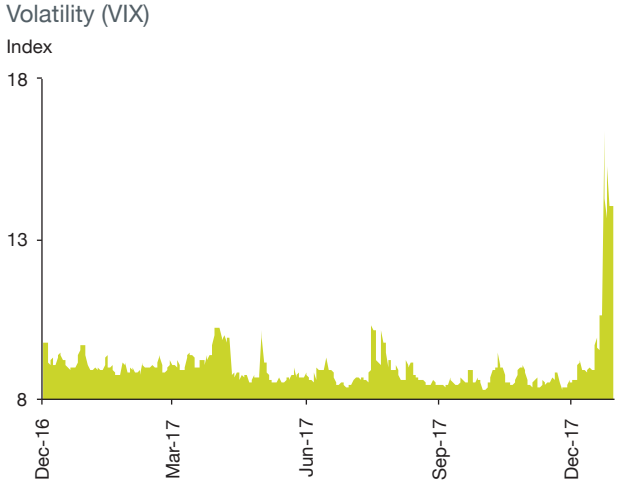
Chart 2: Export Growth of Selected Economies (in USD terms)



Source: National authorities and Bloomberg

High volatility in the financial markets

Chart 3: Chicago Board Options Exchange (CBOE) Volatility (VIX)



Source: Bloomberg

Export growth remained robust

Global trade continued to grow at a robust pace, driven by broad-based improvements in global demand. This translated into higher shipments of manufactured, resource-based and commodity products from the region.

Shipments of technology-related products was supported by the demand for consumer electronic products such as flagship smartphone models released in the second half of 2017. Sales of consumer electronics and appliances also increased in the US and some European countries leading up to the festive season. The uptrend in commodity prices provided further support to commodity exporters.

As a result, many Asian economies recorded a double-digit growth in their exports during the quarter. These economies benefitted from both demand for technological products and commodities. Nonetheless, export growth moderated in some economies due to lower shipments of motor vehicles and automotive parts.

High volatility in the financial markets

In the fourth quarter, global financial market volatility remained low. Still, there were brief spikes in volatility recorded during the second half of the quarter. These short episodes of increase in volatility were triggered mainly by concerns surrounding the resolution and safe passage of the Tax Cuts and Jobs Act by the US Congress. Volatility in the financial markets subsided following the signing of the act into law.

However, this trend reversed in early February 2018 as volatility increased reflecting sharp corrections in the equity markets. Investor sentiments were affected by the expectation that the Federal Reserve could potentially hike interest rates by more than projected given rising wages in the US.

In the commodities market, Brent crude oil prices rose steadily throughout the quarter, crossing the USD60[1] per barrel mark in November 2017 and ending the quarter at USD67 per barrel. The upward trend reflected mainly investors' response to developments that highlighted a narrowing oversupply gap in the global crude oil market. In particular, declining crude oil inventories, pipeline shutdowns and the announcement of OPEC's output cut extension drove expectations for lower crude oil supply in the future and led to the increase in prices.

[1] Based on global Brent crude oil 1-month futures price

Developments in the Malaysian Economy

HIGHLIGHTS

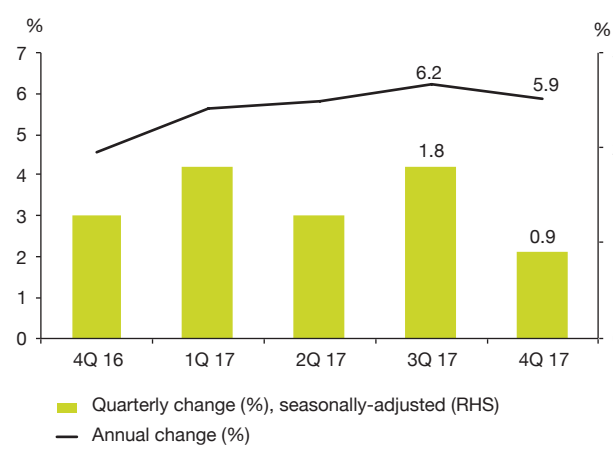
- The Malaysian economy expanded by 5.9% in the fourth quarter.
- Headline and core inflation moderated slightly to 3.5% and 2.3%, respectively.
- Current account surplus widened slightly to RM12.9 billion in the fourth quarter of 2017, accounting for 3.7% of GNI (3Q 2017: RM12.5 billion or 3.7% of GNI).

Growth of the Malaysian economy remained strong at 5.9% in the fourth quarter of 2017

For the fourth quarter of 2017, the Malaysian economy registered a growth of 5.9% (3Q 2017: 6.2%) as private sector spending continued to be the primary driver of growth (7.4%; 3Q 2017: 7.3%). The external sector performance improved further (5.4%; 3Q 2017: 1.7%), as real import growth moderated faster than real export growth. On a quarter-on-quarter seasonally-adjusted basis, the economy grew by 0.9% (3Q 2017: 1.8%). For the year as a whole, the economy registered a robust growth of 5.9%.

Sustained growth in 4Q 2017

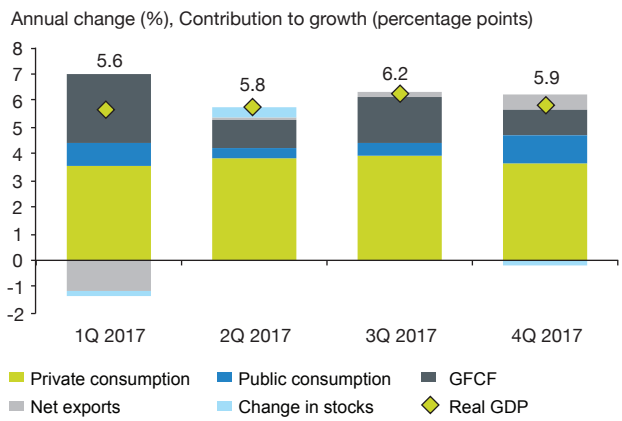
Chart 4: GDP Growth



Source: Department of Statistics, Malaysia

Private sector demand remained the key driver of growth

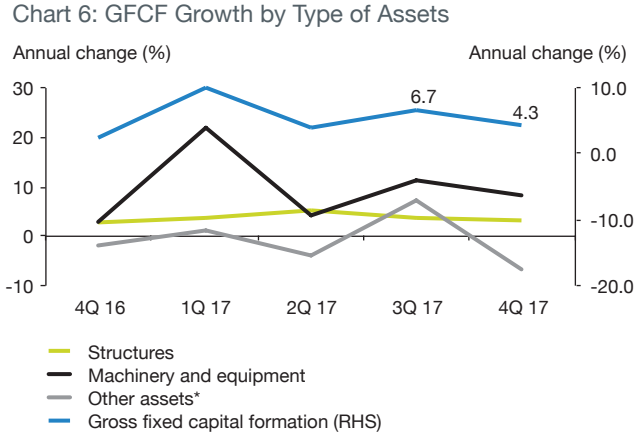
Chart 5: Contribution of Expenditure Components to GDP Growth



Source: Department of Statistics, Malaysia

Gross fixed capital formation expanded further

Chart 6: GFCF Growth by Type of Assets



*Other assets include mineral exploration, research & development and capitalised planting

Source: Department of Statistics, Malaysia

Domestic demand driven by the private sector

Domestic demand expanded by 6.2% (3Q 2017: 6.6%) supported by continued strength in private sector expenditure (7.4%; 3Q 2017: 7.3%), amid waning support from public sector spending (3.4%; 3Q 2017: 4.0%).

Private consumption expanded by 7.0% (3Q 2017: 7.2%), supported by continued wage and employment growth.

Private investment registered a higher growth of 9.2% (3Q 2017: 7.9%), driven mainly by the services and manufacturing sectors. Capital spending was supported by continued business optimism and favourable demand, which was evident across both export- and domestic-oriented industries.

Public consumption expanded by 6.9% (3Q 2017: 3.9%) mainly driven by higher spending on supplies and services by the Federal Government.

Public investment contracted during the quarter (-1.4%; 3Q 2017: 4.1%), due to lower capital spending by both the General Government and public corporations.

Gross fixed capital formation (GFCF) growth moderated to 4.3% (3Q 2017: 6.7%) mainly due to a contraction in public investment. By type of assets, capital spending on machinery and equipment continued to register a strong growth of 8.3% (3Q 2017: 11.5%). Investment in structures was broadly sustained at 3.3% (3Q 2017: 3.6%) while investment in other types of assets contracted by 6.7% (3Q 2017: 7.2%).

Moderate expansion across most economic sectors

On the supply side, most economic sectors recorded a moderate expansion, except for the agriculture sector, while growth in the mining sector declined.

The services sector registered slightly lower growth in the fourth quarter. This mainly reflected lower growth in the wholesale and retail trade sub-sector, in tandem with the moderation in private consumption. However, growth in the finance and insurance sub-sector improved, supported by lower insurance claims and sustained banking activity. Growth in the information and communication sub-sector continued to be underpinned by high demand for data communication and computer services.

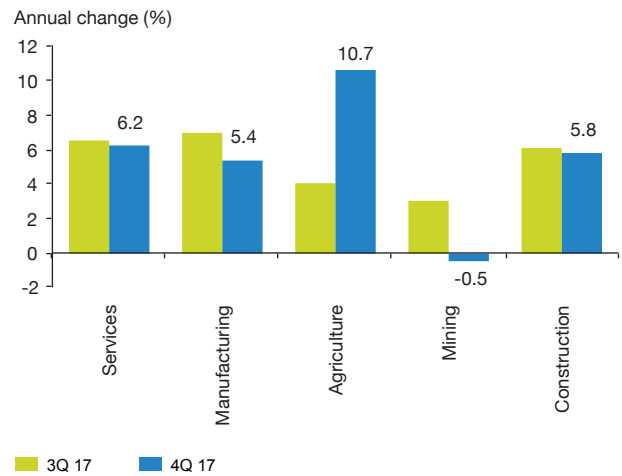
Growth in the manufacturing sector eased during the quarter, reflecting a broad-based moderation in both export- and domestic-oriented industries. Production in the export-oriented industries including electrical and electronics (E&E) and petroleum refinery activity continued to expand, albeit at a more moderate pace. Lower growth in the domestic-oriented industries was due mainly to a slower production of transport equipment and food-related products, as well as construction-related materials.

In the mining sector, growth declined as natural gas output was affected by pre-scheduled facilities' shutdown in Sarawak. However, the agriculture sector's growth performance improved, reflecting mainly higher CPO output as yields recovered from adverse weather conditions in the previous quarter.

Growth in the construction sector was sustained by civil engineering activity for rail, highway, petrochemical and power plant projects.

Moderate growth across most economic sectors

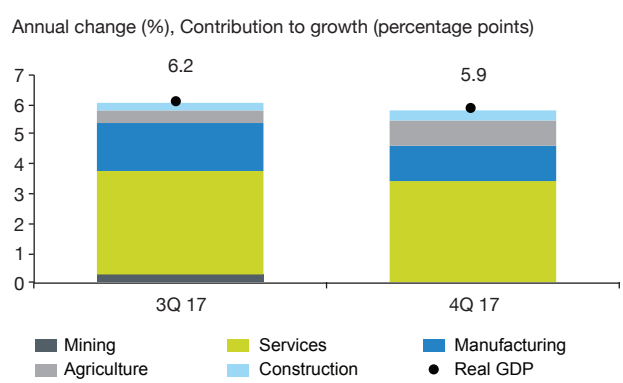
Chart 7: Growth by Sector



Source: Department of Statistics, Malaysia

Services and manufacturing sectors remained the key drivers of growth

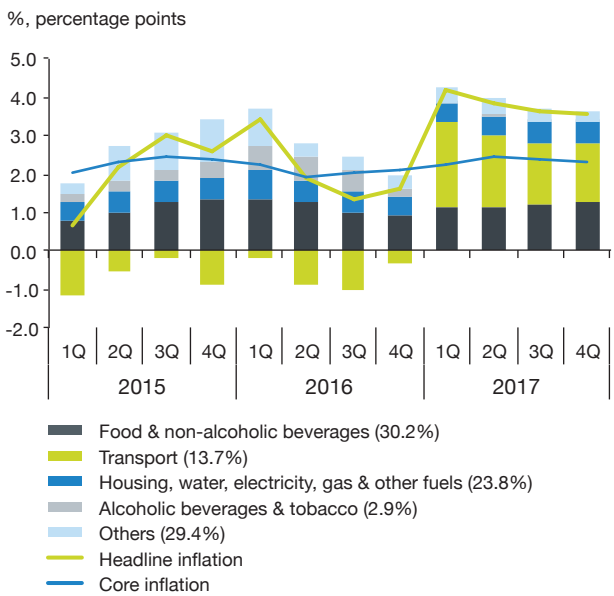
Chart 8: Real GDP by Economic Sector



Source: Department of Statistics, Malaysia

The more moderate headline inflation reflected lower inflation in the housing and transport categories

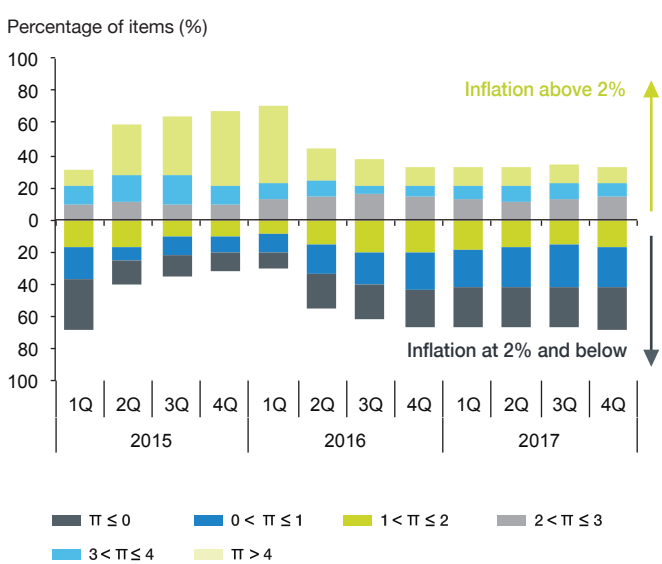
Chart 9: Headline Inflation



Note: Core inflation excludes the estimated direct impact of GST
Source: Department of Statistics, Malaysia and Bank Negara Malaysia estimates

Inflation pervasiveness was slightly lower in 4Q 2017

Chart 10: Inflation Pervasiveness



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

Both headline and core inflation moderated in 4Q 2017

Headline inflation[2] moderated slightly to 3.5% in 4Q 2017 (3Q 2017: 3.6%) due mainly to lower inflation in the *housing, water, electricity, gas and other fuels* and *transport* categories.

Inflation for the *housing, water, electricity, gas and other fuels* category averaged at 2.2% (3Q 2017: 2.3%). Rental inflation declined slightly to 2.8% during the quarter (3Q 2017: 2.9%), due mainly to the smaller increase in rental for terrace and bungalow houses.

While inflation in the *transport* category was slightly lower during the quarter, it remained elevated at 11.4% (3Q 2017: 11.7%) due to high domestic fuel prices.

Core inflation also declined during the quarter to 2.3% (3Q 2017: 2.4%). Inflation pervasiveness was lower, as the percentage of items in the CPI basket that registered inflation of more than 2% declined to 32% (3Q 2017: 34%).

[2] As measured by the annual change in the Consumer Price Index (CPI).

Stable labour market conditions

Labour market conditions remained stable in the fourth quarter of 2017. Private sector wage and employment growth moderated to 6.3% (3Q 2017: 7.5%) and 2.2% (3Q 2017: 2.3%) respectively. During the quarter, labour force expansion was relatively matched by net employment gains resulting in a stable unemployment rate of 3.4% (3Q 2017: 3.4%). The number of vacancies posted on a major job search website also moderated to 61,061 positions in the 4Q (3Q 2017: 68,794 positions).

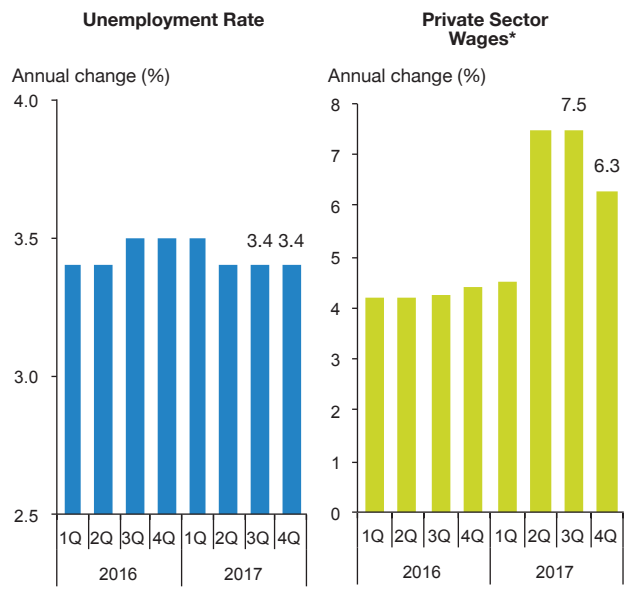
The moderation in private sector wages was due to slower wage growth in the services and manufacturing sectors. Services sector wage growth moderated to 5.0% (3Q 2017: 6.1%), amidst slowdown in the information and communication and professional services subsectors. Manufacturing wage growth moderated to 9.4% (3Q 2017: 10.6%) due to the slowdown in the electrical and electronics and chemicals subsectors.

Strong external sector performance

In 4Q 2017, gross export growth was comparatively lower than the previous quarter but continued to register double-digit performance of 12.4% (3Q 2017: 22.1%), driven mainly by manufactured exports (14.2%; 3Q 2017: 23.7%). The trade surplus widened to RM27.7 billion (3Q 2017: RM26.7 billion).

Stable unemployment rate and moderation in wage growth

Chart 11: Labour Market Indicators

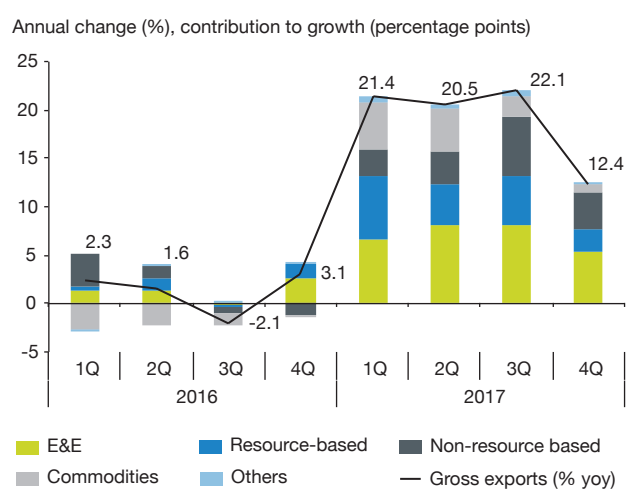


*Private sector wages is derived from the salaries and wages data published in the Monthly Manufacturing Statistics and Quarterly Services Statistics by the Department of Statistics, Malaysia (DOSM). It covers 62% of total employment.

Source: Department of Statistics, Malaysia

Export growth supported mainly by manufactured exports

Chart 12: Gross Exports by Products

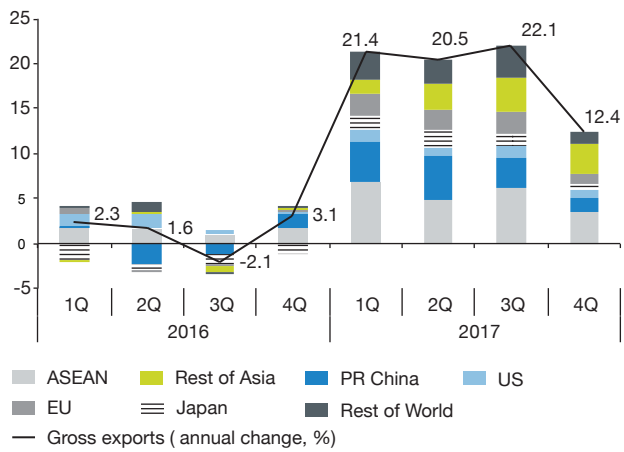


Source: Department of Statistics, Malaysia

Export growth was also broad-based across markets

Chart 13: Gross Exports by Markets

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

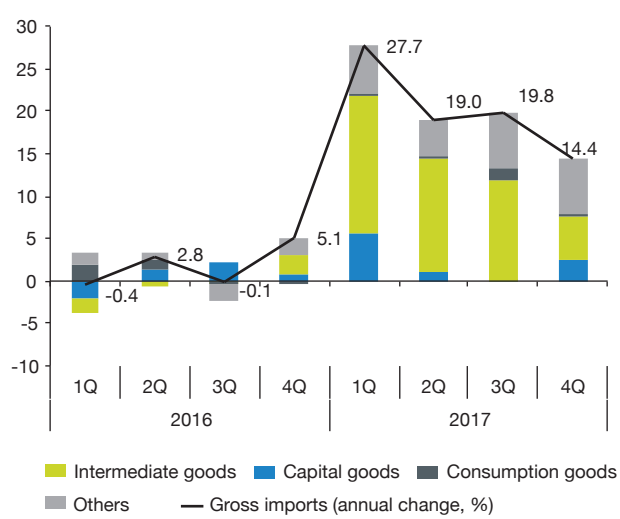


Source: Department of Statistics, Malaysia

Strong imports, supported mainly by intermediate and capital goods

Chart 14: Gross Imports by Products

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



Source: Department of Statistics, Malaysia

The strong manufactured export performance was supported by continued demand from Malaysia's major trading partners, particularly regional economies, the EU and US. Of significance, semiconductor exports accelerated to 24.4% (3Q 2017: 22.3%), benefitting from the upswing in the global technology cycle. Resource-based manufactured exports remained resilient, supported mainly by chemicals & chemical products, petroleum and rubber products. Commodity exports moderated due mainly to contractions in palm oil and natural rubber products and slower growth in LNG exports. This was however, partially offset by stronger crude petroleum exports, reflecting mainly higher crude oil prices.

Gross import growth remained strong in 4Q 2017 (14.4%; 3Q 2017: 19.8%), on account of continued strength in intermediate imports and higher capital imports. This was in line with strong manufacturing export performance and continued strength in domestic demand. Higher capital imports was in tandem with the strength in investment activity in the manufacturing and services sectors. This was further supported by a surge in aircraft deliveries during the quarter.

Higher current account surplus

The current account surplus widened slightly to RM12.9 billion in the fourth quarter of 2017 (3Q 2017: RM12.5 billion), accounting for 3.7% of GNI (3Q 2017: 3.7% of GNI). This was due to a larger goods surplus and lower deficit in the secondary income account which offset the higher deficits in the services and primary income accounts. For the full year, the current account surplus widened to RM40.3 billion or 3.1% of GNI (2016: 2.4% of GNI), the highest since 2015.

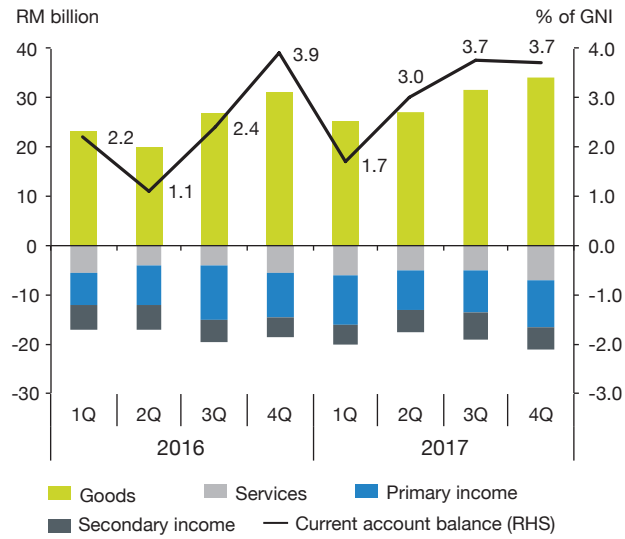
Reflecting the sustained strong export performance during the quarter, the goods surplus increased to RM34.1 billion[3] (3Q 2017: RM31.7 billion). The services account, however, registered a larger deficit of RM6.9 billion (3Q 2017: -RM4.9 billion). This was attributable mainly to the lower surplus in the travel account (RM7.9 billion; 3Q 2017: RM9.2 billion) as travel receipts declined due to lower tourist per capita expenditure. The construction services deficit was also higher (-RM4.3 billion; 3Q 2017: -RM3.3 billion), driven by higher construction services imports mainly in projects related to the oil & gas, utilities and transportation sectors.

The higher deficit in the primary income account (-RM9.5 billion; 3Q 2017: -RM8.6 billion) was largely attributable to higher profits accrued to foreign investors in Malaysia, particularly in the mining and wholesale & retail trade services sub-sectors. This was partially offset by higher profits earned by Malaysian firms investing abroad, particularly in the real estate services sub-sector.

The secondary income account registered a sizeable, albeit smaller deficit of RM4.8 billion (3Q 2017: -RM5.7 billion). Outward remittances amounted to RM8.6 billion (3Q 2017: -RM9.5 billion) driven by foreign worker remittances while inward remittances were sustained at RM3.8 billion (3Q 2017: RM3.8 billion).

Continued current account surplus

Chart 15: Current account balance

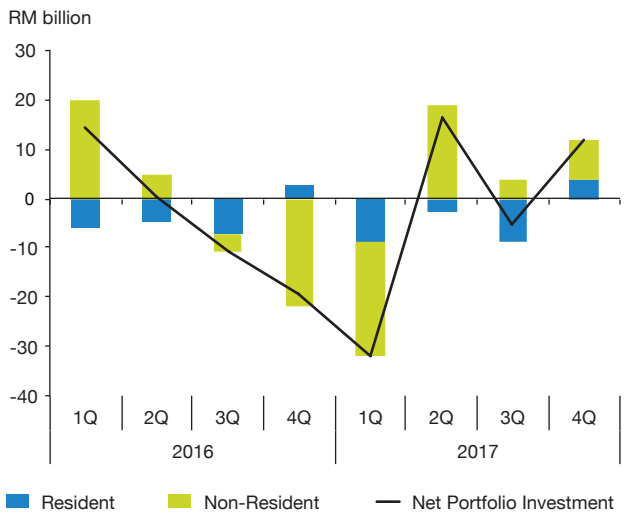


Source: Department of Statistics, Malaysia

[3] The 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

Net inflows in portfolio investment account contributed by both residents and non-residents

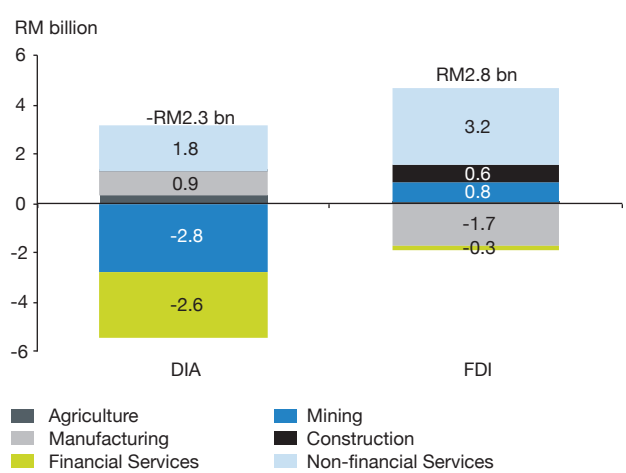
Chart 16: Portfolio Investments



Source: Department of Statistics, Malaysia

Net inflows in the direct investment account

Chart 17: Net Direct Investment Flows by Sector



Note: For DIA, positive values refer to net outflows while negative values refer to net inflows

Source: Department of Statistics, Malaysia

Financial account recorded net inflows

In the fourth quarter of 2017, the financial account registered a net inflow of RM5.0 billion (3Q 2017: net outflow of RM1.2 billion). This was supported by portfolio investment inflows by both residents and non-residents, foreign direct investments (FDI) and some liquidation of direct investments abroad (DIA) assets by Malaysian companies. These inflows were partially offset by outflows arising from banks' liquidity and treasury management operations.

The portfolio investment account registered a net inflow of RM11.7 billion (3Q 2017: net outflow of RM5.1 billion), attributed mainly to non-resident portfolio investments, which recorded a higher net inflow of RM7.7 billion (3Q 2017: net inflow of RM3.7 billion). Better-than-expected economic performance, higher corporate earnings and improvement in global oil prices provided support to investor sentiments in the domestic financial markets. Resident portfolio investments also registered a net inflow of RM4.0 billion (3Q 2017: net outflow of RM8.8 billion), as domestic institutional investors liquidated some of their bond holdings abroad.

The direct investment account registered a net inflow of RM5.1 billion (3Q 2017: net inflow of RM6.2 billion), on account of continued FDI inflows and a reversal of DIA flows during the quarter. FDI amounted to a smaller net inflow of RM2.8 billion (3Q 2017: net inflow of RM11.2 billion), due mainly to lower equity capital injections from parent companies and a moderation in retained earnings. FDI inflows were channeled mainly into the services sector, particularly the real estate and wholesale and retail trade sub-sectors, followed by the mining and construction sectors. DIA by Malaysian companies also recorded a net inflow of RM2.3 billion (3Q 2017: net outflow of RM5.0 billion), due to a net liquidation of equity capital and a net repayment of intercompany loans from subsidiaries and affiliates abroad. Sectors which recorded inflows were the mining and services sectors, particularly the financial services sub-sector.

The other investment account recorded a larger net outflow of RM10.9 billion (3Q 2017: net outflow of RM3.3 billion), due mainly to the placements of currency and deposits abroad by domestic financial institutions.

Following these developments, the overall balance of payments registered a deficit of RM13.1 billion in the fourth quarter (3Q 2017: a surplus of RM2.9 billion). Errors and omissions, which includes revaluation changes on BNM's international reserves, amounted to -RM31.0 billion or -6.7% of total trade.

Manageable external debt

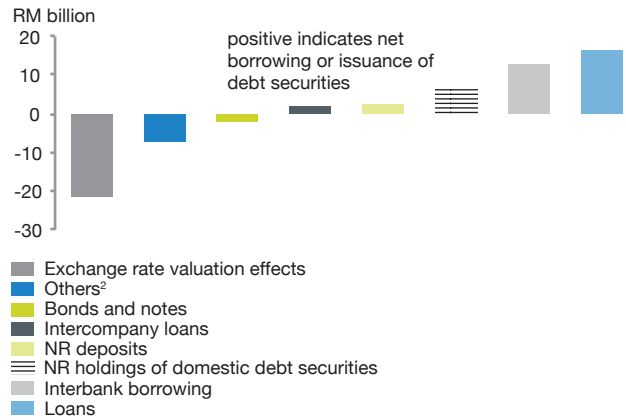
Malaysia's external debt amounted to RM883.4 billion, equivalent to USD215.5 billion or 65.3% of GDP as at end-December 2017 (end-September 2017: RM873.8 billion or USD204.7 billion or 64.6% of GDP). The higher external debt reflects the increase in loans, interbank borrowing and non-resident (NR) holdings of domestic debt securities. This was partially offset by valuation effects following the strengthening of the ringgit against selected major and regional currencies during the fourth quarter.

Malaysia's external debt remains manageable given its currency and maturity profiles, as well as the availability of large external assets. More than one-third of total external debt is denominated in ringgit (34.3%), mainly in the form of NR holdings of domestic debt securities and in ringgit deposits in domestic banking institutions. As such, these liabilities are not subjected to valuation changes from the fluctuations in the ringgit exchange rate.

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

Higher external debt in 4Q 2017

Chart 18: Changes in External Debt
Net Change[1]: +RM9.5 billion

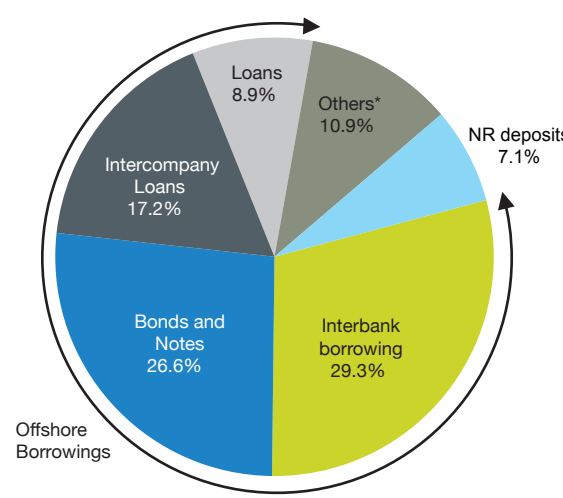


[1] Changes in individual debt instruments exclude exchange rate valuation effects
[2] Comprises trade credits, IMF allocation of SDRs and other debt liabilities
Note: NR refers to non-residents

Source: Ministry of Finance, Malaysia and Bank Negara Malaysia

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

Chart 19: Breakdown of Foreign Currency-Denominated External Debt (% of Share)



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

Of the total FC-denominated external debt (inclusive of valuation effects), more than one-third (or amounting to RM211.6 billion) is accounted by interbank borrowing and FC deposits in the domestic banking system. This largely reflects the banks' intragroup liquidity management and placements of deposits from foreign parent entities, which are subjected to prudent liquidity management practices. Among these are internal limits on funding and maturity mismatches. This is then followed by long-term bonds and notes issued offshore which amounted to RM154.2 billion as at end-December 2017, primarily to finance asset acquisitions abroad that will generate future income. The intercompany loans are typically on flexible and concessionary terms, such as no fixed repayment schedule or low interest rate.

From a maturity perspective, more than half of the total external debt is skewed towards medium- to long-term tenure (57.3% of total external debt), suggesting limited rollover risks. Given the export earnings of borrowers and external assets, it is important to note that international reserves is not the only means for banks and corporations to meet their short-term external obligations. International reserves account for about a quarter of total external assets, with the remaining external assets being held by banks and corporations. As at 30 January 2018, international reserves is 1.1 times the short-term external debt and is sufficient to finance 7.2 months of retained imports.

Box Article 1

Affordable Housing: Challenges and the Way Forward

Authors: Cheah Su Ling, Stefanie Joan Almeida, Ho Su Wei

HIGHLIGHTS

- **Houses in Malaysia remained unaffordable to many households in 2016 due to the failure in the market to produce a sufficient quantity of affordable housing for the masses.**
- **Policy propositions include establishing a single entity to spearhead affordable housing initiatives, setting up an integrated database to assist in matching demand and supply, and reducing costs. On the demand side, strategies include rehabilitating the balance sheet of households and improving the rental market.**

Introduction

Housing affordability is a global concern plaguing key cities around the world in both developing and advanced economies. The key drivers include the rise in income growth and urbanisation, driven by better job opportunities in cities. Affordable housing is defined[1] as housing which is sufficient in quality and location, and is not so costly that it prevents its occupants from satisfying other basic living needs. In other words, the location, quality and build-up of a house is equally as important as the financial affordability of a house. In 2014, the McKinsey Global Institute estimated that 330 million urban households globally live in substandard housing or are financially stretched by housing costs. Malaysia faces a similar issue in this regard. A number of reasons encompassing structural, cyclical, institutional and cultural factors, culminating in a mismatch between supply and demand, has contributed towards houses becoming seriously unaffordable in Malaysia in 2016. Consequently, Malaysia faces a shortage of affordable homes for the masses. This box article focuses on drawing out for public discussion, several policy propositions as a way forward in addressing this challenge.

A. The state of housing affordability in Malaysia

In 2016, houses in Malaysia remain seriously unaffordable by international standards with a median multiple[2] of 5.0. The maximum affordable house price in Malaysia is estimated to be RM282,000[3]. However, actual median house price was RM313,000, beyond the means of many households, where the median national household income is only RM5,228.

The housing affordability issue in Malaysia is largely due to the supply-demand mismatch and slower income growth. Financing continued to be available for purchases of houses for eligible borrowers, with more than 70% of housing loans accorded to first-time buyers and close to two-thirds of new housing loans channelled to the purchase of houses below RM500,000[4]. On the supply side, structural and cyclical factors in the housing market in Malaysia have resulted in a failure of the market to provide an adequate supply of affordable housing for the masses (Figure 1). On the demand side, growth in household income has not kept up with the rise in house prices. Together with a low state of financial literacy amongst a majority of Malaysian households, and a cultural preference towards home-ownership instead of renting, these have contributed to the high demand for house purchases.

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[1] According to the United Nations Human Settlement Programme (2011).
[2] Under the Median Multiple approach, housing is deemed affordable if median house prices are less than 3 times annual median household income.
[3] Based on the Housing Cost Burden (HCB) approach, in which a house is affordable if housing costs are less than 30% of monthly household income. Considers the role of credit in financing the purchase of a house.
[4] For further details, please refer to BNM's 3Q 2017 Quarterly Bulletin Box Article "Imbalances in the Property Market"

Figure 1: Factors Contributing Towards Housing Unaffordability in Malaysia[5]

Mismatch between supply and demand for housing

- Since 2012, new housing supply has consistently fallen short of the increase in demand by households.
- Over the period 2014-2016, there was an average supply of 114,000 new houses, sharply lower than the formation of 154,000 new households.

New launches skewed towards unaffordable range

- From 2016-Q12017, while 35% of Malaysian households can afford houses priced up to RM250k, only 24% of new launches were in that range, indicating an undersupply of affordable homes
  - This also reflects the trend in new housing supply which has been skewed towards the higher-end property segment since 2012.

3 Key Factors Resulting in Housing Unaffordability

Growth in house prices outpacing growth in household income

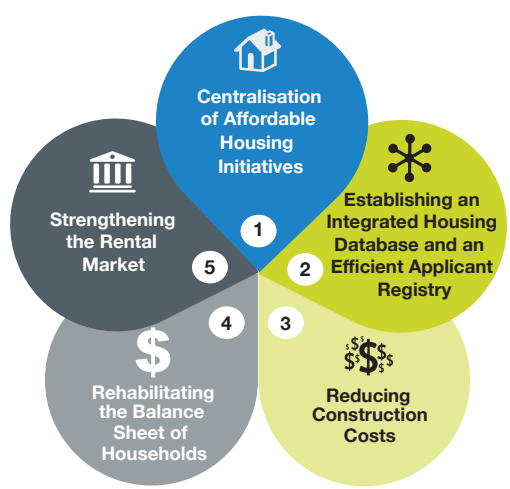
- From 2007 to 2016, house prices grew by 9.8%, while household income only increased by 8.3%.
- The issue was most acute in 2012 to 2014, when the growth in house prices (26.5%) more than doubled the growth in income levels (12.4%).
- It is worth nothing that from 2014 to 2016, growth in house prices moderated to 5.7%, lower than the growth in income levels (6.8%)

As a result of the acute supply-demand mismatch, the level of total unsold[6] residential properties in Malaysia stands at a decade-high of 146,497[7] units as at 2Q 2017, an increase from the 130,690 units as at 1Q 2017. During 2Q 2017, almost 82% of unsold units were priced above RM250,000.

B. Policy propositions as the way forward

Beyond measures to improve households' income in the long run, a holistic approach is needed to effectively bridge the affordable housing gap in Malaysia (Figure 2).

Figure 2: Five Key Policy Solutions to Reducing the Affordable Housing Gap in Malaysia



[5] For more details, please refer to BNM's Annual Report 2016 Box Article "Demystifying the Affordable Housing Issue in Malaysia," and BNM's 3Q 2017 Quarterly Bulletin Box Article "Imbalances in the Property Market".

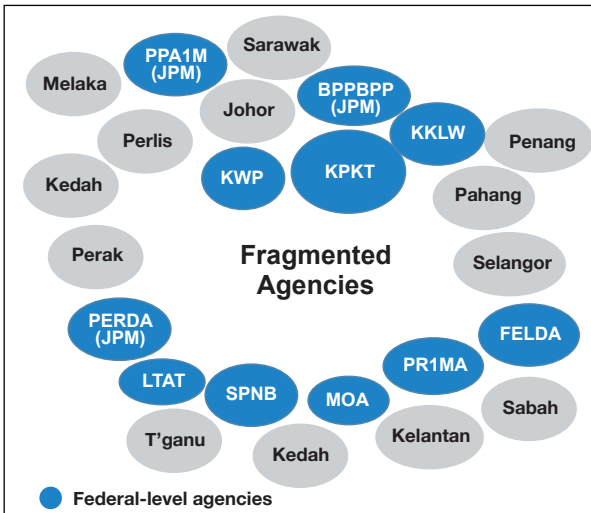
[6] Includes both unsold properties that have been completed (overhang) and unsold properties currently under construction. These properties encompass all residential properties as well as serviced apartments and small office home offices (SOHO). (Source: National Property Information Centre).

[7] In comparison, the average total unsold residential properties between 2004 to 2016 was 72,239 units per year.

i. Centralisation of affordable housing initiatives

A single entity should be established to spearhead national affordable housing initiatives among the various Government and state agencies, and private players alike. Affordable housing provision is currently fragmented and uncoordinated nationwide. Over 20 national and state-level agencies are involved in the provision of affordable housing (Figure 3). This institutional factor has led to policy coordination being an issue, resulting in slow progress towards achieving the Government's target of providing 1 million affordable homes by 2018. Between 2013 and October 2017, only 255,341 homes have been completed by the various public and private sector players.

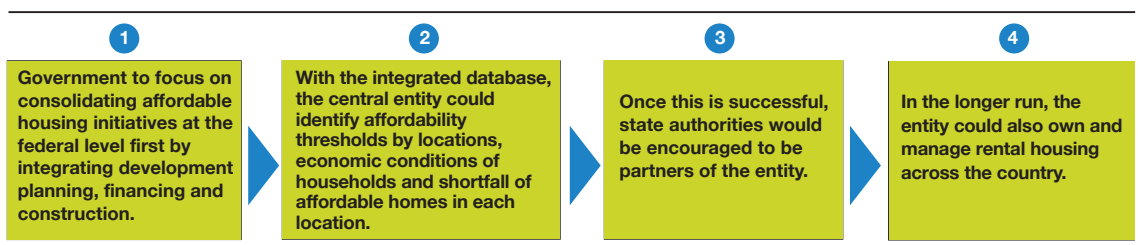
Figure 3: More than 20 National and State-level Agencies Providing Affordable Housing



Notes:	
JPM	Jabatan Perdana Menteri
PPA1M	Perumahan Penjawat Awam 1Malaysia
KWP	Kementerian Wilayah Persekutuan
KPKT	Kementerian Kesejahteraan Bandar, Perumahan, dan Kerejaan Tempatan
BPPBPP	Bahagian Penyelarasan Penyertaan Bumiputera Pulau Pinang
KKLW	Kementerian Kemajuan Luar Bandar dan Wilayah
PERDA	Lembaga Kemajuan Wilayah Pulau Pinang
LTAT	Lembaga Tabung Angkatan Tentera
SPNB	Syarikat Perumahan Negara Berhad
MOA	Kementerian Pertanian dan Industri Asas Tani Malaysia
PR1MA	Perumahan Rakyat 1Malaysia
FELDA	Lembaga Kemajuan Tanah Persekutuan

The consolidation will improve efficiency in planning, implementation and execution. Other strategic benefits of establishing such an entity include the acceleration of construction activities and reduced development cost due to economies of scale. The affordable housing initiatives could be consolidated first at the federal level, where the single entity can then leverage on the integrated database to plan affordable housing supply across the nation. Once this is successful, state authorities would be encouraged to be partners of the entity (Figure 4).

Figure 4: Centralising Affordable Housing Initiatives and Planning Going Forward



Countries such as Korea and Singapore have achieved great strides in bridging the affordable housing gap through such a single entity. The Land and Housing Corporation in Korea for example, supplies diverse types of housing (Bogeumjari Houses) to over 1 million households in Seoul. Houses are categorised, amongst others, into houses for sales and rental[8]. Additionally, the authority facilitates speedier supply of housing through the integration of development and construction planning, which reduces the project period from an average of six years to four years. In Singapore, the Housing and Development Board (HDB) manages and builds affordable public housing for Singaporeans. To date, more than 1 million flats have been completed and about 80% of its population now lives in HDB flats.

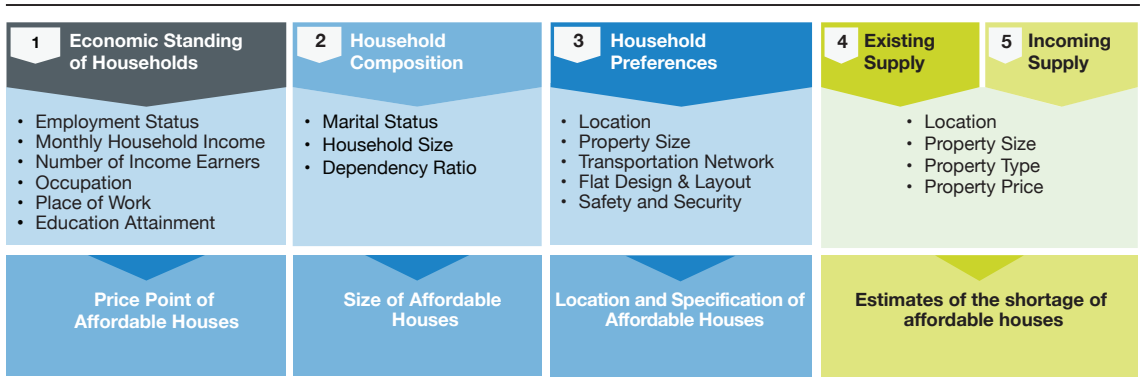
[8] Rental housing in Korea includes People's Rental (for a period of 30 years, applicable to those who earn less than 70% of the average city worker's monthly household income), and Permanent Rental (applicable to recipients of basic living, single parent households and men of national merit). As such, housing is tailored to the economic conditions of citizens.

ii. Establishing an integrated housing database and an efficiently-managed applicant registry for the planning and allocation of affordable housing

An integrated database is key to addressing information asymmetries in the affordable housing market. Currently, Malaysia lacks such a database that captures the supply and demand of housing. The scarcity of information such as household income, characteristics and preferences has hindered the ability of supply to be tailored effectively to meet the demand of households. This has contributed to the large number of unsold residential properties, even for affordable houses, in various states including Johor, Selangor and Kedah. The database should comprise household income, characteristics and preferences (build-up size and location) in the market. Routine surveys which leverage on existing ones such as the Household Income and Expenditure Survey or the launch of a new National Housing Survey[9], could be conducted to gather household-level data. Such information could provide guidance on the supply to the market and should be tapped into by the Government and developers to inform developments going forward.

In Singapore, the HDB formulates optimised housing policies and builds public housing with the support of a comprehensive database that is updated based on a survey[10] conducted every five years. In the United States, the Department of Housing and Urban Development plans and designs its housing programmes for different target groups utilising the American Housing Survey[11] that is conducted biennially. For Malaysia, the survey should gather relevant indicators that will enable the centralised entity to determine the price point, location, size, design and specification of affordable housing. On the supply side, more precise inventory of existing housing stock and new planned supply by location would facilitate in identifying pockets of shortages in specific locations (Figure 5).

Figure 5: Suggested Key Indicators to be Included in the Integrated Database for Housing in Malaysia



Source: Adapted from the Singapore Housing and Development Board (HDB) Survey 2013

In addition to guiding the planning of housing by price, type and location, the integrated database would also help in identifying household segments that can afford to purchase a home. These households could then be prioritised in the allocation process of affordable housing units. Households that cannot afford a home could be directed to rental housing by state authorities. In Singapore, new HDB flat buyers must have a valid HDB Loan Eligibility (HLE) letter before purchasing their flat. The HLE letter considers the flat buyers' age, income and financial commitments to calculate the maximum loan eligibility and corresponding monthly instalments to ensure they are not financially overstretched.

[9] Conducted every 5 years, collecting data at the mukim level (Source: Khazanah Research Institute, 2015)
[10] The survey captures data on the economic and demographic profiles of HDB households, housing satisfaction and preferences.
[11] The survey captures data on the economic characteristics and demographics of occupants, household composition as well as the size, type and physical condition of the housing stock.

To encourage an efficient allocation process of affordable housing units, each state should ideally have only one applicant registry. Currently, separate applicant registries maintained by multiple agencies and affordable housing providers may result in overlapping of applicants, where an eligible applicant might experience delays in being allocated an affordable housing unit or in some cases, allocated more than one unit. Thus, state agencies should consolidate applicant registries among the various affordable housing providers in each state. The registry should then be cleaned up to remove duplicate applicants, and updated frequently to reflect latest household information. The consolidation would offer a one-stop centre for potential buyers of affordable houses, enable easier detection of genuinely eligible affordable housing applicants, speed-up the allocation process, and reduce the number of unsold affordable housing units.

iii. Reducing the cost barrier to affordable housing

Efforts to reduce the costs of housing are crucial to lower house prices towards a more affordable level. High construction costs remain one of the largest barriers towards wide-scale provision of affordable housing where costs such as construction materials, labour, compliance[12] and land could reach up to 80% of house prices according to the Real Estate and Housing Developers' Association Malaysia[13]. Labour-intensive traditional construction methods are less productive, resulting in lengthy project duration and higher overall project costs. Malaysia's adoption of technologically-advanced construction methods is not helped by the abundance of low to mid-skilled foreign workers[14] offering lower cost of labour. These factors have resulted in wages and productivity levels in the construction sector that are lower than the national average and far below other countries (Table 1). Land costs in and around urban centres are also very high, impeding the ability for houses to be priced reasonably in these locations, where they are demanded the most.

Table 1 : Wages and labour productivity in the Malaysian construction sector compared to other countries.

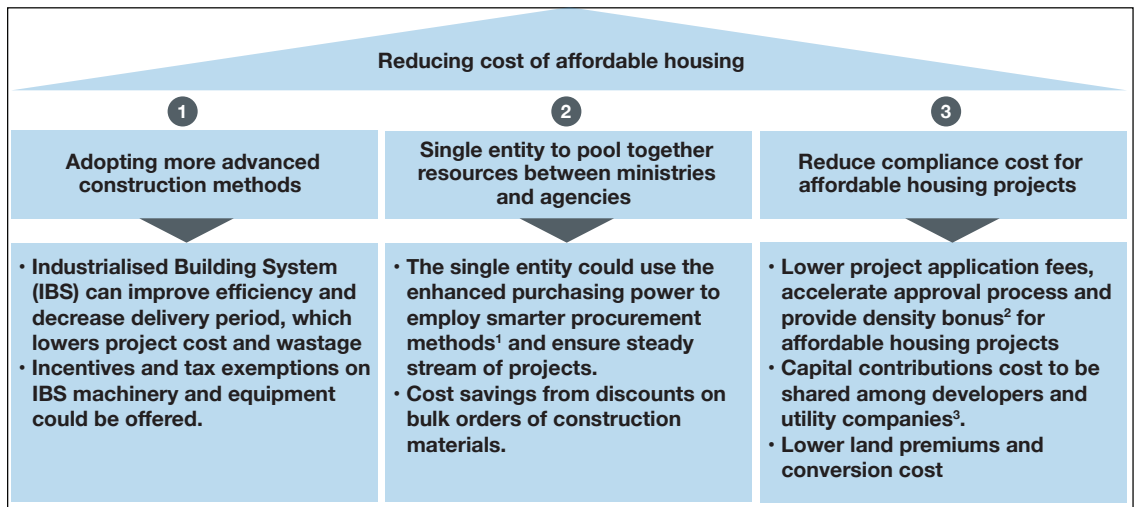
Average wages (Malaysia, 2016) *Construction: RM2,049* *Overall economy: RM2,463*	**Construction labour productivity** *(USD per worker)* *Canada : USD66,646 (2015)* *Singapore : USD28,127 (2016)* *Chinese Taipei : USD14,516 (2015)* *Malaysia : USD9,650 (2016)*
Labour productivity (2011- 2016) *Construction: RM32,000/worker* *Agriculture : RM56,000/worker*	

Source: Haver, National Authorities and BNM estimates

There are potential areas for cost reduction in affordable housing projects, namely adopting more advanced construction methods, pooling together resources under a single entity and reducing compliance cost for affordable housing projects (Figure 6). While a centralised entity would consolidate affordable housing initiatives at a macro level, micro-industrial improvements[15] such as that mooted by Khazanah Research Institute could also streamline delivery and further realise cost efficiencies. Countries such as Singapore, India and Hong Kong have made progress in this regard through technological innovation[16], and standardising of housing design through the use of uniform building codes which has helped spread such practices. Singapore has successfully reduced its overall construction costs with a wide adoption of Industrialised Building Systems (IBS), resulting in labour cost savings of more than 45% compared to conventional means (HDB, 2011). Land for affordable housing could also be uncovered through the release of public land for affordable housing, transit-oriented development and idle-land policies (McKinsey, 2014). For example, New York City is considering using land banks, reclamation and infrastructure decking[17] to unlock new landbank for affordable housing.

[12] Includes conversion premiums, development charges, infrastructure contribution funds, and connectivity to utility companies.
[13] Source: The EdgeProperty article, February 23 2017.
[14] Foreign workers account for 27% of construction employment in 3Q 2017, higher than overall employment (12%).
[15] A new designated procurement delivery system that consolidates resources of firms within the supply chain. This entails a move from using the Traditional General Contracting (TGC) procurement towards a design-and-build or turnkey governance structure and forming framework agreements with the material supply section (Source: Khazanah Research Institute, 2015).
[16] In Singapore, the HDB achieved development efficiencies through technological innovation in which 70% of a house is made from prefabricated parts, allowing quick assembly and production at scale.
[17] Construction of housing on top of existing infrastructures such as rail lines.

Figure 6: Reducing Costs of Affordable Housing in Malaysia



[1] UK Procurement Efficiency Initiative for social housing achieved 15%-30% savings on material costs (McKinsey, 2014).
[2] To allow construction of more units per square feet if it is an affordable housing project.
[3] Capital contribution is payment made by developers in the form of upfront fees and charges imposed by utility providers for the provision of water, sewerage, electricity and telecommunication services

iv. Rehabilitating household balance sheets by enhancing financial literacy

For households, the purchase of a home is among the biggest financial decisions one would make. However, the majority of households in Malaysia[18] were found to have inadequate knowledge to make informed financial decisions. More than 75% of Malaysians find it difficult to raise RM1,000 to meet emergency needs, while 47% of youth engaged in excessive credit card borrowings. The combination of low financial literacy of households, with high household indebtedness (88.4% of GDP in 2016) and house price growth exceeding household income growth contributed to lowering the ability of households to afford a home.

This underscores the need for homebuyers to make prudent financial decisions to avoid being distressed by their financial obligations. It is also crucial for them to understand that the costs of owning a home goes beyond purchase costs[19]. Recognising this importance, Bank Negara Malaysia aims to enhance financial literacy and homebuyer education through the Credit Counselling and Debt Management Agency (AKPK). For example, POWER! by AKPK offers an online learning portal which provides home-buying advice and guidance on the decision of buying or renting a home. Through AKPK's Housing Loan calculator, homebuyers could calculate the loan amount[20] they are eligible for, while the budget assessment calculator enables homebuyers to calculate their net disposable income after taking into account other expenses[21]. In addition, banks have also started offering rent-to-own homeownership plans, where renters are given the option to purchase the house after a set period of time.

[18] Based on the Financial Capability and Inclusion Demand Side Survey conducted by BNM in 2015.
[19] These costs include property assessment tax, quit rent, home insurance and building maintenance fees for strata-titled property.
[20] Total monthly payment, total loan payment and total interest payment according to a set of inputs which include house price, interest rate, down payment, and loan tenure
[21] E.g. housing loans, fixed instalments, household items, utilities, child care, education, insurance and transportation.

v. Improving the rental market by strengthening the legal framework

While the country works towards increasing the supply of affordable housing for the masses, strengthening the residential rental market offers a means to alleviate the issue in the short run as households rehabilitate their balance sheets and increase their income. Unlike countries where housing are also unaffordable (e.g. Canada, New Zealand, and Australia), Malaysia does not have a legislation that is enacted specifically to govern the residential rental market. The lack of strong legal safeguards[22] and the absence of a speedy and affordable tenant-landlord dispute resolution process have influenced some Malaysian households to purchase rather than rent. Statistics show that Malaysia has a relatively low share of households who live in rented accommodation (24%) as compared to Canada (31%), Australia (33%) and New Zealand (36%)[23].

In a stronger rental market, renting instead of buying would become a viable option of choice for households who are financially overburdened. In this regard, Malaysia has taken a step in the right direction. In the Federal Budget 2018, the formulation of the Residential Tenancy Act was announced. The landmark initiative would provide legal safeguards for both landlords and tenants, encouraging both demand and supply for rental housing in Malaysia. The next step would be to establish a Tenancy Tribunal, which offers an inexpensive option to resolve disputes between landlord and tenant[24].

Conclusion

While cities around the world have made great strides in alleviating the affordable housing issue, progress remains slow in Malaysia. The need to increase supply of affordable housing has been recognised in recent years, but efforts to truly improve the affordable housing market in the long run must confront the deep-rooted issues that prevent the adequate supply of reasonably priced homes. Housing remains out of reach for many Malaysian households despite the availability of bank financing, reflecting the ongoing concern of house price growth outpacing income growth. This emphasises the need to rehabilitate and improve the balance sheet of households, alongside implementing measures to increase household income in the longer-run. As the experiences of successful cities have shown, concerted efforts by the Government, housing developers, banks, consumers, interest groups and regulators alike are needed to bridge the affordability gap.

[22] Provisions on tenancies in existing laws (National Land Code 1965, Contracts Act 1950, Specific Relief Act 1950, Civil Law Act 1956, Distress Act 1951 and the Common Law/Case Law) do not safeguard the rights of both landlords and tenants adequately.
[23] For more details, please refer to BNM's Annual Report 2015 Box Article, 'Assessing the Demand-Supply Conditions in the Malaysian Property Market' (Note: Data on rental share is sourced from national authorities).
[24] As in Australia, Canada and New Zealand.

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Monetary and Financial Developments

HIGHLIGHTS

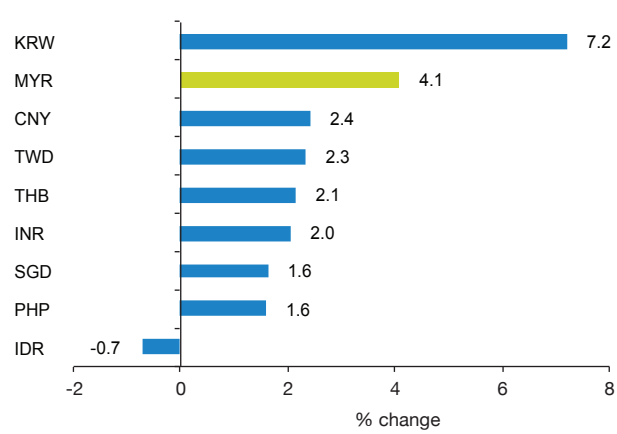
- The ringgit continued to appreciate during the quarter.
- The performance of domestic financial markets was strong amid non-resident inflows following positive domestic developments.
- Lending rates remained stable and supportive of private sector financing during the quarter.

The ringgit's appreciation continued into the fourth quarter of 2017

The ringgit continued to appreciate against the US dollar and most regional currencies in the fourth quarter of the year. The ringgit was supported mainly by non-resident portfolio inflows, driven by positive investor sentiments as the Malaysian economy continues to record better-than-expected economic growth, and expectations of monetary policy normalisation by Bank Negara Malaysia. The increased interest in the region's financial assets, including the ringgit, was also supported by subdued US dollar sentiment amid uncertainties over the Federal Reserve longer-term normalisation path. The ringgit ended the year at RM4.0620 against the US dollar. Going forward, however, the ringgit will continue to be driven by a confluence of external and domestic factors. These include the timing and pace of monetary policy normalisation by major central banks, global geopolitical developments, and the domestic economic performance.

Most regional currencies appreciated against the US dollar

Chart 20: Summary of Performance of Regional Currencies Against the US Dollar (1 Oct - 29 Dec 2017)



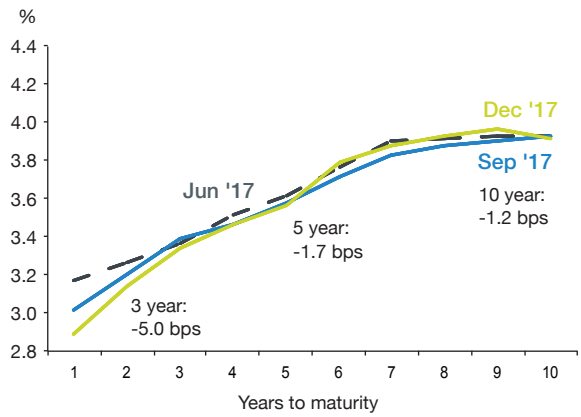
Source: Bank Negara Malaysia

Domestic monetary and financial conditions remained supportive of economic activity

Domestic monetary and financial conditions remained supportive of economic activity during the quarter. Bond yields declined amid non-resident inflows. Liquidity conditions remained sufficient for continued financial intermediation, while stable retail funding costs continued to provide support to private sector financing.

MGS yields declined during the fourth quarter

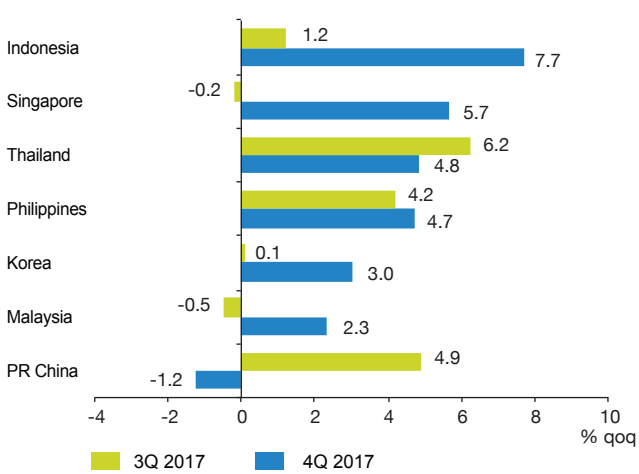
Chart 21: Trend in MGS Yields



Source: Bank Negara Malaysia

Domestic equity market increased during the fourth quarter

Chart 22: Performance of Regional Markets



Source: Bloomberg

Bond yields declined amid non-resident inflows

The bond market experienced some upward pressure in yields earlier in the quarter, due to cautious investor sentiments arising from uncertain external developments. Since November, however, bond yields declined, especially for the medium-tenured papers. This reflected mainly increased demand by non-resident investors following the better-than-expected GDP growth in the third quarter of 2017 and a stronger ringgit. Non-resident investors increased MGS holdings by RM7.7 billion during the quarter. As a result, the 3-year, 5-year and 10-year MGS yields declined by 5.0, 1.7 and 1.2 basis points, respectively.

The domestic equity market recovered firmly amid improved sentiments

During the fourth quarter, the FBM KLCI increased by 2.3% to close at 1,796.8 points as at end-December (end-September 2017: 1,755.6 points), in line with most regional indices. While the domestic equity market declined initially amid uncertainties surrounding policy developments in the US, the index recovered towards the end of the quarter, supported by the resumption of non-resident inflows. Improved investor sentiments were triggered by the upward revisions to Malaysia's growth outlook by the IMF and World Bank, and an improvement in third quarter corporate earnings. Sentiments in the domestic market were further supported by an increase in global oil prices during the quarter.

Interest rates remained stable during the quarter

Both nominal wholesale and retail borrowing costs were broadly stable throughout the quarter. The 3-month KLIBOR was steady at 3.44% (3Q 2017: 3.43%). In the retail market, both the weighted average base rate (BR) and the weighted average lending rate (ALR) on outstanding loans were stable at 3.64% (3Q 2017: 3.63%) and 5.22% (3Q 2017: 5.22%), respectively.

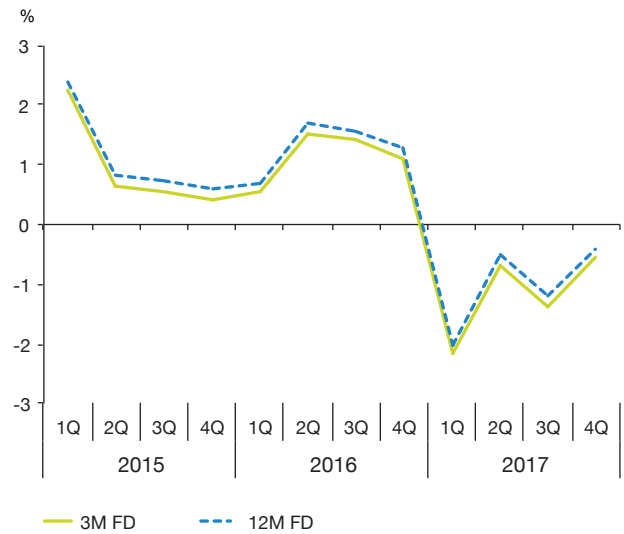
Reflecting the moderation in headline inflation, real fixed deposit (FD) rates turned less negative in the fourth quarter. In particular, the real 12-month FD rate increased to -0.40% compared to -1.20% in September.

Liquidity conditions remained sufficient to facilitate financial intermediation

In the banking system, liquidity conditions remained sufficient at both the institutional and system-wide levels. With the continued resumption of net inflows, the level of surplus liquidity placed with BNM remained relatively stable. At the institutional level, most banks continued to maintain surplus liquidity positions.

Real deposit rates have turned less negative amid moderating inflation

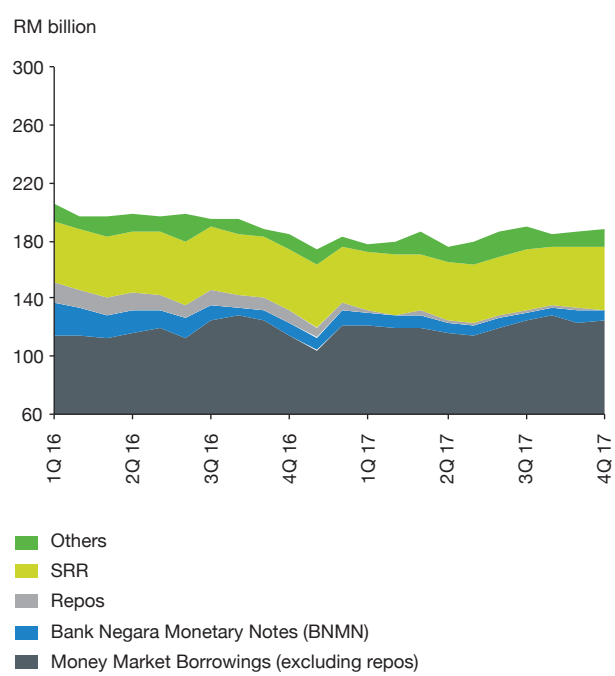
Chart 23: Real FD Rates (by Maturity), as at End-period



Source: Bank Negara Malaysia

Outstanding surplus ringgit liquidity placed with BNM remained stable during the quarter

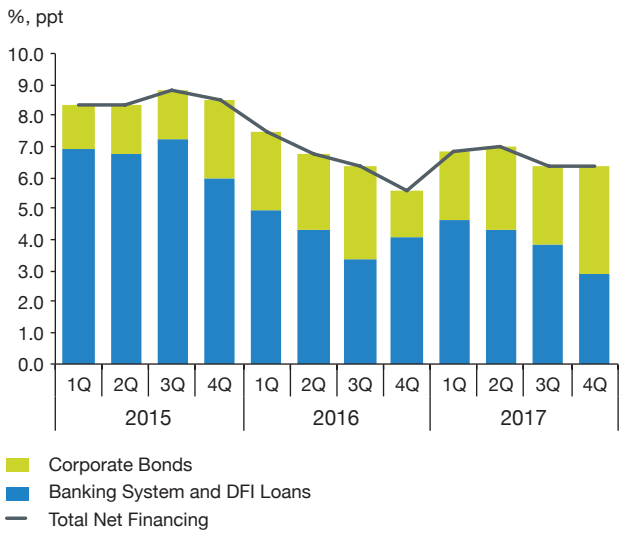
Chart 24: Outstanding Ringgit Liquidity Placed with Bank Negara Malaysia, as at End-period



Source: Bank Negara Malaysia

Net financing growth supported by continued growth of corporate bonds

Chart 25: Contribution to Net Financing Growth



* Net financing comprises outstanding banking system and DFI loans, and outstanding corporate bonds

Source: Bank Negara Malaysia

Net financing sustained during the quarter

The growth of net financing sustained at 6.4% in the fourth quarter of 2017 (3Q 2017: 6.4%), reflecting mainly the continued strong double-digit growth in net outstanding issuances of corporate bonds[5] (4Q 2017: 15.4%; 3Q 2017: 10.9%) amid a moderation in the growth of outstanding loans[6] (4Q 2017: 3.8%; 3Q 2017: 5.0%). The lower loan growth was mainly due to the slower growth in outstanding business loans (4Q 2017: 1.3%; 3Q 2017: 5.4%), which was broad-based across most sectors. During the quarter, the growth and level of total business repayments outpaced disbursements, especially for businesses other than SMEs. The increase in repayments was mainly due to scheduled repayments, and higher prepayments amid stronger business earnings. Despite some moderation in loan growth to SMEs (4Q 2017: 5.3%; 3Q 2017: 7.0%), the amount of loans disbursed increased during the quarter (4Q 2017: RM 78.4 billion; 3Q 2017: RM 76.8 billion). Household loans remained stable at 4.9% (3Q 2017: 4.9%). Overall, the growth in financing remained supportive of the expansion of the economy during the quarter.

[5] Corporate bonds exclude issuances by Cagamas, Danaharta, Danamodal and non-residents.

[6] Loans extended by both banking system and development financial institutions (DFIs).

Box Article 2

Unorthodox Measures for Unconventional Times

Authors: Syed Akmal Shafiq, Tengku Muhammad Azlan Ariff

HIGHLIGHTS

- **External spillovers originating from unconventional monetary policy in the advanced economies require policymakers in emerging economies to rethink and reinvent their policy approaches.**
- **Policy flexibility and pragmatism, policy autonomy, and clear and transparent communication are the three principles that should guide policymaking.**
- **Malaysia has adopted these three principles, which have been key in the management of financial market volatility.**

Introduction

A decade of unconventional monetary policy in the advanced economies has created a new dimension of challenges for policymakers in emerging economies. External spillovers originating from these policies come in many shapes and forms; from large cross border capital flows and its impact on domestic monetary and financial market conditions, aggressive yield seeking behaviours by international investors that can create destabilising price dynamics, to sudden shifts in sentiments that can amplify financial market boom-bust cycles. While these spillovers make the operating environment of policies more challenging, it can be further complicated by unique domestic circumstances that emerging economies face.

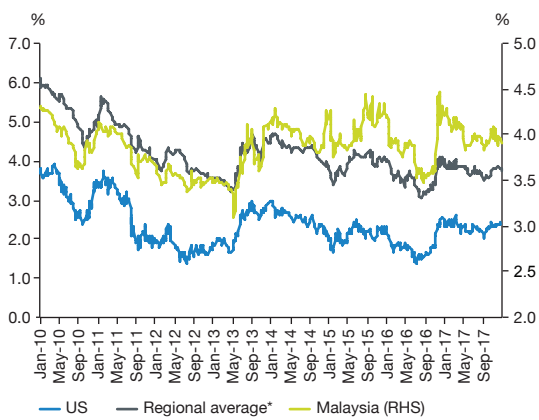
The reality is that emerging economies are constantly exposed to the vagaries of policies in the advanced economies that dictate the global economic and financial market landscape. They remain at the receiving end of these external spillovers which, in turn, have implications on domestic policies. In this new normal, it becomes more important for policymakers in emerging economies to continuously rethink and reinvent policy approaches. In such unconventional times, unorthodox policies may be the new trump card. In Malaysia's case, the series of measures introduced by the Financial Markets Committee (FMC) since late 2016 included some bold measures, aimed at ensuring that the domestic financial market remains resilient and ready to face these external spillovers. This box article will first provide some colour to the environment currently confronting policymakers in emerging economies, before elaborating on the principles, approaches and the efficacy of policy measures from the Malaysian experience.

A. Policymaking in the new normal: Constant spillovers, constant challenges, constant vigilance

Much of these external spillovers have made their way into emerging economies due to the financial globalisation that has taken place over the past few decades. An increasingly open financial system inevitably exposes the country to large cross-border capital flows along with its attendant risks. This became more pronounced following the policies undertaken by the advanced economies in the aftermath of the Global Financial Crisis (GFC) in 2008. Ultra-low interest rates, combined with a large injection of liquidity into the global financial system have led to sizeable capital inflows into emerging economies in the search for higher returns. The more volatile components of these capital flows, which include equity and debt portfolio flows, increased tremendously within a decade, and could reverse at much greater speeds. There are a multitude of policy challenges that arise from this, some of which are:

- **Weaker and less effective domestic policies.** Large capital flows have the ability to influence domestic financial conditions, affecting the effectiveness and independence of domestic monetary policies (Rey, 2015). International investors borrow cheaply from major global financial centres and invest in higher-yielding emerging market financial assets, increasing domestic liquidity and raising asset prices. Domestic banks also now have access to cheaper sources of capital from abroad, easing domestic financing conditions. This can make domestic monetary and financial conditions more accommodative than intended by the policymaker. This can be observed in how long-term sovereign bond yields in the region, which are usually influenced by domestic policy interest rates, have become more strongly correlated with the long-term US sovereign bond yields.

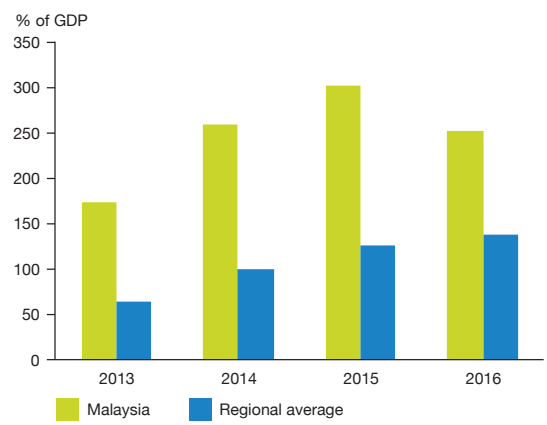
Chart 1: 10-Year Government Bond Yields



*Regional countries include Indonesia, Korea, Philippines, Singapore and Thailand

Source: Bloomberg

Chart 2: Non-Deliverable Forward (NDF) Volume/GDP



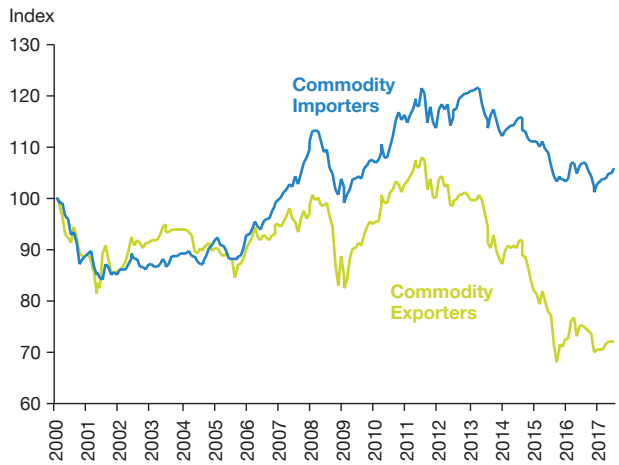
Note: Regional countries include Indonesia, Korea, Chinese Taipei, India and Philippines. NDF volume refers to only regional currencies versus US dollar.

Source: Bloomberg

- **Managing destabilising price dynamics.** The search for higher returns has led to the increasing presence of non-resident investors in financial markets of emerging economies. Among them include global asset managers, who have increasingly encroached on the role of global banks as the intermediator of liquidity (IMF, 2015). The higher participation of non-resident asset managers, whose fund sizes are large and have different risk appetites, have led to increased usage of financial derivatives. This is mainly driven by their desire to hedge or speculate on exchange rate risks, based on their respective risk appetites. A proportion that is primarily driven by returns would find ways to engage in speculative activities, which has coincided with the growing size of the offshore currency non-deliverable forward (NDF) market within the region. Speculators use these NDF contracts to acquire exposure on the movements of regional currencies, causing considerable volatility in both the offshore and onshore foreign exchange (FX) markets. The rising exposure of financial markets in many emerging economies to these types of investors has grown to be one of the main challenges to policymakers, especially to manage these dynamic and potentially disruptive behaviours.

- **Domestic conditions exacerbating the impact of external spillovers.** External spillovers interact differently with the unique domestic conditions faced by emerging economies, complicating the choice of policies to dispense. This can be due to various factors, ranging from the level of financial market development, political and economic situation to the perception of international investors on the country. For example, the large decline in global oil prices in 2015 affected regional commodity exporters more severely compared to its peers. In Malaysia, for example, the misperception that the economy and public finances relied heavily on commodities led to an unwarranted deterioration in investor sentiments and an unwinding of financial assets. The ensuing non-resident capital outflows resulted in a sharper depreciation of the ringgit exchange rate relative to other regional currencies.

Chart 3: Average Performance of Currencies of Commodity Exporters & Importers



Note: Commodity importers are Singapore, Thailand, and Philipinnes while commodity exporters are Malaysia and Indonesia

Source: Bloomberg

B. Towards rethinking and reinventing policy approaches

With these policy challenges in mind, there is a need for emerging economies to rethink and reinvent their policy approaches. The policymaking environment is fast-changing and is growing more complex, possibly evolving beyond the scope of conventional and established policy thinking and tools. Policies also need to be agile and adaptive to the unique domestic circumstances to prevent them from becoming ineffective and irrelevant. Three principles should guide the policy approach:

- **Policy Flexibility and Pragmatism:** Many emerging economies are already practicing a large degree of policy flexibility and have employed a broad array of policy instruments. Yet, the policy scope remains inhibited by consensus thinking and the stigma upon the introduction of certain measures. Policy pragmatism requires policymakers to be bold and timely in introducing new policy tools when it becomes necessary, and not shy away from new and untested ideas that may go against the grain of conventional wisdom. This includes 'market-correcting' measures and the strong reinforcement of existing policies, where needed. These measures may appear penal to market participants but as with any policy that is corrective, the short-term frictions are necessary for the longer-term resilience and development of the economy and financial system.

- **Policy Autonomy:** It is imperative to recognise that every emerging economy faces its own unique circumstances and policy challenges. Hence, policy autonomy is critical to tailor unique policy responses. The international community should not judge policy measures based on pre-subscribed narrow definitions, categorisation and concepts. Instead, policies should be judged based on their outcome and effectiveness in correcting market failures and imbalances. It is especially important for influential international organisations such as the International Monetary Fund (IMF) or Bank for International Settlements (BIS) to create an enabling environment for flexible policies to effectively address unique domestic challenges. The fact is that domestic policymakers have greater understanding and experience in dealing with country-specific circumstances and should be allowed to leverage on this advantage.

- **Clear and Transparent Communication:** Two-way communication is an important pillar of effective policymaking. The implementation of new and untested policies require that policymakers clearly and transparently communicate the motivations and intentions behind the policies to the public. This avoids a situation where the public is quick to react negatively and dismiss policies unfairly. Therefore, constant engagements through various platforms are vital to internalise the concerns and potential difficulties faced by the industry and market participants. These constructive engagements will ensure the effective implementation of policy measures.

C. Malaysia's experience in managing financial market volatility

In late-2016, uncertainties surrounding political developments in the US led to a sharp increase in volatility and risk-aversion in global financial markets. While all regional financial markets were affected by the unwinding of non-resident investments, hence facing exchange rate depreciation pressures, the impact on Malaysia was more pronounced due to factors that were unique to Malaysia.

First, there existed imbalances in the demand and supply of FX and ringgit in the domestic FX market. As Malaysia has always exported more than it imported for the past 20 years (current account surplus position), the demand for ringgit was expected to be sustained as exporters convert their FX proceeds into ringgit, alleviating some depreciation pressure during stress periods. However, this demand was not forthcoming during the volatile period and counter-intuitive to the underlying economic activities. Second, there were rising speculative pressures on the ringgit during this period, arising from increased offshore ringgit NDF activities that were being facilitated by non-resident financial institutions and fund managers. Third, the market misperception that Malaysia was still heavily reliant on commodities caused an unwarranted deterioration in investor sentiments, particularly when global oil prices were declining in the first half of 2017. All these factors exacerbated the volatility and depreciation pressure in the ringgit exchange rate to the point that it was no longer in line with Malaysia's fundamentals and risked the orderly functioning of the domestic financial market.

In dealing with these unique challenges, Malaysia implemented a policy strategy that focused mainly on financial market development but included bold 'market-correcting' and prudential measures. Through the FMC, measures were introduced to further liberalise the domestic financial market, including allowing for better market access, hedging flexibilities and the introduction of new financial market instruments. Where a larger degree of firmness was required, such as in addressing the issues of offshore speculative activities, the FMC reinforced the non-facilitation of NDF rule. Export conversion requirements were also put in place to address the imbalances within the domestic FX market, but with sufficient flexibilities accorded to domestic exporters.

The policy combination in the series of measures introduced by the FMC has been crucial to Malaysia's success in managing financial market volatility. As a result, domestic financial market conditions improved substantially. Volatility in the ringgit exchange rate declined and speculative pressures subsided. The outflows from short-term non-resident investors following the measures improved the composition of non-resident holdings in the domestic financial markets towards more stable and sustainable longer-term investors. The improved domestic financial market conditions, which also coincided with Malaysia's stronger-than-expected economic performance, facilitated the appreciation of the ringgit in 2017 to better reflect underlying fundamentals when global financial market conditions improved. More importantly, the orderly functioning of the domestic financial market has continued to support Malaysia's economic growth.

In implementing these policies, there were of course challenges. The measures were initially perceived by the public as 'anti-market forces' and 'disruptive'. In response, the Bank actively engaged the public through various communication platforms, both internationally and domestically. Through regulator-industry platforms, the Bank was able to conduct two-way communications with market participants. This allowed the Bank to internalise the concerns and difficulties faced by them and further fine tune the implementation of the measures accordingly to better facilitate their adjustment to the new environment. These communication strategies proved effective as market perception on the measures improved, giving way to better aligned expectations between the Bank and market participants.

List of FMC Measures Implemented to Foster the Sustainable Development of Malaysia's Financial Markets



Adopting global best practices

- Transaction based KL USD/MYR Reference Rate
- Extension of official closing hour for onshore ringgit market

Rebalance onshore FX demand and supply

- 25% retention of export proceeds in foreign currency
- Trade settlement among residents in ringgit only
- Streamline onshore and offshore foreign currency investment limit

Promote FX risk management onshore

- Active hedging below RM6 million of net open positions
- Active hedging for institutional investors
- Expansion of Appointed Overseas Office framework

Additional FX risk management flexibilities

- Streamline passive and dynamic hedging flexibilities for investors
- Active hedging for corporations

Improve bond market liquidity

- Liberalise regulated short-selling
  - o allow all residents to participate

Promote fair and effective market conduct

- New code of conduct for wholesale financial market
- Principles for a Fair and Effective Financial Market

Additional FX risk management flexibilities

- Allow hedging of RM exposure arising from trading of palm oil derivative contracts on Bursa Malaysia

Improve bond market liquidity

- Introduce regulated Short Selling of Malaysian Government Investment Issues (MGII) and Islamic banks under bilateral binding promise concept

Enhance liquidity intermediation

- Issuance of Bank Negara Interbank Bills (BNIBs) in MYR and USD to onshore licensed banks
- Expand eligible collateral for Monetary Operations

D. Conclusion

Going forward, external spillovers will continue to affect emerging economies in ways that are both expected and unexpected. The state of ongoing uncertainties within global policy, economic, political and financial market developments will lead to periods of heightened volatility. In such a case, it is important for emerging economies to recognise their autonomy in the conduct of policies to address issues that are unique to the domestic environment. Policies can no longer be constrained to conventional tenets of policymaking. Instead, new and untested strategies should be considered. As new risks from external spillovers emerge, Malaysia will continue to introduce new policies in order to preserve macroeconomic and financial stability.

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Managing Risks to Financial Stability

HIGHLIGHTS

- **Businesses and households continued to demonstrate sound debt servicing capacity.**
- **Domestic bond market conditions remained orderly, with the support of long-term domestic and foreign investors.**
- **Domestic financial stability is expected to remain intact, supported by sound financial institutions and orderly markets and liquidity conditions.**

Financial stability preserved

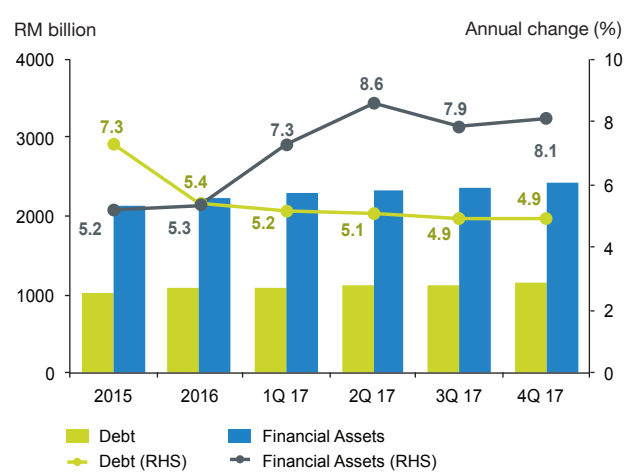
Financial stability was sustained, supported by sound financial institutions and orderly domestic financial market conditions. Overall volatility in domestic financial markets remained low amid improved sentiment. Domestic financial institutions continued to demonstrate resilience amid healthy asset quality and sound profitability. Credit conditions in the domestic banking system remained conducive for real economic activities.

Sustained debt servicing capacity of households and businesses

Household debt registered an annual growth of 4.9% in the fourth quarter of 2017 (3Q 2017: +4.9%) with the bulk of debt mainly for wealth accumulation (64%). Loans for the purchase of residential property continued to be the key driver of growth (+8.5%; 3Q 2017: +8.5%). The overall debt repayment capacity of households is expected to remain sound supported by steady income growth and stable labour market conditions. Aggregate household financial assets and liquid financial assets continued to be high at 2.1 and 1.5 times of debt, respectively. Further, growth of household financial assets (+8.1%) continued to outpace debt (+4.9%). At the end of the quarter, total household debt amounted to 84.3% (3Q 2017: 84.6%) of GDP.

Annual growth of household financial assets continue to outpace that of debt

Chart 26: Household Sector Debt* and Financial Assets

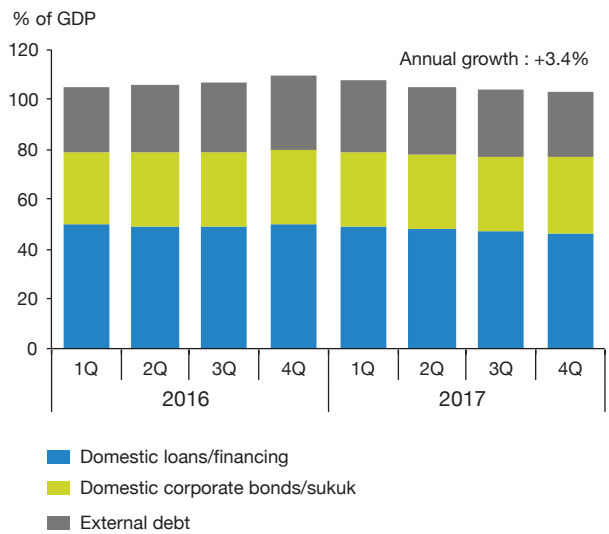


* Loans extended by banks, development financial institutions and major non-bank financial institutions

Source: Bank Negara Malaysia, Bloomberg, Department of Statistics, Malaysia, Securities Commission Malaysia and internal computation

Total business borrowings in the quarter was driven by sustained corporate issuances in the capital market

Chart 27: Business Sector NFC Debt-to-GDP



Source: Bank Negara Malaysia

Aggregate impairment and delinquency ratios for both banks and non-banks were sustained at 1.6% and 1.4%, respectively. Based on engagement with banks, vulnerable borrowers (individuals earning less than RM3,000 per month) living in the urban areas continued to experience difficulty in debt repayment on account of the high cost of living. Overall risks to financial stability from the household sector are, however, assessed to have receded further. The majority of new household borrowers continued to observe prudent debt service ratios (DSR) of below 60% with 41% of borrowers having DSR of below 40%. The share of borrowings by vulnerable borrowers also declined further to account for 20.6% (2016: 21.9%) of total household debt as loan affordability assessments continued to improve.

Potential losses to banks from vulnerable households were estimated at less than 10% of banks' excess capital buffers (above the regulatory minimum). This is under a simulated scenario based on the assumption of a tripling of prevailing probabilities of default and severe loss given default.

In the fourth quarter of 2017, total business borrowings grew annually at 3.4% (3Q 2017: 7.0%). This was driven by fund raising in the corporate bond and sukuk markets which grew by 14.3% (3Q 2017: 10.2%). Recent non-financial corporate bond/ sukuk issuances during the quarter were led by the real estate, utilities and infrastructure sectors. Corporate external borrowings were lower, largely driven by valuation effects from a stronger ringgit and net repayment of trade credit. Financing by banks and development financial institutions (DFIs) to businesses expanded moderately by 1.3% (3Q 2017: 5.4%), reflecting slower growth in financing across most sectors. Total financing by banks and DFIs to SMEs remained modest, recording an annual growth of 5.3% (3Q 2017: 7%).

Financial position of firms remained healthy amid improving domestic and external demand. The aggregate leverage of Malaysian non-financial corporations (NFCs)[7] as measured by the median debt-to-equity ratio increased in 3Q 2017 (51.9%; 2Q 2017: 48.6%) led by the real estate and services sectors. The aggregate debt servicing capacity and liquidity positions remained sound.

[7] Based on 120 listed firms on Bursa Malaysia with 85% market capitalisation (excluding financial institutions).

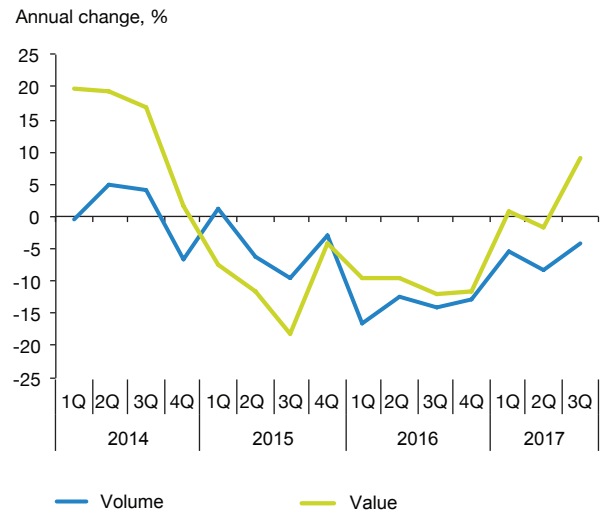
The median interest coverage ratio (ICR) improved to 9.6 times (2Q 2017: 8.3 times), and remained significantly above the prudent threshold of two times. The median current cash-to-short-term debt ratio (CASTD) improved to 1.6 times (2Q 2017: 1.4 times), above the prudent threshold of one time. Overall, the ratio of impaired and delinquent loans improved slightly to 2.5% and 0.3% of total bank lending to businesses, respectively (3Q 2017: 2.6% and 0.4%, respectively).

The Organization of the Petroleum Exporting Countries' (OPEC) announcement to extend cuts in crude oil production until end 2018 supported oil prices. The oversupply position in the oil market, however, is expected to persist at least until the first quarter of 2018. For Malaysian O&G companies, overall debt servicing capacity remained stable in 3Q 2017, with the median ICR at 29.6 times. However, the liquidity position (median CASTD ratio) moderated to 2.2 times (2Q 2017: 4.7 times). This was mainly due to new short–term borrowings for working capital and acquisitions. Delinquent and impaired loans ratio in the segment increased to 0.6% (3Q 2017: 0.1%) and 5.5% (3Q 2017: 5.0%), respectively, in the fourth quarter of 2017. This was driven by continued cash flow issues faced by non-SMEs in the shipping-related segment, which are servicing the O&G sector. Risks to the banking system remained limited as exposures to the O&G-related sector accounted for about 6% of total exposures with banks already setting aside provisions for current and future expected impairments.

On an annual basis, activities in the housing market have shown some improvements. Total housing transaction volume recorded a smaller contraction of 4.2% (2Q 2017: -8.4%) with 47,501 units of houses being transacted in 3Q 2017. The value of housing transaction also showed signs of improvement, recording a positive annual growth of 8.9% (2Q 2017: -1.5%). The improvement was contributed largely by transactions of houses priced at RM500,000 and above. House prices (as measured by the Malaysian House Price Index) continued to increase at a moderate annual pace of 6.8% in 2Q 2017 (1Q 2017: +6.7%), well below previous peaks observed during the 2012-2013 period (average growth of 12.3%).

Housing market activities improved during 3Q 2017

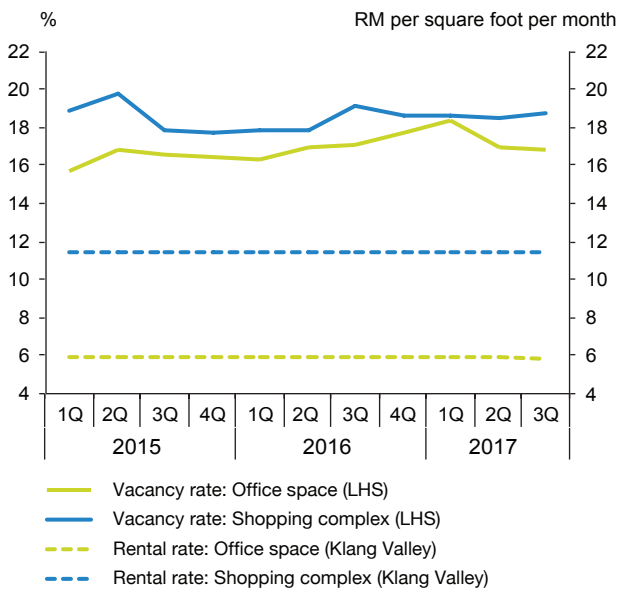
Chart 28: Property Sector Transaction Volume and Value



Source: National Property Information Centre

Rental rates of office space and shopping complex remained depressed

Chart 29: Office Space and Shopping Complex Vacancy and Rental Rates



Source: National Property Information Centre, Knight Frank, Jones Lang Wootton and internal computation

Borrowers continued to have access to home financing, especially the first-time house buyers. The growth in outstanding house financing increased to 8.9% (3Q 2017: +8.8%), while the overall housing loan approval rate for the purchase of houses priced below RM500,000 remained high at 72.3% (3Q 2017: 73.9%).

Demand for financing for speculative house purchases remained muted. During the quarter, the share of the number of housing loans settled within three years (the typical duration required to complete construction after a property is acquired) stood at 7.9% (3Q 2017:10.5%) of total settled housing loans. The annual growth in the number of borrowers with three or more outstanding housing loans (a proxy for speculative buyers) remained low at 0.9% (3Q 2017: +0.7%). The credit quality for overall housing loans also remained sound, with delinquency and impairment ratios at 1.3% and 1.0% of total bank loans, respectively (3Q 2017: 1.2% and 1.1%, respectively).

Rental rates in the office space and shopping complex segments remained low in 3Q 2017 amid excess supply. Direct risks to banks from end-financing exposures to the office space and shopping complex segments remained small at 3.2% of total bank loans, supported by sound lending and valuation practices. The delinquency and impairment ratios for non-residential property segment remained low at 0.7% and 1.1%, respectively (3Q 2017: 0.6% and 1.2%, respectively).

Domestic financial market conditions remained orderly

Investor sentiment continued to closely follow developments on the external front. This included the announcement of the new Federal Reserve chairman, the passing of the US tax reform bill, the rate hike in the US and OPEC's decision to extend production cuts until the end of 2018. Overall volatility in the domestic financial markets remained at low levels. This was attributed partly to improved domestic sentiments amid the release of better-than-expected 3Q GDP growth and expectations of monetary policy normalisation by the Bank. Average volatility of 10-year MGS yields was unchanged at 8.5% while average volatility of the FBM KLCI declined to 4.4% (3Q 2017: 8.5% and 5.1%, respectively). Average volatility of the ringgit increased slightly to 3.2% (3Q 2017: 2.8%).

In the last quarter of 2017, there were net portfolio investment inflows of RM11.7 billion (3Q 2017: net outflows of RM5.1 billion) due mainly to foreign inflows into both the government bond and equity markets. Consequently, non-resident investor holdings of government bonds increased to 27.7% (3Q 2017: 26.6%) of total outstanding Malaysian government bonds. The composition of non-resident investors in the government bond market remained relatively unchanged, with bulk of the holdings attributed to long-term investors such as central banks, governments, pension funds and insurance companies (50% of total non-resident holdings). The stability of non-resident holdings is further supported by the distribution of holdings across different maturities. Of total non-resident holdings, 62% were in medium- and longer-dated bonds of more than 3 years.

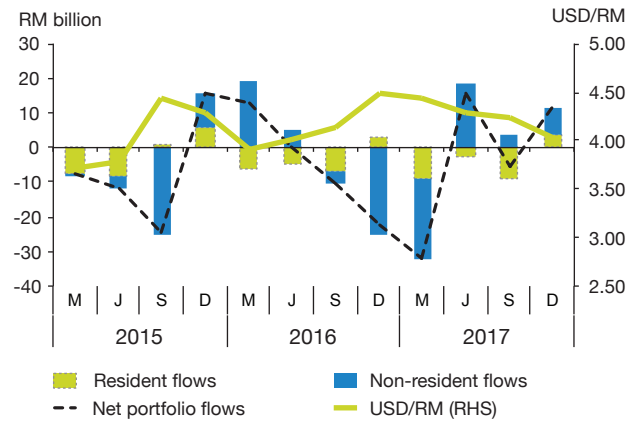
Non-resident participation in the domestic equity market remained stable at 23.2% of total equity market capitalisation (3Q 2017: 23.3%). The FBM KLCI ended the quarter at its highest point of the year at 1796.81 points (3Q 2017: 1755.58 points), supported by the stronger ringgit and higher crude oil prices. The average price-to-earnings (PE) ratio for the FBM KLCI stood at 16.2 times (3Q 2017: 16.7 times; 2010-2016 average: 16.8 times).

Market liquidity remained healthy. The bid-ask spread for MGS was stable at 0.1%, while the bid-ask spread for FBM KLCI widened slightly to 0.4% of the mid-price (3Q 2017: 0.1% and 0.3%, respectively). Daily average USD/MYR bid-ask spreads remained narrow at 24 pips (3Q 2017: 23.3 pips). In the foreign exchange market, a daily average volume of USD9.9 billion (3Q 2017: USD10.4 billion) was recorded, of which spot and forward transactions accounted for USD4.6 billion (3Q 2017: USD4.7 billion).

The ringgit appreciated by 4.1% against the US dollar to end the quarter at RM4.0620 per US dollar (3Q 2017: RM4.2275). A similar trend was observed against most other major currencies. Spreads on long-term onshore USD liquidity, as reflected by the 5-year cross-currency basis swap spreads, narrowed to 25 basis points (bps) (3Q 2017: 54 bps). Similarly, the 5-year sovereign credit default swap spread declined to 58.4 bps (3Q 2017: 68.7 bps).

Net portfolio investment outflows mainly driven by residents' investment abroad

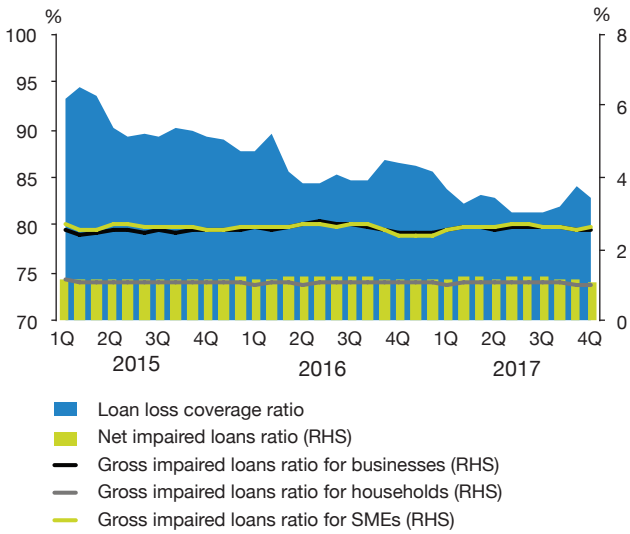
Chart 30: Financial Market Net and Gross Portfolio Flows and Ringgit Exchange Rate Movement



Source: Department of Statistics, Malaysia

Healthy asset quality observed in the banking system

Chart 31: Banking System Asset Quality



Source: Bank Negara Malaysia

Market risk exposures supported by risk management and hedging strategies

Banks' aggregate market risk exposures remained stable. FX risk, measured in terms of the net open position of foreign currency denominated exposures, stood at 6.1% of total capital (3Q 2017: 5.7%). Interest rate risk in the trading book and equity risk remained low at 1.0% and 1.0% of total capital, respectively (3Q 2017: 1.1% and 0.9%, respectively). Interest rate risk in the banking book also remained stable at 3.7% (3Q 2017: 3.6%) of total capital. For the insurance and takaful industry, market risk exposures stood at 15.4% (3Q 2017: 14.9%) of total capital available. Equity risk, which formed the bulk of insurers' market risk exposures, increased to 9.1% (3Q 2017: 8.8%) of total capital available.

Sound profitability and sustained liquidity position of financial institutions

The banking system recorded higher pre-tax profits of RM10 billion (3Q 2017: RM9 billion) in the fourth quarter of 2017. This was driven by higher fee-based income from brokerage and syndication activity, followed by dividend contributions from overseas subsidiaries. The financing (including interest) margin net of operating costs and loss provisions increased slightly to 0.71 percentage points (ppts) (3Q 2017: 0.69 ppts), owing mainly to higher recoveries from impaired loans.

In the insurance and takaful sector, general insurers and takaful operators recorded higher operating profit of RM748.3 million in the fourth quarter (3Q 2017: RM655.1 million) on account of more favourable claims experiences with the industry claims ratio improved to 49.5% (3Q 2017: 61.2%). Similarly, life insurers and family takaful operators recorded an increase in profitability with excess income over outgo standing at RM4.9 billion (3Q 2017: RM 3.5 billion). This was attributed largely to net capital gains of RM821.1 million (3Q 2017: net capital losses of RM176.2 million).

Liquidity in the banking system remained ample to support intermediation activity. Outstanding ringgit surplus liquidity placed with Bank Negara Malaysia stood at RM188.7 billion in the form of placements, reverse repos and statutory reserves. The Basel III Liquidity Coverage Ratio (LCR)[8], a measure of short-term liquidity resilience for the banking system stood at 134% as at end-December 2017 (3Q 2017: 136%). All banks recorded LCR levels above 90%, the current minimum requirement.

Domestic funding conditions remained stable during the quarter. Both the average cost of deposits[9] for banks and the 3-month KLIBOR were almost unchanged at 2.51% and 3.45%, respectively as at end-December 2017 (3Q 2017: 2.50% and 3.33%, respectively). Banks continued to be predominantly funded by deposits (70% of total funding) mostly in local currency. Banking system deposits grew by 4% (3Q 2017: +4.5%), contributed by the sustained expansion in business sector and household deposits. The loan-to-funds ratio[10] (LTF) remained stable at 84% (3Q 2017: 83.1%).

Disaster Relief Facility activated to assist SMEs affected by floods

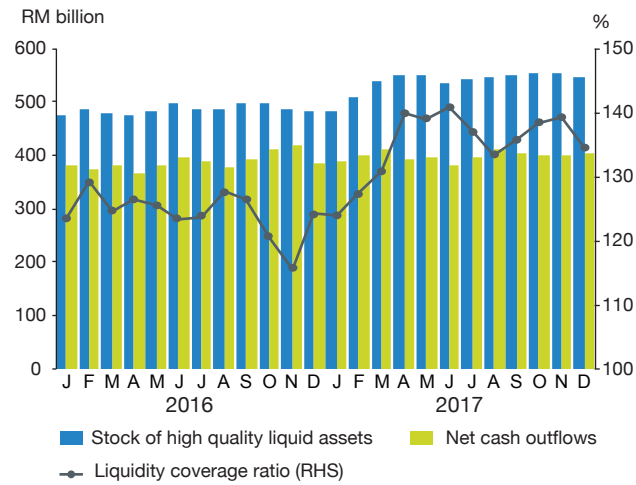
The recent floods resulted in 67 districts throughout the country being identified as flood disaster areas by the National Disaster Management Agency (NADMA). In response, the Bank activated its Disaster Relief Facility (DRF) on 8 November 2017 to alleviate the financial burden of SMEs affected by floods and assist in the resumption of their businesses operations. To date, more than 200 SMEs have sought financial assistance amounting to RM75 million under the DRF.

Malaysian SMEs affected by the floods in the districts identified by NADMA as flood disaster areas may apply for assistance via 49 financial institutions for the replacement of damaged assets and working capital needs. The maximum amount of financing under the DRF is RM500,000 per group of companies at an effective financing rate of up to 2.25% per annum for a term of five years. The facility is available until 31 May 2018.

Financial institutions have also proactively assisted 170 SMEs to rehabilitate their loans via loan restructuring and rescheduling.

Banking system liquidity sufficient to buffer for adverse liquidity shocks

Chart 32: Banking System Basel III Liquidity Coverage Ratio



Source: Bank Negara Malaysia

[8] The Basel III LCR has been phased in since June 2015, with initial compliance set at 60% and progressive increments of 10% each year until 100% with effect from 2019. As of 1 January 2018, the minimum requirement is set at 90%.
[9] The average cost of deposit is computed based on rolling 12-months average of interest expense on deposit over total deposit.
[10] Funds comprise deposits and all debt instruments issued (including subordinated debt, debt certificates/sukuk, commercial papers and structured notes).

The Bank's Policy Considerations

HIGHLIGHTS

- **With the economy firmly on a steady growth path, the MPC decided in January 2018 to normalise the degree of monetary accommodation.**

The OPR remained accommodative

The Monetary Policy Committee (MPC) kept the Overnight Policy Rate (OPR) at 3.00% at the September and November 2017 meetings. At the meeting in November, however, the MPC indicated that the degree of monetary accommodation could be reviewed given the assessment of improving macroeconomic conditions. Malaysia's economic growth had become more entrenched while prospects remained favourable for 2018, given expectations of sustained performance in both the domestic and external sectors. Nevertheless, downside risks to the global growth remained. Headline inflation was expected to be at the upper end of the forecast range of 3% - 4% for 2017 but to moderate in 2018. Underlying inflation was also expected to moderate in 2018, sustained by robust domestic demand but contained by the continued expansion in productive capacity.

More recently, at the January 2018 MPC meeting, the MPC assessed that there would be faster expansion in global growth, with more balanced risks to the outlook. The domestic economy is firmly on a steady growth path. Headline inflation is expected to average lower in 2018, on expectations of a smaller effect from global cost factors. A stronger ringgit exchange rate compared to 2017 will mitigate import costs. Global energy and commodity prices are expected to trend higher in 2018. However, the trajectory of headline inflation will be dependent on future global oil prices which remain highly uncertain. Underlying inflation, as measured by core inflation, remains moderate.

The MPC, therefore, decided to normalise the degree of monetary accommodation by raising the OPR by 25 basis points to 3.25%. The MPC recognised the need to pre-emptively ensure that the stance of monetary policy is appropriate to prevent the build-up of risks that could arise from interest rates being too low for a prolonged period of time, particularly in a high-growth environment. The adjustment does not constitute a tightening of monetary conditions, but rather a normalisation of the degree of monetary accommodation. The normalisation would contribute towards preserving the sustainability of growth, while ensuring ample policy space for buffers in the event of shocks to the economy in the future. At the current level of the OPR, the stance of monetary policy remains accommodative and supportive of growth.

Other policy highlights in fourth quarter of 2017

In October 2017, the Bank outlined the Principles for a Fair and Effective Financial Market for the Malaysian Financial Market. The aim of the Principles is to achieve a financial market environment that is trusted, competitive, resilient and best positioned to support the sustainable growth of the Malaysian economy.

In addition, as part of the overall strategy to deepen and broaden the financial market, the Bank and the Financial Markets Committee took several measures to improve bond market liquidity and enhance liquidity intermediation. These included the introduction of regulated short-selling of MGII, issuance of Bank Negara Interbank Bills (BNIBs), and expansion of eligible collateral for Monetary Operations.

In the insurance sector, greater flexibility was accorded for life insurers and family takaful operators in respect of operating cost controls under revised standards that came into effect on 1 January 2018. This represents part of broader reforms being undertaken to encourage greater innovation and competition in the insurance and takaful industry.

To protect the interests of consumers, the Bank also issued strengthened standards to be observed by financial service providers for handling customer information. Financial service providers are expected to ensure the effective protection of customer information in the process of collection, storage, use, transmission, sharing, disclosure and disposal, in line with the laws administered by the Bank.

Macroeconomic Outlook

HIGHLIGHTS

- Global growth to expand at a faster pace in 2018, supported by continued growth in advanced economies and improvements in emerging market economies.
- The Malaysian economy is expected to remain favourable in 2018.
- Going forward, inflation is expected to moderate due mainly to a smaller contribution from global cost factors and a stronger ringgit compared to 2017.

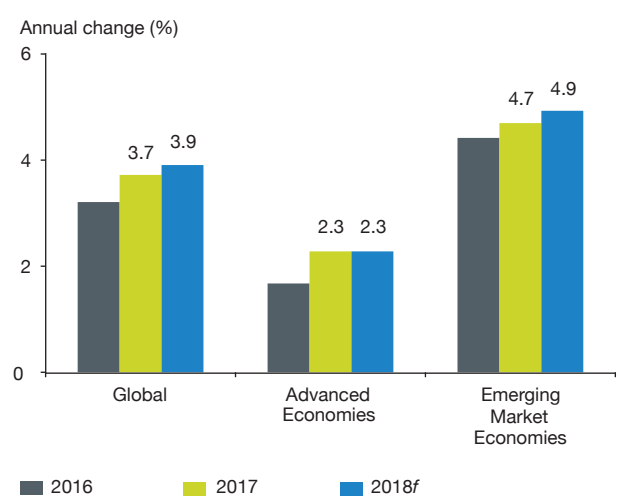
Global growth to expand at a faster pace

The sustained strong performance of the global economy in 4Q 2017 suggests that the current phase of expansion is likely to continue going into 2018. Of significance, the IMF revised its 2018 global growth projections upwards for the third time in its January 2018 publication of the World Economic Outlook Update.

The outlook is underpinned by expectations for continued synchronised expansions in both the advanced and emerging market economies. In the advanced economies, leading economic indicators such as purchasing managers' indices (PMI), manufacturers' orders and capital spending intentions surveys point towards continued expansion in business spending by corporations and smaller firms. Economic activity is projected to be further supported by favourable labour market conditions, continued access to financing and the implementation of pro-growth policies. In the US, the passing of the Tax Cuts and Jobs Act in December 2017 is expected to provide additional impetus to domestic demand, with positive spillovers to the rest of the world. Strong external demand will continue to benefit Asian economies. In addition, recently announced fiscal measures, including higher infrastructure spending, will complement the strength in domestic demand in several regional economies.

Global economic activity to expand at a faster pace in 2018

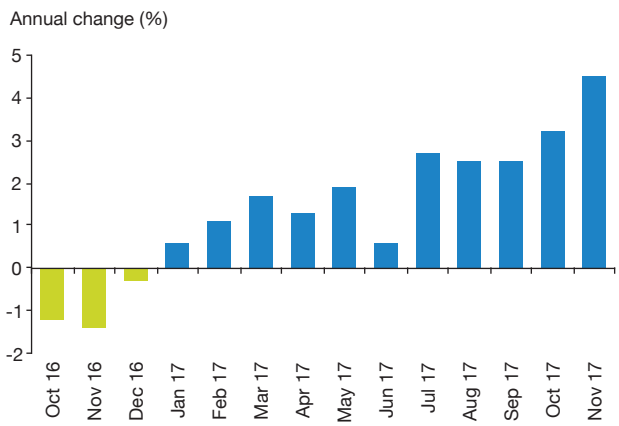
Chart 33: GDP Growth



Source: IMF World Economic Outlook (January 2018)

Leading indicators suggest continued expansion in the domestic economy

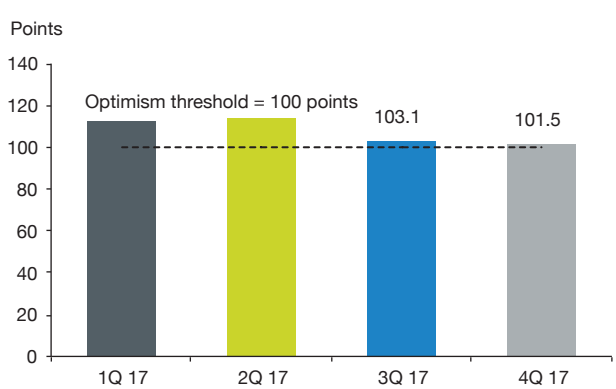
Chart 34: Composite Leading Index



Source: Department of Statistics, Malaysia

Business sentiments remained above the optimism threshold in 4Q 2017

Chart 35: MIER Business Conditions Index



Source: Malaysian Institute of Economic Research (MIER)

Risks to the growth outlook have become more balanced. Upside risks to the forecast include higher-than-expected investment growth due to the tax cuts in the US, stronger wage growth in the advanced economies and a continued expansion of the global tech cycle. In contrast, downside risks to the outlook arise mainly from uncertainty regarding the timing, pace and magnitude of monetary policy normalisation in major economies in the event of stronger inflationary pressures and wage growth, the lingering risk of rising trade protectionism and residual political risks in certain European countries. A sudden escalation of geopolitical tensions, abrupt corrections in the global financial markets and significant reversals of capital flows in emerging markets also pose additional downside risks to the global growth outlook.

Growth in the Malaysian economy to remain favourable in 2018

Malaysia registered a strong growth of 5.9% in 2017 (2016: 4.2%). For 2018, growth is expected to remain favourable with domestic demand continuing to be the key driver of growth. The positive growth momentum will continue to benefit from spillovers from better global growth on to domestic economic activity.

The Department of Statistics Malaysia's composite leading index has shown a sustained increase in recent periods. The MIER Business Conditions Index also points towards sustained expansion of the economy. Overall, the assessment is for growth to remain strong in 2018.

On the supply side, the manufacturing and services sectors are expected to benefit from continued growth across both export- and domestic-oriented sub-sectors. The agriculture sector's growth will be driven by further improvements in CPO yields and the maturing of oil palm trees. Growth in the mining sector is projected to be supported by higher output from new oil and gas facilities. In the construction sector, growth will be mainly supported by new and existing civil engineering projects.

Going forward, inflation is expected to moderate due mainly to a smaller contribution from global cost factors and a stronger ringgit compared to 2017

While global oil prices are expected to be higher in 2018, the magnitude of increase would likely be smaller compared to 2017. The impact of higher global oil prices on domestic fuel prices will also be partly offset by a stronger ringgit exchange rate. As such, the contribution of domestic fuel prices to headline inflation in 2018 will be smaller leading to a moderation in headline inflation.

Underlying inflation, as measured by core inflation, is expected to moderate following the expectation of smaller spillovers from external and domestic cost factors and a stronger ringgit. Upward pressures from the robust demand condition will be contained by continued spare capacity in the labour market and on-going investment for capacity expansion.

For 2018 as a whole, while the expectation is for inflation to moderate, the trajectory will remain dependent on the trend of global oil prices, which is highly uncertain.

1 Feature Article

Open Application Programming Interface (API): A Financial Revolution

Authors: Celine Wan Shi Ann, Norariefah Mohd Iqbal

HIGHLIGHTS

- **Financial and payments-related Open APIs are poised to grow exponentially due to regulatory mandates and increasing collaboration between financial institutions and fintech firms.**
- **A majority of financial institutions in Malaysia have plans to deploy Open APIs, although the current level of adoption remains low. Key impediments include security concerns and confidence in third party providers.**
- **An Open API strategy is viewed as a key lever to increase efficiency, broaden access, promote greater innovation, and encourage competition in the financial sector.**

Application Programming Interface, or API in short, has been utilised to connect software application programs for decades. In recent years, APIs are increasingly recognised as a potential game changer to enhance customer experience and spearhead digital innovation in financial services. This article takes a closer look at Open APIs in financial services, including new services made possible through Open APIs, issues associated with its adoption, and industry and regulatory responses. The article concludes with a specific focus on Open API adoption within the Malaysian financial sector.

API: Terminology and Mechanics

An API works in a manner analogous to the studs and tubes of a Lego brick. The connective feature of a Lego allows for the formation of building blocks of various permutations, depending on the creativity of the builder. Similarly, APIs allow for software programs to connect with each other to create new solutions that enhance the customer experience, deliver efficiency gains and generate new revenue streams for service providers.

APIs can be broadly categorised into either private, partner, or open APIs. Private APIs facilitate information flow within an organisation by connecting different databases or systems. Partner APIs are APIs that support interfaces between data providers and third parties with which they have entered into business relationships. Open APIs, on the other hand, provide access to third party developers without needing to establish a business relationship with the API publisher. Access to restricted or more sensitive data through Open APIs is commonly supported by security, legal and governance frameworks necessary to protect confidentiality.

The Open API Revolution across Business Sectors

The availability of Open APIs has transformed industries, from social media, to retail and financial services. The following are examples of Open APIs used across various businesses:

Social Media: Facebook

- Other social media such as Instagram or Twitter are able to use Facebook's Open APIs to replicate postings onto Facebook.
- Ability to create an account on an external site/application using Facebook credentials.

Transportation: Uber

- Uber ride requests can be embedded on external website applications, such as in restaurant or travel apps. For example, Uber rides can now be requested directly from Google Map app without the need to access the Uber app.
- Other features such as contacting the driver, viewing the location of the driver/passenger, updating on the trip status, making price comparisons across all other taxi services, and paying for the trip can also be done in third party apps such as Google Maps, which would automatically link itself to Uber's Open API.

Retail: Walgreens

- Publishes Open APIs which allow external developers to integrate their applications for prescription requests, daily health tracking and education with Walgreens services.
- The revenue per customer who interacted with Walgreens via their website and mobile applications was six times higher than retail customers who shopped in stores. In Walgreen's experience, the use of Open APIs not only enhances customer engagement and experience, but also creates new business opportunities to generate revenue from Open API usage fees.

Financial: TransferWise

- Transferwise gained significant market share by offering international funds transfer services comparable to SWIFT payments for cross border transactions.
- Released Open APIs which enable third parties, including banks, to integrate with its services.

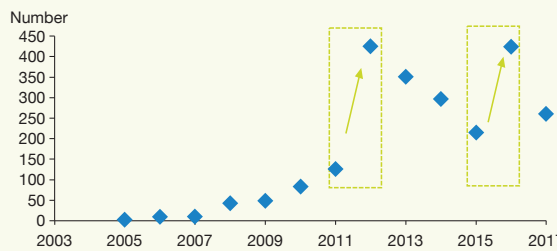
Financial: PayPal

- Enables a third party to incorporate PayPal's functionality into the website and mobile application, which allows merchants and customers to securely accept or make online/mobile payments via PayPal with only a few clicks.
- Details of completed payments, refunds, and authorisations from various merchants are also captured in the customer's PayPal account.

Open API Trends and Developments in the Financial Sector

Financial and payments-related Open APIs are poised to grow exponentially due to regulatory mandates and increasing collaboration between financial institutions and fintech firms

Chart 1: Number of Financial-Related APIs added per year



Source: Programmable Web

Publications of APIs in the financial sector are expected to grow exponentially, with a greater focus on Partner and Open APIs[1]. From 2005 to mid-2017, over 2300 financial-related APIs were estimated to have been published globally (Chart 1). Between 2012 and 2017, over 200 APIs were added annually, up from less than 20 prior to 2007. Two growth surges for financial-related APIs were observed and both appear to be spurred by government or regulatory initiatives[2]:

- in 2012, largely from data-driven APIs covering a broad range of data on financial and capital markets. This was in tandem with open government data initiatives and modernisation in the delivery of public services[3]. Examples include APIs related to financial sector data, government budgetary information, grants and tax facilitation matters; and
- in 2016, owing to regulatory developments allowing third parties to access account information or to initiate payments on behalf of customers in the UK and Europe.

Leading the pack— financial institutions embracing Open APIs

Open API publications by financial institutions would pave the way for the more rapid diffusion of technology to improve the delivery and consumption of financial services. This is more pronounced where access (with consent) to customer's data is permitted. Some of the ways in which the publication of Open APIs has enabled financial institutions to create value include the following:

- facilitating money transfers to intended parties through more convenient and accessible third party applications without having to log onto an online bank account or obtain bank account information;
- enabling individuals to access and compare a wide range of financial solutions from alternative providers which are matched to their specific needs and circumstances; and
- integrating banking data across banks and with other personal applications to help individuals track and manage their financial affairs through a single interface.

[1] Capgemini, Efma (2017), World Retail Banking Report
[2] Santos W., (2017a), Financial APIs have seen two growth spikes, Programmable Web
[3] HM Government (2012), Open Data White Paper – Unleashing the Potential

Examples of banks that have adopted Open APIs to enhance their delivery of banking services include:

UK: HSBC

- HSBC is one of the first banks in the UK to satisfy the requirements for publishing Open APIs on publicly available data.
- The bank has published Open APIs on branch and ATM locations, as well as product information for retail and businesses.

France: Credit Agricole

- Credit Agricole, one of the top three banks in France, launched its own application store (the CA store) in 2012.
  Applications on the CA store allow the customer to:
  - o Change the currency their account is displayed in
  - o See the location of their transactions on a map
  - o Manage healthcare expenses
  - o Turn savings into a game

Spain: BBVA

- BBVA has become one of the first major banks in the world to deliver open banking in 2017. The bank made eight APIs available through the BBVA API Market, which includes:
  - o Customer profile data
  - o Retail accounts, cards, payments, loans and notifications
  - o Business accounts
  - o Aggregated data
- Through the Open APIs, companies, and developers will be able to build new products and services by accessing and integrating customer's banking data – with consent – into their applications.

Singapore: OCBC

- OCBC bank is among the first ASEAN banks to publish publicly available data APIs. Its APIs provide latest forex rates, allowing online businesses to deliver product prices denominated in the customer's home currencies.
- These APIs reduce the time required to integrate such functionalities into new application from more than 2 months, to just a few hours.

Opportunities and Concerns Surrounding Open APIs

Open API publication offers a myriad of opportunities. However, concerns remain around data security and privacy issues.

From a public policy perspective, Open APIs hold significant potential to:

- further expand access to financial services, for example by enabling the remote on-boarding of bank customers and through payment innovations that allow individuals to safely manage and transfer money without visiting a bank branch or facility;
- promote greater competition in the financial sector, for example through product aggregators that compare products across financial institutions and by enabling customers to port over their data to alternative financial providers conveniently; and
- empower customers by giving them greater control over how their data can be shared and used securely by financial institutions and third parties to better serve their specific needs through innovative financial solutions.

Some challenges however remain:

- Legal ownership of customer data is not always clear, particularly where they involve intellectual property rights over, or proprietary claims to, customer information that is shared by various parties (e.g. financial institutions and fintech companies);
- Liability in the event of data breaches or security lapses is often not clearly established; and
- Poorly constructed APIs may make financial institutions' internal systems vulnerable to cyber-attacks.

Open API Deployment in Other Jurisdictions

Regulators play a key role in the proliferation of Open APIs

In several developed economies, actions by regulators have contributed to the wider adoption of Open APIs in the financial sector:

- In the EU, the Payment Systems Directive 2 (PSD2) requires account providers to allow third parties to access customer's account information and initiate payments on behalf of the customer.
- The Competition and Markets Authority (CMA) has required the nine largest banks in the UK to publish Open API on personal and business current accounts effective January 2018. To this end, the Open Banking Working Group (OBWG) in the UK has recommended an Open Banking Standard framework to address the data, technical, security, and governance aspects to data sharing in an open banking environment.
- The Australian government recently committed to launch an open banking regime that mirrors that in the EU and UK. It is currently reviewing proposals for recommendation to the Treasury by end of 2017.
- The Monetary Authority of Singapore (MAS), in collaboration with the Association of Banks Singapore, has recommended the adoption of 411 APIs by the regulator, government agencies, insurers, banks and asset management companies. MAS has published 12 Open APIs on data sets which are frequently used including credit card statistics, interest rates, and currency exchange rates.

Open API in Malaysia's Financial Sector

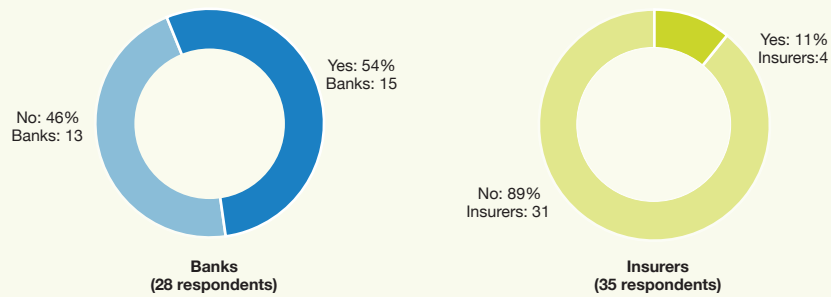
A majority of financial institutions have plans to deploy Open APIs

In a recent survey of Malaysian banks and insurers[4]:

- 51% indicated plans to roll-out Open APIs, with 69% targeted to deploy within the next 24 months;
- Only 48% claimed to have the necessary resources to deploy Open APIs, pointing to significant investments in manpower and financial allocations needed to achieve scalability; and
- By sector, significantly more banks viewed the adoption of Open API as a high priority (54%) compared to insurance institutions (11%) (Chart 2). This appears to be consistent with higher concerns observed among banks over the threat of disintermediation (Chart 3):

[4] Bank Negara Malaysia issued a survey in 3rd Quarter 2017 to gauge the Malaysian financial institutions' readiness to adopt Open APIs. 63 institutions responded (64.3% response rate), which includes insurance (79.5% response rate) and banking (51.9% response rate) institutions.

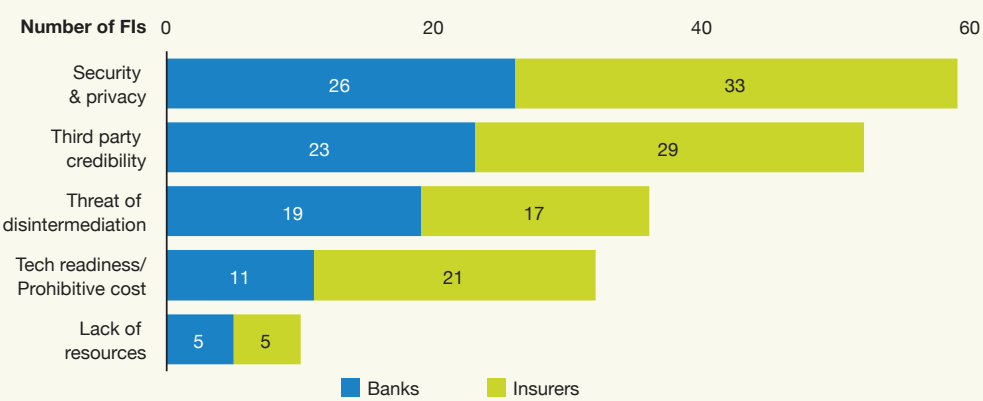
Chart 2: Most Banks Indicated Open API as a Priority, in Contrast to Insurance Institutions



Source: Bank Negara Malaysia Market Research

- 35% indicated plans to deploy Open API for publicly available data, while 22% plan to publish Open API allowing access to public as well as confidential data. The low response on plans to publish Open API for individual account information reflects key concerns highlighted by financial institutions around security and compliance with data privacy regulations (Chart 3).

Chart 3: Ranking of Key Concerns on Open API



Source: Bank Negara Malaysia Market Research

In the area of payments, the proposed Interoperable Credit Transfer Framework recently issued by Bank Negara Malaysia (Bank) in December 2017 encourages approved operators of shared payment infrastructure and issuers of payment instruments to publish APIs to facilitate convenient credit transfers and the development of other value-added services. The Bank expects to finalise the framework in early 2018 - a move likely to encourage the wider adoption of Open APIs[5].

Moving Forward with Open APIs

The Bank views an Open API strategy as a key lever to increase efficiency, broaden access, promote greater innovation and encourage competition in the financial sector. To this end, the Bank will undertake the following in 2018:

[5] The 'Interoperable Credit Transfer Framework' Exposure Draft is open for a 1-month public consultation period.

- Identify and consult on priority use cases for the adoption of Open APIs in the financial sector, with a view to finalise a clear roadmap for the publication of priority Open APIs by first quarter of 2018;
- Establish an Open API Implementation Group by first quarter of 2018 with members drawn from the Bank, financial industry, fintech companies and relevant key stakeholders to develop Open API standards for the financial sector, including open data specifications, security standards (including access rights), and oversight arrangements for access by third party service providers; and
- Review existing regulations on controls over confidential customer data and consult on requirements to be observed by financial institutions for securing customer consent to share confidential data under Open API and to safeguard customer credentials that are shared.

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Annex

Table 1

GDP by Expenditure Components (at constant 2010 prices)

	Share 2017 (%)	2016		2017		
		4Q	Year	3Q	4Q	Year
		Annual growth (%)				
Aggregate Domestic Demand (excluding stocks)	92.2	3.2	4.3	6.6	6.2	6.5
Private sector	*71.2*	5.9	5.6	7.3	7.4	7.5
Consumption	*53.7*	*6.1*	*6.0*	*7.2*	*7.0*	*7.0*
Investment	*17.4*	*4.9*	*4.3*	*7.9*	*9.2*	*9.3*
Public sector	21.0	-2.6	0.4	4.0	3.4	3.3
Consumption	*13.0*	*-4.2*	*0.9*	*3.9*	*6.9*	*5.4*
Investment	*8.0*	*-0.4*	*-0.5*	*4.1*	*-1.4*	*0.1*
Net Exports	7.8	6.4	1.5	1.7	5.4	-1.1
Exports of Goods and Services	*72.9*	*2.2*	*1.1*	*11.8*	*7.1*	*9.6*
Imports of Goods and Services	*65.1*	*1.6*	*1.1*	*13.4*	*7.4*	*11.0*
GDP	**100.0**	**4.5**	**4.2**	**6.2**	**5.9**	**5.9**
GDP (q-o-q growth, seasonally adjusted)	**-**	**1.3**	**-**	**1.8**	**0.9**	**-**

Source: Department of Statistics, Malaysia

Table 2

GDP by Economic Activity (at constant 2010 prices)

Annual growth (%)	Share 2017 (%)	2016		2017		
		4Q	Year	3Q	4Q	Year
Services	54.4	5.5	5.6	6.5	6.2	6.2
Manufacturing	23.0	4.7	4.4	7.0	5.4	6.0
Mining	8.4	5.0	2.2	3.1	-0.5	1.1
Agriculture	8.2	-2.5	-5.1	4.1	10.7	7.2
Construction	4.6	5.1	7.4	6.1	5.8	6.7
Real GDP	**100.0**[1]	**4.5**	**4.2**	**6.2**	**5.9**	**5.9**

[1] Numbers do not add up due to rounding and exclusion of import duties component

Source: Department of Statistics, Malaysia

Table 3

Trade Account

	Share 2017 (%)	2016		2017		
		4Q	Year	3Q	4Q	Year
		Annual growth (%)				
Gross Exports	**100.0**	**3.1**	**1.2**	**22.1**	**12.4**	**18.9**
Manufactured	82.1	3.5	3.3	23.7	14.2	18.9
E&E	*36.7*	*7.7*	*3.6*	*21.7*	*14.7*	*19.2*
Non-E&E	*45.4*	*0.2*	*3.0*	*25.4*	*13.7*	*18.6*
Resource based	*22.9*	*5.9*	*3.5*	*22.2*	*9.9*	*19.3*
Non-resource based	*22.5*	*-5.2*	*2.5*	*28.7*	*17.9*	*18.0*
Commodities	17.0	-0.1	-8.1	12.5	4.3	17.1
Agriculture	*8.3*	*14.1*	*4.7*	*3.1*	*-2.2*	*10.8*
Minerals	*8.6*	*-11.3*	*-18.9*	*23.9*	*10.8*	*23.9*
Gross Imports	**100.0**	**5.1**	**1.9**	**19.8**	**14.4**	**19.9**
Intermediate goods	57.1	3.8	-0.1	20.9	8.9	20.0
Capital goods	13.8	6.6	4.9	0.1	17.5	15.4
Consumption goods	8.5	-0.2	7.3	14.9	4.7	6.1
Re-exports and dual-use goods	20.6	10.7	3.3	34.8	32.4	30.2
Trade balance (RM billion)	**-**	**28.0**	**88.1**	**26.7**	**27.7**	**97.2**

Source: Department of Statistics, Malaysia

Table 4

Malaysia's Direction of Exports

	Share 2017 (%)	2016		2017		
		4Q	Year	3Q	4Q	Year
		Annual change (%)				
European Union (EU)	**10.2**	**1.0**	**1.2**	**23.6**	**11.0**	**19.4**
Japan	**8.0**	**-12.3**	**-12.3**	**16.5**	**10.3**	**17.5**
United States	**9.5**	**2.3**	**8.9**	**13.2**	**7.9**	**10.5**
ASEAN[1]	**29.2**	**6.3**	**5.5**	**20.7**	**12.2**	**18.0**
North East Asia	**24.2**	**5.8**	**-3.1**	**27.0**	**21.5**	**25.3**
People's Republic of China	*13.5*	*12.3*	*-2.9*	*25.4*	*11.8*	*28.0*
Hong Kong SAR	*5.1*	*10.4*	*2.1*	*30.8*	*51.2*	*26.8*
Korea	*3.1*	*-6.9*	*-7.1*	*40.4*	*34.0*	*24.8*
Chinese Taipei	*2.5*	*-12.9*	*-7.7*	*15.9*	*6.2*	*11.3*
West Asia[2]	**2.7**	**11.4**	**3.0**	**22.2**	**1.6**	**10.6**
India	**3.7**	**1.1**	**1.1**	**8.7**	**-5.3**	**8.0**
Total exports	**100.0**	**3.1**	**1.2**	**22.1**	**12.4**	**18.9**

[1] Singapore, Thailand, Indonesia, Philippines, Brunei Darussalam, Vietnam, Cambodia, Myanmar and Lao PDR
[2] United Arab Emirates, Saudi Arabia, Oman, Iraq, Qatar, Kuwait, Jordan, Lebanon, Bahrain, Syria, Palestine, Yemen and Iran

Source: Department of Statistics, Malaysia

Table 5

Balance of Payments[1]

	2016		2017		
	4Q	Year	3Q	4Q	Year
	RM billion				
Current Account	**12.5**	**29.0**	**12.5**	**12.9**	**40.3**
(% of GNI)	*3.9*	*2.4*	*3.7*	*3.7*	*3.1*
Goods	31.2	101.4	31.7	34.1	118.1
Services	-5.4	-19.1	-4.9	-6.9	-23.1
Primary income	-9.2	-34.6	-8.6	-9.5	-36.1
Secondary income	-4.1	-18.6	-5.7	-4.8	-18.6
Financial Account	**-14.2**	**-1.1**	**-1.2**	**5.0**	**2.3**
Direct investment	1.0	14.1	6.2	5.1	12.4
Assets	*-15.1*	*-42.1*	*-7.7*	*-0.7*	*-26.7*
Liabilities	*16.1*	*56.2*	*13.9*	*5.8*	*39.1*
Portfolio investment	-19.1	-15.4	-5.1	11.7	-9.2
Assets	*2.7*	*-15.0*	*-8.8*	*4.0*	*-16.5*
Liabilities	*-21.8*	*-0.4*	*3.7*	*7.7*	*7.3*
Financial derivatives	-1.2	-0.8	1.0	-0.9	0.5
Other investment	5.0	1.0	-3.3	-10.9	-1.3
Errors & omissions[2]	20.7	-13.2	-8.5	-31.0	-52.0
Overall Balance	**19.0**	**14.8**	**2.9**	**-13.1**	**-9.3**

Assets: (-) denotes outflows due to the acquisition of assets abroad by residents
Liabilities: (+) denotes inflows due to the incurrence of foreign liabilities
[1] In accordance with the Sixth Edition of the Balance of Payments and International Investment Position Manual (BPM6) by the International Monetary Fund (IMF)
[2] Includes unrealised foreign exchange revaluation on gains/losses made on international reserves

Source: Department of Statistics, Malaysia

Table 6

Outstanding External Debt

	2016	2017	
	end-Dec	end-Sept	end-Dec
	RM billion		
Total External Debt	**916.1**	**873.8**	**883.4**
USD billion equivalent	*202.3*	*204.7*	*215.5*
By instrument			
Bond and notes[1]	169.1	162.3	155.2
Interbank borrowing[1]	171.0	166.5	172.6
Intercompany loans[1]	137.5	127.7	126.4
Loans[1]	53.8	38.3	53.0
NR holdings of domestic debt securities	214.2	200.7	207.4
NR deposits	86.2	90.8	91.1
Others[2]	84.4	87.6	77.7
Maturity profile			
Medium and long-term	539.1	469.5	506.3
Short-term	377.0	384.4	377.1
Currency denomination			
Ringgit	312.3	296.9	302.6
Foreign	603.8	577.0	580.7
Total debt/GDP (%)	74.5	64.6	65.3
Short-term debt/Total debt (%)	41.2	44.0	42.7
Reserves/Short-term debt (times)	1.1	1.1	1.1[3]

[1] These debt instruments constitute the offshore borrowing.
[2] Comprise trade credits, IMF allocation of SDRs and miscellaneous.
[3] Based on international reserves as at 30 January 2018.
Note: NR refers to non-residents

Source: Ministry of Finance and Bank Negara Malaysia

Table 7

Financing of the Private Sector through the Banking System, DFIs and Capital Market

	2016		2017			2016		2017		
	4Q	Year	3Q	4Q	Year	4Q	Year	3Q	4Q	Year
	Change during the period (RM billion)					Annual growth (%)				
Net total financing	**39.1**	**113.2**	**29.1**	**42.5**	**138.2**	**5.5**	**5.5**	**6.4**	**6.4**	**6.4**
Outstanding loans*[1]	40.4	84.1	13.6	22.2	63.1	5.3	5.3	5.0	3.8	3.8
Of which:										
Business enterprises	21.8	27.9	0.8	-2.3	8.1	4.7	4.7	5.4	1.3	1.3
SMEs	*9.4*	*25.3*	*5.2*	*5.1*	*15.9*	*9.2*	*9.2*	*7.0*	*5.3*	*5.3*
Non-SMEs	*12.4*	*2.5*	*-4.5*	*-7.5*	*-7.8*	*0.8*	*0.8*	*4.0*	*-2.5*	*-2.5*
Households	16.1	49.2	11.3	16.7	46.6	5.5	5.5	4.9	4.9	4.9
Outstanding corporate bond	-1.3	29.1	15.5	20.3	75.1	6.3	6.3	10.9	15.4	15.4

* Include loans sold to Cagamas
[1] Banking system and development financial institutions (DFIs)
Note: Numbers may not add up due to rounding

Source: Bank Negara Malaysia

Table 8

Loan Indicators

	2016		2017			2016		2017		
	4Q	Year	3Q	4Q	Year	4Q	Year	3Q	4Q	Year
	During the period (RM billion)					Annual growth (%)				
Total										
Loan applications[1]	198.6	800.4	221.4	217.5	841.2	-7.6	-2.4	8.5	9.5	5.1
Loan approvals[1]	93.1	345.0	96.9	104.1	380.1	-6.9	-11.0	10.6	11.9	10.2
Loan disbursements[2]	296.2	1,103.5	285.5	306.3	1,158.3	0.8	-1.7	8.1	3.4	5.0
Loan repayments[2]	277.9	1,074.7	286.1	297.1	1,146.9	0.5	1.4	11.5	6.9	6.7
Of which:										
Business enterprises[3]										
Loan applications	92.4	374.2	97.2	99.9	370.1	-13.6	-4.0	3.5	8.1	-1.1
Loan approvals	46.4	163.9	44.4	51.6	177.7	-4.8	-6.2	10.9	11.2	8.4
Loan disbursements	217.8	797.4	205.5	219.7	835.9	2.7	-0.9	9.6	0.9	4.8
Loan repayments	205.4	782.5	208.5	216.4	834.0	-0.2	0.6	13.3	5.4	6.6
SMEs										
Loan applications	46.1	181.8	46.4	47.7	177.2	10.7	-2.3	-4.0	3.4	-2.5
Loan approvals	19.3	66.1	16.9	18.4	64.4	30.0	3.0	-0.7	-4.7	-2.6
Loan disbursements	72.2	267.4	76.8	78.4	296.3	3.3	-2.0	15.1	8.6	10.8
Loan repayments	68.0	260.6	74.3	73.4	286.1	0.9	1.0	12.7	7.9	9.8
Non-SMEs[3]										
Loan applications	46.3	192.4	50.8	52.2	192.8	-29.0	-5.5	11.5	12.7	0.2
Loan approvals	27.1	97.8	27.4	33.2	113.4	-20.0	-11.6	19.5	22.4	15.9
Loan disbursements	145.6	530.0	128.7	141.3	539.6	2.3	-0.3	6.5	-3.0	1.8
Loan repayments	137.4	522.0	134.1	143.1	548.0	-0.7	0.4	13.6	4.1	5.0
Households										
Loan applications	106.2	426.2	124.2	117.6	471.1	-1.7	-1.0	12.8	10.7	10.5
Loan approvals	46.7	181.1	52.5	52.5	202.4	-8.9	-15.0	10.3	12.6	11.8
Loan disbursements	78.4	306.1	79.9	86.6	322.4	-4.2	-3.9	4.4	10.5	5.3
Loan repayments	72.6	292.2	77.6	80.6	312.9	2.5	3.5	6.8	11.1	7.1

[1] Loan applications and approvals for all segments include only banking system loans
[2] Loan disbursements and repayments for all segments includes banking system and development financial institutions (DFIs)
[3] Includes domestic non-bank financial institutions, domestic financial institutions, government, domestic other entities and foreign entities
Note: Numbers may not add up due to rounding

Source: Bank Negara Malaysia

Table 9

Banking System Profitability Indicators

	2016	2017			
	4Q	1Q	2Q	3Q	4Q
Return on equity (%)	12.5	11.8	12.7	12.8	13.0
Return on assets (%)	1.3	1.3	1.4	1.4	1.5
	RM million				
Net interest income	10,087	11,314	11,622	11,705	11,662
Add: Fee-based income	2,527	2,538	2,527	2,452	3,036
Less: Operating cost	7,554	7,610	7,670	7,589	8,167
Gross operating profit	6,080	6,242	6,478	6,568	6,530
Less: Impairment and other provisions	683	301	822	529	415
Gross operating profit after provision	5,378	5,941	5,656	6,039	6,115
Add: Other income	2,284	2,021	3,578	2,999	3,838
Pre-tax profit	**7,652**	**7,962**	**9,234**	**9,038**	**9,953**
	Annual change (%)				
Return on equity *(percentage points)*	1.3	-4.3	-3.4	0.0	4.1
Return on assets *(percentage points)*	5.9	-1.5	-0.6	2.1	7.9
Net interest income	1.9	6.5	9.6	9.8	5.2
Add: Fee-based income	3.5	4.3	13.0	12.4	20.0
Less: Operating cost	-9.8	4.6	4.6	4.1	8.1
Gross operating profit	22.6	8.0	17.7	18.3	7.7
Less: Impairment and other provisions	74.3	-63.2	11.0	17.5	-40.2
Gross operating profit after provision	18.1	19.7	18.8	18.4	13.9
Add: Other income	-13.0	-26.3	-13.4	5.2	64.7
Pre-tax profit	**6.7**	**3.3**	**3.8**	**13.7**	**29.3**

Source: Bank Negara Malaysia

Table 10

Insurance and Takaful Sector Indicators

	2016	2017			
	4Q	1Q	2Q	3Q	4Q
	RM million				
Life Insurance & Family Takaful					
Excess of Income Over Outgo	658	6,122	4,413	3,518	4,928
General Insurance & General Takaful					
Operating profit	*891*	*495*	*762*	*655*	*748*
Claims ratio (%)	*57*	*63*	*55*	*61*	*54*
	Annual change (%)				
Life Insurance & Family Takaful					
Excess of Income Over Outgo	*-87.5*	*32.4*	*67.8*	-34.2	649.1
General Insurance & General Takaful					
Operating profit	*31.3*	*-36.3*	*-10.6*	*-26.2*	*-16.0*
Claims ratio (percentage points)	*-4.0*	*8.8*	*-1.2*	*4.8*	*-2.9*

Source: Bank Negara Malaysia

Table 11

Federal Government Finance

	2016		2017[p]		
	4Q	Year	3Q	4Q	Year
	RM billion				
Revenue	59.8	212.4	58.7	64.6	220.4
% annual growth	*6.8*	*-3.0*	*4.3*	*8.0*	*3.8*
Operating expenditure	50.0	210.2	48.3	58.3	217.7
% annual growth	*-13.0*	*-3.1*	*-4.8*	*16.7*	*3.6*
Current account	**9.8**	**2.2**	**10.5**	**6.3**	**2.7**
% of GDP	**3.0**	**0.2**	**3.1**	**1.8**	**0.2**
Net development expenditure	*13.7*	*40.6*	*9.7*	*13.4*	*43.0*
% annual growth	*-11.5*	*3.5*	*30.9*	*-1.9*	*5.9*
Overall balance	***-3.8***	***-38.4***	***0.8***	***-7.2***	***-40.3***
% of GDP	***-1.2***	***-3.1***	***0.2***	***-2.0***	***-3.0***
Memo:					
Total net expenditure	63.7	250.8	57.9	71.8	260.7
% annual growth	*-12.7*	*-2.1*	*-0.3*	*12.7*	*3.9*
Total Federal Government debt (as at end-period)	648.5	648.5	687.4	686.8	686.8
% of GDP	*52.7*	*52.7*	*50.8*	*50.8*	*50.8*
Domestic Debt	438.2	438.2	492.3	484.1	484.1
% of GDP	*35.6*	*35.6*	*36.4*	*35.8*	*35.8*
External Debt	210.2	210.2	195.1	202.8	202.8
% of GDP	*17.1*	*17.1*	*14.4*	*15.0*	*15.0*
Non-resident holdings of RM-denominated Federal Government debt	*191.8*	*191.8*	*177.8*	*186.2*	*186.2*
% of GDP	*15.6*	*15.6*	*13.1*	*13.8*	*13.8*
Offshore borrowing	*18.5*	*18.5*	*17.3*	*16.6*	*16.6*
% of GDP	*1.5*	*1.5*	*1.3*	*1.2*	*1.2*

[p] Preliminary

Source: Ministry of Finance, Malaysia and Bank Negara Malaysia