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## **Global Macro Shifts**

## **Emerging Markets: Mapping the Opportunities**



Michael Hasenstab, Ph.D.

Executive Vice President, Portfolio Manager, Chief Investment Officer
Templeton Global Macro

Global Macro Shifts is a research-based briefing on global economies featuring the analysis and views of Dr. Michael Hasenstab and senior members of Templeton Global Macro. Dr. Hasenstab and his team manage Templeton's global bond strategies, including unconstrained fixed income, currency and global macro. This economic team, trained in some of the leading universities in the world, integrates global macroeconomic analysis with in-depth country research to help identify long-term imbalances that translate to investment opportunities.



Sonal Desai, Ph.D. Senior Vice President, Portfolio Manager, Director of Research Templeton Global Macro



Calvin Ho, Ph.D.
Vice President, Senior Global
Macro & Research Analyst
Templeton Global Macro



Hyung C. Shin, Ph.D.
Vice President, Senior Global
Macro & Research Analyst
Templeton Global Macro



Diego Valderrama, Ph.D. Senior Global Macro & Research Analyst Templeton Global Macro



Attila Korpos, Ph.D. Research Analyst Templeton Global Macro



**Shlomi Kramer, Ph.D.** Research Analyst Templeton Global Macro

## **Overview: Global Environment**

The US economic recovery remains steady, dispelling market fears earlier this year of impending recession. First-quarter (Q1) 2016 gross domestic product (GDP) growth was relatively low, at 0.8%, but this mostly reflects well-known seasonality issues. In a recent speech, San Francisco Federal Reserve (Fed) President John Williams noted that according to his staff's analysis adjusting for residual seasonality in Q1 indicated true real GDP growth above 2%. Furthermore, over the last few months, activity indicators have been strong across the board: Consumer confidence is running near record-high levels, retail sales are strong and the housing market remains resilient.

The labor market has strengthened further: Job creation continues to outpace the increase in the labor force, and the unemployment rate has dropped to 4.7% in conjunction with some recovery in the participation rate. The only notable exception was the May payroll figure, which was unexpectedly low: While the pace of job creation should naturally slow as we are at or close to full employment, the 38,000 nonfarm payroll

(NFP) figure appears to be an outlier, inconsistent with all other labor market indicators that show continued strength. The tighter labor market conditions have recently begun to translate into more robust wage pressures: The Atlanta Fed composite wage indicator accelerated to 3.4% year-over-year (yoy) in April, the strongest growth since early 2009.<sup>3</sup>

As we had foreshadowed in our previous edition of Global Macro Shifts (GMS),<sup>4</sup> headline inflation has started to rise. Core inflation has remained stable at around 2%, suggesting that the previous decline in headline inflation reflected lower energy prices, and not weaker economic activity or broader disinflationary trends. Since early this year, oil prices have first stabilized, and then recovered to a somewhat stronger degree than was anticipated. In our last GMS, we designed a model to forecast inflation. We noted that even if oil prices remained at the US\$30 per barrel (pb) levels that were prevalent at the start of the year for the remainder of 2016, the adverse base effect impact on headline inflation would likely fade out by January

#### Wage Growth Has Been Rising with Persistently Elevated Levels of Core Inflation

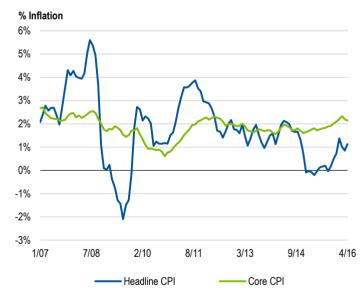
# Exhibit 1: Average Hourly Earnings Growth and Atlanta Fed Wage Tracker

January 2007-May 2016



Source: US Bureau of Labor Statistics and US Federal Reserve Board of Atlanta.

#### Exhibit 2: CPI Inflation January 2007–April 2016



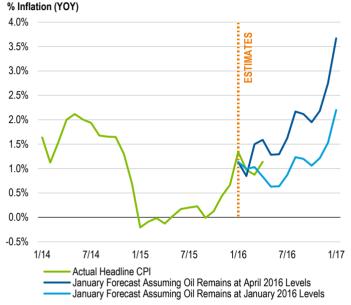
Source: US Bureau of Labor Statistics.

- 1. Source: Bureau of Economic Analysis. This figure is quarter-over-quarter, seasonally adjusted at an annualized rate (qoq, saar).
- 2. Source: Federal Reserve Bank of San Francisco.
- 3. The Atlanta Fed wage index tracks the median wage growth for a matched sample of workers (workers employed continuously at same place for 12 months) to control for composition effects.
- 4. Inflation: Dead, or Just Forgotten? Templeton Global Macro, Franklin Templeton Investments, February 2016.

2017. This would then set the stage for a rebound in consumer prices.<sup>5</sup> Since then, oil prices have, in fact, rebounded to about US\$50 pb rather than remaining at US\$30, suggesting that the recovery in headline inflation is likely to continue in the months ahead and at a faster pace (see Exhibit 3 below).

# Base Effects from Declines in Oil Prices Are Expected to Fade by January 2017

#### Exhibit 3: Headline CPI Forecasts January 2014–January 2017E



Source: US Bureau of Labor Statistics. Model calculations by Templeton Global Macro as at 6/16 using data sourced from US Bureau of Labor Statistics.

In other words, recent data on activity, wages and inflation have vindicated the out-of-consensus view that we articulated at the beginning of the year in our GMS: namely that inflation was set to rebound, with risks tilted to the upside.

These developments on activity and inflation were reflected in somewhat more hawkish Fed rhetoric during April and May, when a series of public statements by Fed officials indicated that a second increase in policy interest rates might be appropriate already at the June Federal Open Market Committee (FOMC) meeting—a view repeated in the April FOMC minutes. This forced financial markets to rapidly revise upward the probability of an interest-rate hike in either June or July, previously priced out.

The May NFP number, however, has pushed the Fed back to a more cautious stance: The bank kept rates on hold at the June meeting, and the "dots" shifted lower, signaling that FOMC members on average now expect a less aggressive tightening cycle this year. This shift in Fed stance was once again quickly reflected in market expectations.

The frequent swings in the Fed's rhetoric have undermined the bank's credibility, especially in light of generally robust economic developments. Following the December 2015 rate hike, the Fed had indicated that an additional four hikes would probably be appropriate over the course of 2016. Following another round of declines in oil prices and equity prices at the beginning of the year, the Fed adopted a more dovish tone, stressing downside risks to global growth, and leading the market to expect little or no change in policy interest rates for the year. During the hawkish shift in tone in April–May, financial markets' rate expectations lagged behind the indication of the Fed's "dots," suggesting that they expected the Fed might once again change its stance—which indeed happened in June.

We continue to believe that trends in US growth and inflation will require a further significant tightening of monetary policy. In fact, recent developments underscore, in our view, the rising risk that the Fed might fall behind the curve with its monetary policy response. If that were the case, during the course of 2017 the Fed might find itself forced to raise interest rates faster than it is currently envisaging, and much faster than markets currently anticipate.

Meanwhile, the Bank of Japan (BOJ) followed in the path of the European Central Bank (ECB), Sweden's Riksbank and the Swiss National Bank into the territory of negative interest rates. The BOJ took its monetary policy rate to -10 basis points (bps) in January this year, easing by 10 bps, as it sought to counter the deflationary impact of lower energy prices. The BOJ's efforts, however, were undercut by the simultaneous shift in Fed rhetoric. In its December meeting, the Fed had led markets to believe it would hike four times during 2016. By March this had been reduced to two hikes. The market pricing of Fed rate hikes correspondingly went from about 90 bps for the year to a low of about 20 bps in February, effectively a front-end easing of 70 bps relative to December. 6 In other words, the Fed's shift in rhetoric de facto more than reversed the impact of its December hike, with an effective easing that overwhelmed the BOJ's move. This resulted, unsurprisingly, in a significant appreciation

<sup>5.</sup> In GMS 4, we tested seven different alternative specifications of a Phillips curve relationship. We chose the best forecasting model by minimizing the root mean square error of the forecasts compared to the realized values of inflation. Using our preferred specification to forecast the four-quarters-ahead inflation rate we projected that, based on fundamentals at the time, headline inflation would be greater than 2% by end 2016. We then incorporated into the model, the impact of oil price decline over the course of 2015, and showed the impact of oil prices not recovering from the US\$30/barrel level. In Exhibit 3, we reproduced that work and further show the impact of oil prices staying at their April levels. 6. Source: Calculations by Templeton Global Macro using data sourced from Bloomberg. Rates expectations calculated using one-year forwards versus three-month LIBOR as a proxy.

of the Japanese yen versus the US dollar—even after the most recent hawkish Fed statements, the yen was about 13% stronger year-to-date through the analysis date of this paper in mid-June. The Bank of Japan has been on hold since January—in our view, the BOJ has decided that further monetary easing on its part would be ineffective until the Fed hiking cycle resumes. Looking forward, we believe that Japan's growth and inflation outlook will continue to impart an easing bias to the BOJ's policy; the eventual resumption in Fed monetary policy tightening should therefore result in a meaningful resumption of yen depreciation.

The ECB has also taken the road of negative interest rates, as it struggles to bring inflation and inflation expectations back to target. Eurozone growth has been relatively solid, reflecting a cyclical upswing supported by a weaker euro and accommodative monetary policy. Accumulated slack in the economy, however, has kept price pressures muted, and we expect that ECB monetary policy will remain loose for a while and lag the Fed's tightening cycle.

Our view on China has not changed. Policymakers have stepped in to prevent a further deceleration in GDP growth, through higher credit growth and some recovery in infrastructure investment. Most recent activity data suggest that the moves have been generally successful, and we continue to believe that China will sustain a soft landing into 2017, striking a delicate balance between supporting growth and maintaining sufficient reform momentum. China's outlook remains characterized by the classic policy "trilemma," namely the impossibility of reconciling a flexible exchange rate, capital flows liberalization and independent monetary policy. Earlier this year, financial

markets feared that China would square the circle through a substantial exchange rate depreciation aimed at boosting growth. We believed that China would instead square the circle by slowing, and in some cases reversing, the process of capital account liberalization. Capital controls could be used to stem the loss in foreign exchange (FX) reserves and take the immediate pressure off the exchange rate, while allowing a gradual depreciation. China's government has indeed moved along these lines, and we expect this strategy to continue.

Against this background, our view on broader emerging markets (EMs) differs significantly from that embodied in current market pricings. Financial markets are not differentiating across different EM countries and are behaving as if all EMs were equally vulnerable to the commodity price downturn; currency markets in particular seem to be pricing in a scenario of systemic EM crisis/weakness, along the lines of previous EM crises (such as the Mexico Tequila crisis or the Asian financial crisis). We believe this view is deeply misguided. EMs differ substantially in terms of their vulnerability to lower commodity prices and slower Chinese growth, with the differences rooted in macroeconomic fundamentals, the degree of diversification of their economies and their policy responses to the current downturn. We believe that the key to successful investment in this macro environment lies exactly in distinguishing the more resilient EMs from the more vulnerable ones. In this paper we will be taking a deeper dive into the subject: We will analyze the criteria that, in our view, offer the best guide to identifying the right markets for us to invest in, and illustrate their application to four key countries.

# 1. Taking a Dive into Emerging Markets

### 1.1 Are Emerging Markets in Crisis?

To answer this question, we look first at what markets are pricing, as illustrated by Exhibit 4 below. On the basis of this chart, clearly the market perceives EMs as being in the midst of a crisis, one that is more severe in fact than any they have undergone in the past—including the various EM-driven crises of the 1990s and early 2000s, and the more recent global financial crisis (GFC).

# Emerging-Market Currencies Have Been Trading Below Crisis Levels

Exhibit 4: JP Morgan Emerging Markets Currency Index January 2000–April 2016



Source: JP Morgan. Low points in Exhibit 4 respectively represent the effects of the Argentina and Brazil crises in 2002 and the GFC of 2008.

Undoubtedly, the last several years have been trying for emerging markets, with 2015 marking the fifth consecutive year of decelerating growth. As the immediate recovery post-GFC was exceptionally strong, some deceleration was always in the cards. Over the last few years, however, the normal cyclical slowdown has been aggravated by seven severe and interlinked shocks:

- Fed policy has reversed its course, first phasing out quantitative easing and then delivering the first interest-rate hike in almost 10 years;
- 2. Volatility in international capital flows has risen significantly, partly as a result of the Fed's policy change;
- China's economy has slowed, and its ongoing rebalancing away from investment and heavy industry has intensified the impact on its demand for raw materials;
- Commodity prices have entered a deep and prolonged downturn, reflecting not only slower demand from China but also the excess capacity accumulated during the previous long upswing;

- Market uncertainty has intensified, due especially to the unprecedented transitions that both the Fed and China are now undertaking, as well as heightened geopolitical uncertainties;
- Global trade has slowed down significantly: Before the GFC, global trade used to grow twice as fast as GDP, now it barely keeps pace with it; and
- Some major EMs have suffered severe country-specific shocks—Brazil's political crisis is perhaps the most notable example.

However, despite the severity of the shocks, they have not triggered another systemic EM crisis along the lines of those seen in the 1990s. Instead, these shocks have so far resulted mostly in slower economic growth, rather than the severe crisis that appears to be priced in Exhibit 4.

The reason for this surprising resilience lies in the lessons that EMs have learned from previous financial crises, and which allowed many, albeit not all, of them to build substantial buffers and safeguards. These lessons can be enumerated as follows:

- 1. Flexible exchange rates, which have enabled a quick adjustment to exogenous shocks;
- 2. Substantial stocks of FX reserves;
- Prudent fiscal policies over an extended period, which reduced the immediate vulnerability while leaving some room for fiscal stabilizers to help cushion the blows:
- A more balanced macro policy mix, with more independent and credible central banks in a better position to keep inflation anchored while supporting growth in coordination with fiscal policy;
- Stronger balance sheets, notably at the government and financial sector level—though in some countries, corporations have instead increased debt levels;
- More robust and stable banking sectors operating in better regulated environments; and
- The competitiveness boost created by the overshooting of exchange rates in the most recent period (note that EM currencies are still almost 25% weaker than they were at the worst point of the GFC).

In sum, most EMs have learned the lessons of previous crises, and leveraged them to put themselves in a much stronger position to successfully weather the latest set of shocks.

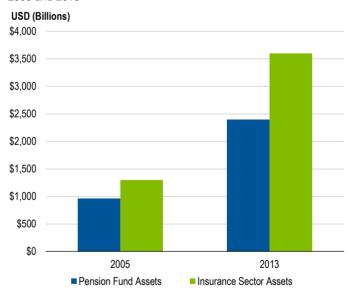
Traditionally, EM financial crises have been of three varieties:
1) currency crises; 2) banking crises; and 3) sovereign debt crises. The most severe crises typically involve more than one of these causes. This explains why most EMs have adopted flexible exchange rates and boosted their levels of foreign exchange reserves.<sup>7</sup>

Perhaps the most important step that emerging markets have taken to reduce their vulnerability to financial crises is the remarkable deepening of domestic financial markets over the past decade. In many countries, the development of a reliable domestic investor base has benefited from the rise of a broad middle class. For example, the total assets held by domestic insurers and pension funds in emerging markets have swelled from US\$2.3 trillion in 2005 to around US\$6 trillion in 2013. boosted by the expansion of the insurance sector in EM Asia and by pension funds in Latin America.8 Mexico stands out in its reduced reliance on the banking sector as a source of domestic funds, as can be seen in Exhibit 6. This transition toward more balanced funding has improved financial resilience. Domestic institutional investors can be a stabilizing force when asset prices collapse to levels that are clearly out of line with fundamentals—in the past, the lack of a strong domestic investor base often magnified the consequences of financial volatility.

The borrowing practices of governments across emerging markets have improved significantly. According to the Bank for International Settlements, governments have raised their reliance on funding in local markets, with the share of international debt securities falling from roughly 40% in 1997 to 8% in 2014, while the share of foreign holdings of local government debt has increased to 25%.9 Similarly, the increased importance devoted to attracting foreign direct investment (FDI) relative to other short-term investments has also helped some developing countries reduce the risk of sudden capital outflows. In recent years, some governments have also taken advantage of low interest rates to lengthen the maturity profile of their debt. For example, Mexico has extended the average maturity of sovereign bonds from under six years in 2010 to just over nine years, according to the International Monetary Fund's (IMF's) latest Fiscal Monitor (as at April 2016). At the same time, financial sophistication has increased, providing a wide variety of investment products to suit the needs of local and foreign investors. It is true that expanded privatesector borrowing from markets could potentially just shift some of the risks that were typically taken on by the banking sector, including currency mismatches. However, this transition does add another line of defense in a stress event, as standing back when non-financial corporations come under pressure is potentially less damaging than troubles brewing in the banking sector.

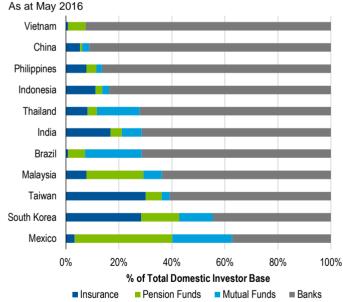
#### Domestic Investor Bases Have Significantly Expanded over the Last Decade

Exhibit 5: EM Assets Held by Domestic Insurance and Pension Funds 2005 and 2013



Source: JP Morgan.

Exhibit 6: Composition of Domestic Investor Base



Source: Standard Chartered, Local Markets Compendium 2016.

<sup>7.</sup> The eurozone crisis has recently served as a reminder of the merits of a flexible exchange rate in allowing independent monetary policy and providing an automatic stabilizer in the face of changing external conditions—mitigating the need for a typically much more painful domestic adjustment.

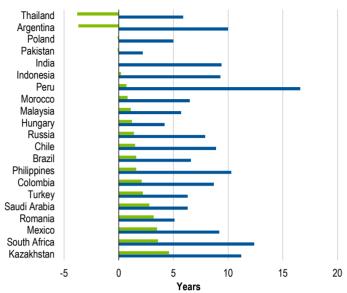
<sup>8.</sup> Source: JP Morgan.

<sup>9.</sup> Source: Bank for International Settlements, BIS 85th Annual Report, Chapter 3.

### Bond Maturity Ranges Have Increased Across Several EMs

Exhibit 7: EM Maturity Extensions and Average Maturities of Government Securities

2010-2016



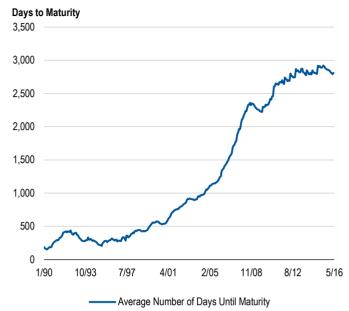
■ Maturity Extension from 2010 to 2016 ■ Average Term to Maturity in 2016

Source: International Monetary Fund, Fiscal Monitor, 4/16.

Of course, financial risks also vary considerably across regions and countries. However, a few common themes do seem to hold. First, contagion risk seems to have diminished. The same transmission mechanisms through financial linkages, trade and competitive currency devaluations have been operating in the past several years, but they have not overwhelmed economies in such a violent manner as in past episodes. Second, most recent crises have been relatively contained currency crises, as in the case of Brazil, without immediately cascading to the banking system. Overall, the lines of defense have widened; policymakers in many countries have more options and time to react when volatility picks up and their economies come under pressure. Although debt levels have increased in emerging markets since the GFC, these developments point to some degree of improvement in the robustness of the financial architecture in many countries and suggest a greater level of resilience at the global level than in the past.

# Exhibit 8: Mexican Government Securities: Average Number of Days Until Maturity

January 1990-May 2016



Source: Central Bank of Mexico, www.banxico.org.mx.

# 1.2 Developing a Proprietary Local Market Index

The analysis developed in the previous section suggests that to properly assess the relative risks and opportunities of different emerging markets today, we need a different framework, guided by a few key considerations overlooked in much of the current discussion and market pricing. The first is the much greater importance that local debt markets have assumed compared to previous EM crises, highlighted in Section 2, which has helped reduce the vulnerability to foreign capital flows and exchange rate exposure. Second, the greater importance of local debt markets implies that traditional indicators of external vulnerabilities, while important, are no longer the only or even the most important metric of resilience or vulnerability; and yet they still seem to play an oversized role in most EM analyses we see. Third, the greater role of local debt markets means that one needs to look more closely at (i) the strength and

sustainability of domestic demand, crucial to generating resources in times of external sector stress; and (ii) the quality of macroeconomic policies, which determine the trend and volatility in domestic yields and currencies. Fourth, we believe it is especially important to assess the extent to which countries have taken to heart the lessons of previous crises, as this helps determine not only their ability to reduce crucial vulnerabilities, but also their ability to respond quickly, decisively and effectively to new crises.

We have developed a scoring mechanism that allows us to rank countries, based on these considerations and the seven shocks that EMs currently face. As detailed on page 5, these are: Fed policy tightening; volatility in capital flows; China's slowdown; much lower commodity prices; heightened market uncertainty; slower global trade; and country-specific shocks. Our resulting proprietary Local Markets Resilience Index (LMRI) scores countries along five different factors:

- 1. The first factor, "policy mix," focuses on the quality of macroeconomic policymaking, from an institutional and capacity-to-implement perspective, taking into account the broader enabling political environment. A well-functioning government and parliament, fiscal rules and a highly independent central bank improve the policy mix, as does the political ability to push through needed changes.
- The second, "lessons learned" from their experience of past crises, evaluates the extent to which the country has learned lessons from previous crises or episodes of mismanagement of the economy, reevaluating the sustainability of its growth model and assessing financial fragilities.
- 3. The third aspect—though probably the first among equals—is "structural reforms": the legal and institutional changes that improve productivity and economic growth, determining the ability of a country to enhance its institutions and productive capacity to drive sustainable economic growth. An extended period when high commodity prices and indiscriminate capital flows could compensate for economic mismanagement is unlikely to return soon. Over the long term, there is no substitute for the hard steps necessary to diversify economic structures, upgrade infrastructure, improve the business environment, facilitate innovation and invest in high-quality education. Specific structural reforms could relate to areas such as the governance of state-owned enterprises, labor laws, the energy sector and corruption.

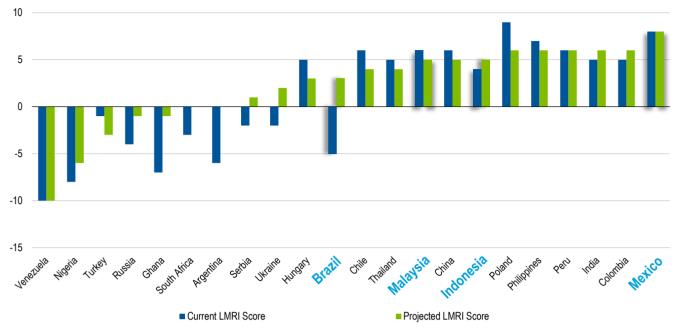
- 4. The fourth factor, "domestic demand," captures the ability of a country to grow on its own, abstracting from external factors. A small open economy is highly dependent on the rest of the world. By contrast, a large economy has the efficiency of scale, the gravity to attract investment and the ability to generate growth independently from the rest of the world. Other factors that determine domestic demand include demographic factors such as population growth and the age of the population; inflation; and wages and employment growth. Overstimulation of domestic demand runs the risk of overheating and hence reduces the score. Given the heightened degree of uncertainty in the global environment, we expect economies that are comparatively insulated from global forces and with healthy domestic demand to outdo their peers.
- 5. The fifth factor, "external vulnerabilities," captures the traditional exposure to external shocks and the risk of a balance of payments crisis or capital flight. Such indicators include the current account, external debt and commodity dependence. In some countries a substantial part of external debt is owed by companies to their foreign parent companies, and this is not regarded as a source of risk. "External vulnerabilities" are, in a sense, a different side of the same coin as "domestic demand": They capture the same idea that in a very volatile global environment, some degree of insulation from external shock is likely to prove especially valuable.

For each factor, we separately assess both current and projected conditions, so as to gauge the degree of risk along the investment horizon. We aggregate the five individual category scores to obtain an overall country score—our proprietary LMRI. The scoring along each category is necessarily based to an important extent on our subjective judgment; nonetheless, we believe it provides a strong rigor in assessing and comparing different markets in a way that allows us to assess the true underlying risk and to identify attractive opportunities where our score deviates significantly from the risk assessment implicit in market prices.

## Local Markets Resilience by Country (LMRI Scores)

**Exhibit 9: LMRI Scores by Country** 

As at June 2016 LMRI Score



Source: Templeton Global Macro.

The rating of countries is based on the five criteria, described above. Each criterion is assigned a value between -2 and +2 for the current situation, and similarly a value for the projected outlook, in the views of the team. The chart above shows the results of our ranking system for the selected subset of EMs across the different regions.

In the next section, we will be using four case studies, which illustrate some aspects of the research the group undertakes in analyzing individual countries, together with the scoring for each. We have picked Mexico, Brazil, Indonesia and Malaysia for the purposes of this paper.

## 2. Case Studies

## 2.1 Mexico (Overall LMRI Score, Current: +8; Projected: +8)

#### **Current and Projected**

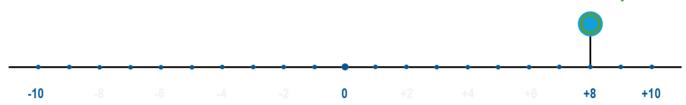
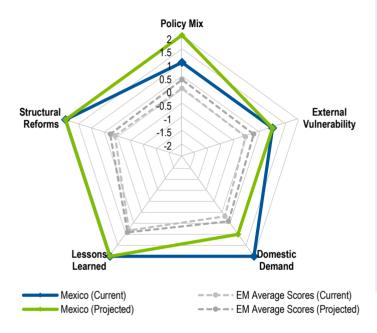


Exhibit 10: Mexico: Current and Projected Conditions (LMRI) As at June 2016



Source: Templeton Global Macro (TGM) LMRI scores; EM averages derived from LMRI calculations.

#### SUMMARY OF OUR LMRI RATING FOR MEXICO

Mexico is the textbook case of a country that has taken to heart the lessons of previous crises and moved to not only reduce macroeconomic vulnerabilities, but also launch wide-ranging structural reforms. In our LMRI, Mexico earns the highest scores for Lessons Learned—Mexico adopted a flexible exchange rate, built up foreign exchange reserves and reduced short-term debt-and Structural Reforms, both current and forward-looking, where the depth and breadth of Mexico's recent efforts stand out among emerging markets; the Policy Mix is strong and getting stronger, with prudent fiscal policy that has reduced dependence on oil revenues, and a proactive monetary policy; External Vulnerability is limited, as the share of oil in total exports has been steadily declining in favor of manufactured products; and Domestic Demand is very strong, thanks to healthy real wage growth and low unemployment, though we expect some weakening ahead due to the ongoing fiscal consolidation. Overall, Mexico scores close to the maximum on our LMRI, both current and forward-looking.

First of all, Mexico stands out among oil producers for its ability to effectively manage its dependence on oil revenues. As the charts below show, oil revenues have fallen from a peak of well over 40% of total revenues to current levels of about 20%. Despite this collapse, the government has remained committed to fiscal consolidation. In addition to a system of hedging out oil revenues one year ahead, in 2012 the government put into place fiscal reforms that allow non-oil revenues to compensate for declining oil revenues. As a consequence, the fiscal deficit has remained at a manageable 3.2% of GDP as at March 2016, and the government aims to achieve a primary surplus in 2017, for the first time since 2009.

Monetary policy has also been prudent and proactive. The central bank, fully independent and guided by its medium-term inflation target, has reacted pre-emptively to the depreciation in the exchange rate to prevent the risk that this could eventually feed into inflation pressures and endanger medium-term price stability. The central bank tightened monetary policy even as inflation remained well under control, showing little or no sign of pass-through from the weaker exchange rate, demonstrating the bank's determination to stay ahead of the curve.

#### Mexico Has Efficiently Managed its Oil Dependency while Fiscally Consolidating

Exhibit 11: Mexico: Total Government Revenue as Percent of GDP March 2011-March 2016 % GDF 23.5% 23.0% 22.5% 22.0% 21.5% 21.0% 20.5%

Source: Central Bank of Mexico, www.banxico.org.mx.

3/12

2015 and 2016 (YTD as at April 2016)

3/11

Exhibit 13: Mexico: Price of Oil Per Barrel (\$USD)

9/12

3/13

9/13

Total Revenue

3/14

3/15

9/15

3/16

\$/Barrel (Average) \$90 \$80 \$70 \$60 \$50 \$40 \$30 \$20 \$10 \$0 2015 2016 ■ Hedged Price Realized Market Price Source: Central Bank of Mexico, www.banxico.org.mx.

-2.5% -3.0% -3.5% -4.0%

Source: Central Bank of Mexico, www.banxico.org.mx.

#### Exhibit 12: Mexico: Oil and Non-Oil Government Revenues as Percent of GDP

March 2011-March 2016 % GDP 20% 18% 16% 14% 12% 10% 8% 6% 4% 2% ٥% 3/11 9/11 3/12 9/12 3/13 9/13 3/14 9/14 3/16 3/15 9/15

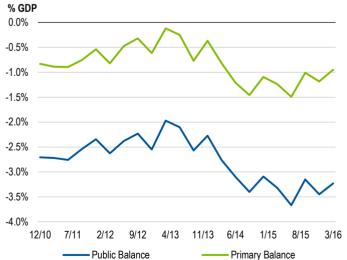
Non-Oil-Related Revenue

Source: Central Bank of Mexico, www.banxico.org.mx.

#### Exhibit 14: Mexico: Fiscal Deficit as Percent of GDP

Oil-Related Revenue

December 2010-March 2016



This prudent monetary policy stance has been especially helpful in reconciling international competitiveness with domestic private demand growth. Over the past several years, nominal wage growth has been relatively contained; combined with structural reforms, this has significantly enhanced the competitiveness of Mexico's manufacturing on a global level, notably vis-à-vis countries that experienced much more robust wage dynamics—China is a case in point.

At the same time, low inflation has supported robust real wage growth, which together with a declining unemployment rate has underpinned domestic demand. Retail sales have been resilient, and remittances continue to provide a steady source of income, as the charts below show. We have also observed continued strength of bank lending, which is growing at 15% yoy, albeit from a low base. Overall, these factors have supported a very healthy rate of economic growth.

#### Real Wage Growth and Declining Unemployment Have Supported Domestic Demand

Exhibit 15: Mexico: Real Wage Changes (Core CPI Adjusted)
March 2010–February 2016

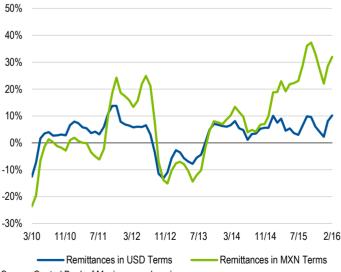
#### % Change (CPI Adjusted)



Source: Central Bank of Mexico, www.banxico.org.mx.

## Exhibit 17: Mexico: Changes in Remittances March 2010–February 2016

#### % Change (YOY 3-Month Average)



Source: Central Bank of Mexico, www.banxico.org.mx.

## Exhibit 16: Mexico: Unemployment Rate (Seasonally Adjusted) March 2010–February 2016

#### % Seasonally Adjusted 3-Month Average



Source: Central Bank of Mexico, www.banxico.org.mx.

## Exhibit 18: Mexico: Economic Activity and Retail Sales March 2010–February 2016

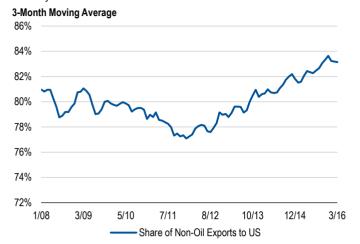
#### % Change (YOY 3-Month Average)



Source: Central Bank of Mexico, www.banxico.org.mx.

### Mexico's Economy Is Linked to the US Economy

Exhibit 19: Mexico: Share of Non-Oil Exports that Go to US January 2008–March 2016



Source: Central Bank of Mexico, www.banxico.org.mx.

GDP growth has also been helped by a strengthening in export performance since 2012. Clearly a part of the explanation is the recovery in US demand. Over the past four years, Mexico's external sector performance has become increasingly linked to the health of the US economy. As the charts above show, not only is a rising share of Mexico's exports going to the US, Mexico has also been successful in increasing its market share in the US.

We conduct a simple exercise to judge whether these changes are demand driven or supply driven, i.e., an increase in Mexico's competitiveness. As Exhibits 21 and 22 below show, the US and Mexican manufacturing sectors are highly correlated. This would suggest that US demand drives Mexican exports to an important degree.

Exhibit 20: US: Share of Imports from Mexico January 2008–February 2016

7% 6%

1/08

12/08

11/09

% of Total Goods Import

3-Month Moving Average
15%
14%
13%
12%
11%
10%
9%

Source: US Census Bureau and Central Bank of Mexico, www.banxico.org.mx.

9/11

8/12

7/13

6/14

% of Total Goods Import ex Crude Oil

5/15 2/16

10/10

The chart also demonstrates, however, that there has been an important change in the dynamic since 2012—in particular for most of the period Mexican industrial production (IP) growth has been systematically stronger than its US counterpart. This can be more clearly observed if we divide the time series into two periods: January 2001–December 2007 (blue) and January 2012–February 2016 (green). The scatter plot below shows that at any given growth rate for US manufacturing IP, Mexican manufacturing IP has jumped up. This is captured by the difference of the two constant terms in the regression lines, providing some evidence that there is more going on than just an increase in demand from the US.

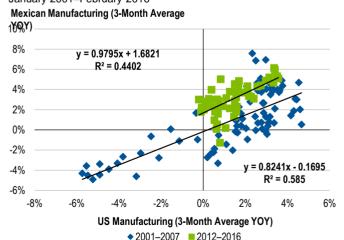
### Mexican Manufacturing Surges when US Manufacturing Increases

Exhibit 21: US and Mexican Manufacturing March 2000–March 2016



Source: The National Institute of Statistics and Geography (Mexican Manufacturing), US Federal Reserve (US Manufacturing).

## Exhibit 22: Correlation of US and Mexican Manufacturing January 2001–February 2016



Source: Calculations by Templeton Global Macro using data sourced from the National Institute of Statistics and Geography (Mexican Manufacturing), US Federal Reserve (US Manufacturing).

### Mexico Has Gained Export Competitiveness with a Higher Share of Value-Added Products

Exhibit 23: Mexico: High Value-Added Manufacturing Goods as Share of Total Non-Oil Exports

January 2003-March 2016



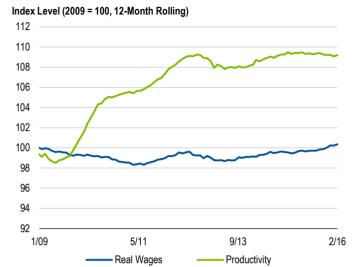
Source: Central Bank of Mexico, www.banxico.org.mx.

Digging deeper, we find that within the manufacturing sector the share of higher value-added products has been rising within total exports. Such products typically have lower demand elasticity as they are less substitutable. In addition to moving up the value-added chain, Mexico also has gained competitiveness, as wages have not kept up with increases in productivity. These factors lead us to believe that apart from the strength in US demand there have also been important supply side changes resulting from the gain in competitiveness within Mexico.

This improved competitiveness reflects in part the deep and farreaching structural reforms that Mexico has undertaken over the past few years. These include deregulation in the utilities sector, increased competition in the telecommunications sector and still ongoing labor market reforms. The impact of utility deregulation, in particular, has the immediate impact of lowering input costs. In addition, Mexico has implemented extremely important reforms in the energy sector, opening it up to foreign investment. In December 2015, Mexico conducted a third round of auctions, and the results exceeded expectations with 100% of oil and gas fields allocated to local and foreign investors. The FDI impact is expected to be in the region of US\$40 billion by 2018, or about 2.5% of GDP.<sup>10</sup> In March 2016, the government successfully launched the first-ever long-term electricity tender auction—the first steps in privatizing the sector. There were a total of 69 bidders against an expectation of only 10. The successful bidders won rights to provide the state-run

# Exhibit 24: Mexico: Productivity and Real Wage Growth in Manufacturing Sector

January 2009-February 2016



Source: Central Bank of Mexico, www.banxico.org.mx and the National Institute of Statistics and Geography.

electricity company with power beginning in 2018 and are expected to generate more than US\$2.1 billion in investment.<sup>11</sup> Given the success, the government plans another auction at the end of September this year, moving the country further along the path of privatizing energy. It is fair to say that Mexico's recent structural reforms record stands out among emerging markets.

Macroeconomic and structural reforms have also helped underpin the resilience of the country's external accounts. Mexico's external sector is often mischaracterized as being extremely oil dependent. In fact, the share of oil in total exports has been on a fairly steady decline for several years, currently standing at only 6% of the total exports. Meanwhile, the share of manufactured goods has been increasing, with vehicles, electrical machinery and mechanical machinery making up some 65% of the total.

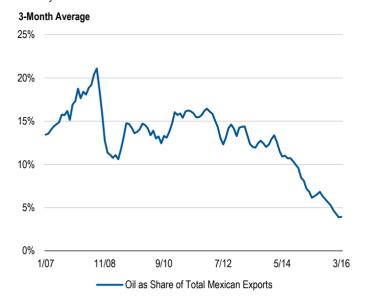
Furthermore, about 85% of Mexico's exports have the US as their destination. Given our relatively constructive outlook on the US, we see this as an additional support for the external sector. Mexico continues to gain market share in the US, as the charts on the next page show. The current account is in deficit, ending 2015 at a moderate 3.1% of GDP. Given Mexico's high level of international reserves, combined with access to the IMF's flexible credit line and the country's low level of external debt, we see Mexico's external vulnerability as very limited.

<sup>10.</sup> Source: Reuters, February 2014.

<sup>11.</sup> Source: Bloomberg News, March 2016.

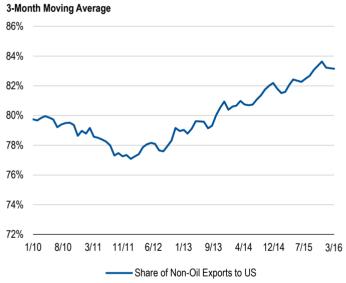
## Mexico's Oil Dependency Has Fallen as Exports to the US Have Increased

#### Exhibit 25: Mexico: Oil as Share of Total Mexican Exports January 2007–March 2016



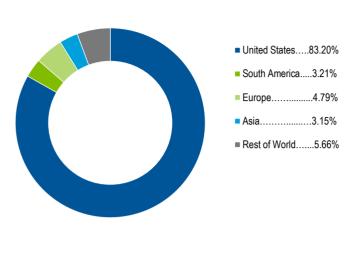
Source: Central Bank of Mexico, www.banxico.org.mx.

# Exhibit 27: Mexico: Share of Non-Oil Exports that Go to US January 2010–March 2016



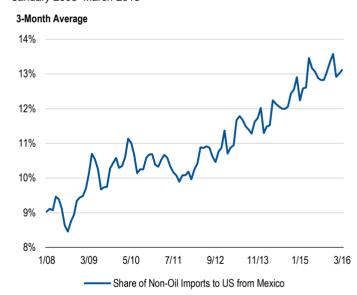
Source: Central Bank of Mexico, www.banxico.org.mx.

## Exhibit 26: Mexico: Destination of Mexican Exports As at March 2016



Source: Central Bank of Mexico, www.banxico.org.mx.

## Exhibit 28: Share of US Non-Oil Imports that Come from Mexico January 2008–March 2016



Source: US Census Bureau.

## 2.2 Brazil (Overall LMRI Score, Current: -4; Projected: +4)

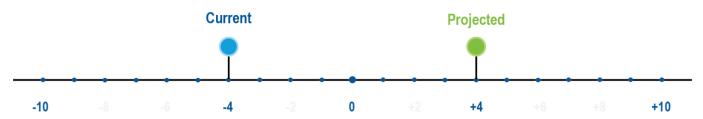
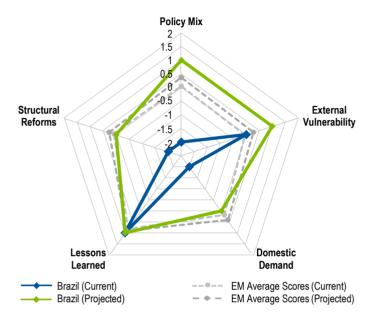


Exhibit 29: Brazil: Current and Projected Conditions (LMRI)

As at June 2016



Source: TGM LMRI scores; EM averages derived from LMRI calculations.

#### **SUMMARY OF OUR LMRI RATING FOR BRAZIL**

Brazil stands out as a vulnerable market that is, however, poised for a significant rebound, in our assessment. In our LMRI, Brazil earns a decent score for Lessons Learned: Brazil adopted a flexible exchange rate, has strong FX reserves and limited short-term debt; this is also reflected in a moderate and improving External Vulnerability score, with its reliance on commodities being the Achilles heel. Current scores for Policy Mix, Structural Reforms and Domestic Demand are at the lowest levels, as reflected in the combination of deep recession and political turmoil. However, we project a stabilization in Domestic Demand, a marked improvement in Policy Mix (in some areas already underway) with a new administration in place, and some improvement in Structural Reforms.

Brazil's economic situation started deteriorating in 2011, when the commodity "super cycle" turned and commodity prices began to decline. About 60% of Brazil's exports are commodity-based, making the country very exposed to commodity price cycles. At first, Brazil's policymakers hoped that the decline in commodity prices would prove temporary; as a consequence, public spending did not adjust to the deceleration in revenue growth, causing the primary fiscal balance to deteriorate.

The decline in commodity prices, however, proved protracted, as China's economy continued to slow and to rebalance away from commodity-intense investment. By 2014, the deterioration in Brazil's fiscal accounts accelerated sharply, with the primary balance plunging into a deep deficit. While the primary fiscal deficit of 2.3% of GDP is not high relative to Brazil's peers, the overall deficit of 9.3% of GDP stands out even among emerging markets.<sup>12</sup>

The runup in the fiscal deficit was accompanied for several years by domination in credit expansion of government-subsidized lending, making for a very weak macroeconomic policy framework.

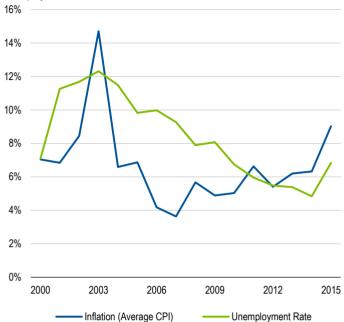
This already adverse economic situation was aggravated by the political crisis that came to a boil in 2015, as a corruption scandal undermined the credibility and stability of Dilma Rousseff's administration and rapidly paralyzed decision-making.

Brazil entered into a deep recession. The economy contracted by 3.85% in 2015, and we see it continuing to contract this year. The contraction in GDP has been accompanied by very high unemployment, low consumer confidence and falling real wages.

# Inflation and Unemployment Remain Persistently Elevated in Brazil

Exhibit 30: Brazil: Inflation and Unemployment Rate 2000–2015

Inflation % Change YOY and Unemployment Rate

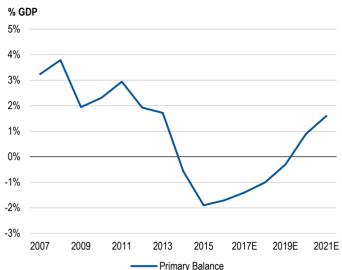


Source: International Monetary Fund, World Economic Outlook, 4/16.

<sup>12.</sup> Source: International Monetary Fund, Fiscal Monitor, 4/16.

### Policy Adjustments Have Already Had Positive Effects on the Fiscal Balance and Inflation





Source: International Monetary Fund, Fiscal Monitor, 4/16.

Even in these very adverse circumstances, however, macroeconomic policies have already started to turn around. Monetary policy has been tightened aggressively even in the face of a deep recession, to bring inflation expectations back under control. This policy should eventually start reducing inflation and inflation expectations; fiscal policy is being tightened, and the IMF projects an improvement in the primary fiscal balance in the years ahead; and as the charts on the next page show, credit expansion has been on a downward trend for a while already.

The government's ability to entrench prudent macroeconomic policies should improve further as the end of the political crisis comes closer. It is also worth noting that Brazil's public debt is still relatively manageable: Even after the recent deterioration, gross public debt is still just over 70% of GDP, and net debt is under 40% of GDP, which affords the country important breathing room as fiscal prudence is restored.

Credit policy has also started to be placed on a more sustainable footing. Between 2012 and 2015, the proportion of earmarked or subsidized lending via policy banks increased sharply, i.e., lending subsidized by the government. This crowded out non-subsidized/private sector lending. As the charts on the next page show, by the end of 2015 the stock of subsidized lending accounted for about half of total credit outstanding. This year, however, the situation started changing, with the flow of new credit declining rapidly. This change has come about by government policy rather than market forces. As Exhibit 34 on the next page shows, new credit expansion is contracting by some 20% yoy, compared to a peak growth of 60% yoy a few years ago.

Exhibit 32: Brazil: Inflation by Sector

December 2010-March 2016



Source: Central Bank of Brazil.

Exhibit 33: Brazil: General Government Gross Debt

2007-2015 % GDP 80% 70% 60% 50% 40% 30% 20% 10% ٥% 2007 2008 2009 2010 2011 2012 2013 2014 2015

General Government Gross Debt

Source: International Monetary Fund, Fiscal Monitor, 4/16.

### Credit Expansion Has Slowed Sharply

Exhibit 34: Brazil: Net Change in Outstanding Credit

July 2009-February 2016

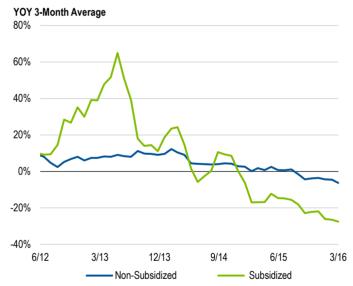
Net Change in Million Real (12-Month Rolling)



Source: Central Bank of Brazil.

Exhibit 36: Brazil: Financial System Credit Expansion: New Operations

June 2012-March 2016



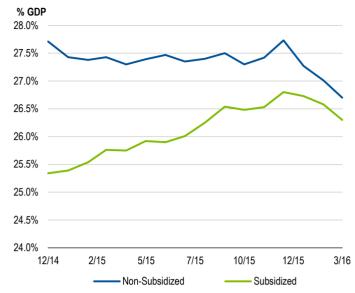
Source: Central Bank of Brazil.

A consequence of the change in policy has been the increase in non-performing loans within the banking sector, to which financial institutions have responded by increasing provisioning.

Meanwhile, Brazil's external accounts have also started to improve, partly as a consequence of the recession. While Brazil is a large closed economy, with exports and imports making up a very small share of GDP, the current account deficit had widened to 4.5% of GDP, driven by the collapse in commodity revenues and the loose fiscal stance. As the chart on the next

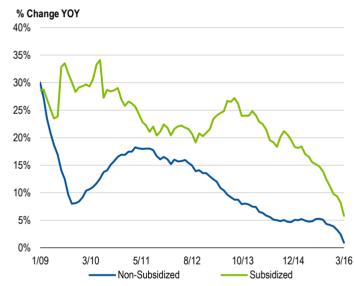
Exhibit 35: Brazil: Financial System Credit Outstanding

December 2014-March 2016



Source: Central Bank of Brazil.

Exhibit 37: Brazil: Change in Financial System Credit Outstanding January 2009–March 2016



Source: Central Bank of Brazil.

page shows, a very rapid improvement in the external balance is now underway, with the narrow balance of payments (current account plus net foreign direct investment: narrow balance of payments [NBOP]) moving into surplus (Exhibits 38 and 39).

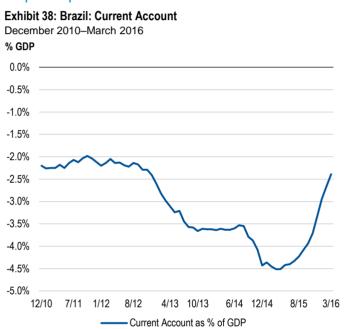
In addition, international reserves, as at the end of Q1 2016, covered 107% of gross external debt and 324% of short-term external debt. Furthermore, net FDI at 4.16% of GDP more than covers the deficit. Finally, domestic real-denominated debt makes up 90% of the government debt stock, limiting

vulnerability to foreign exchange mismatches. Brazil's external vulnerability is therefore quite limited.

Once political stability is restored, tackling much needed structural reforms should be a priority. During President Dilma Rousseff's first term little was accomplished in this area. With the pronounced deterioration in fiscal accounts, social security and pension reform have become more urgent. We believe broad consensus can be achieved once the country navigates the current political crisis and a new leadership team is fully in place.

Brazil had already learned some important lessons from previous crises—in particular, the value of a flexible exchange rate, high reserve levels and low short-term debt in limiting the country's external vulnerability. The most recent crisis has brought home the importance of maintaining a prudent and sustainable fiscal stance. And perhaps most importantly, Brazil's middle class has expressed a clear desire for greater transparency and for an economic policy framework that can bring back robust growth in living standards. We believe this will act as a powerful incentive for Brazil's policymakers to push forward with structural reforms, including improvements to the business environment.

#### Rapid Improvement in the External Balance Is Underway



Source: Central Bank of Brazil.

December 2006-March 2016

Exhibit 40: Brazil: Composition of Gross Debt

% Share of Total Gross Debt 60% 50% 20% 0% 12/06 1/13 8/14 3/16 6/08 12/09 7/11 Foreign Exchange Price-Linked Floating-Rate Fixed-Rate

Exhibit 39: Brazil: Narrow Balance of Payments (NBOP = Current Account + Net Foreign Direct Investment)

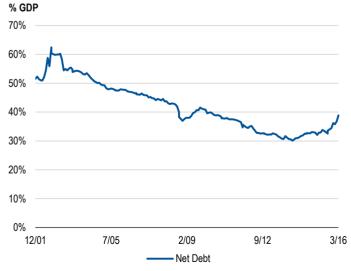
December 2010-March 2016



NBOP (Current Account + Net Foreign Direct Investment)

Source: Central Bank of Brazil.

Exhibit 41: Brazil: Net Debt as Percent of GDP December 2001–March 2016



Source: Central Bank of Brazil.

Source: Central Bank of Brazil.

### 2.3 Indonesia (Overall LMRI Score, Current: +4; Projected: +5)

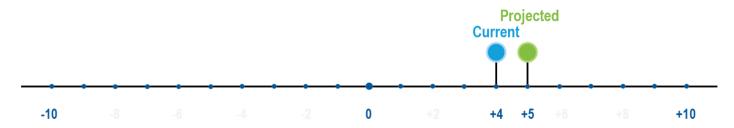
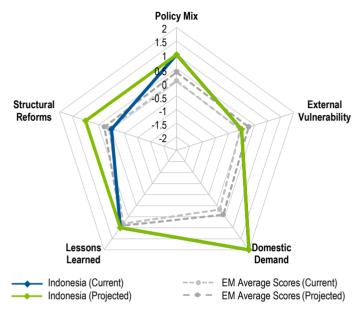


Exhibit 42: Indonesia: Current and Projected Conditions (LMRI) As at June 2016



Source: TGM LMRI scores; EM averages derived from LMRI calculations.

#### SUMMARY OF OUR LMRI RATING FOR INDONESIA

Indonesia is a consistently good performer across most of our key factors. In our LMRI, Indonesia earns the top score for Domestic Demand, both current and forward-looking, underpinned by favorable demographics; a strong score for Policy Mix, current and future, thanks to prudent fiscal policy and recent subsidy reforms; a moderate and stable External Vulnerability score, supported by a healthy level of FX reserves; a Structural Reforms score in the middle of the range, with some improvement projected in the future—Indonesia needs more investment in infrastructure; and a Lessons Learned score at a strong +1 both current and forward-looking—the country has taken to heart the lessons of the Asian financial crisis, adopting a flexible exchange rate and maintaining healthy levels of FX reserves.

Over the last several years, prudent fiscal and monetary policy have entrenched macroeconomic stability in Indonesia. Sound policymaking has paid off, putting the country in a strong position to respond to the deterioration in the external environment of the last few years, as commodity prices declined and the deceleration in China's economy affected the region's growth outlook.

The government maintained a prudent fiscal policy in the face of this deterioration, with the 2015 overall fiscal deficit coming in at 1.9% of GDP. Moreover, the government seized the opportunity provided by lower oil prices to launch a deregulation of fuel prices, which together with lower oil prices helped reduce the fuel subsidy bill by about 2% of GDP last year.

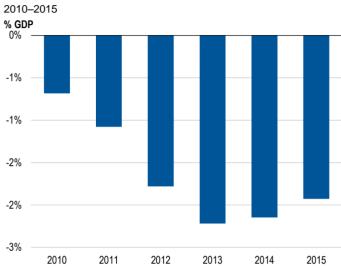
The deregulation of fuel prices is especially important because regulated fuel prices historically have been a leading cause for volatility in both inflation and the fiscal accounts in Indonesia. Since 2005, fuel prices were periodically adjusted in discrete jumps on several occasions, and as the charts below indicate, these discrete increases in fuel prices were a primary culprit in Bank Indonesia (BI) missing its inflation target.

The simple regression in Exhibit 48 confirms that it was regulated fuel prices, rather than economic activity or exchange rate movements, that were the primary drivers of headline inflation. Under these circumstances, there was not much room

for BI to commit to its inflation target or build its credibility. With the recent deregulation, the key barrier to building credibility is gone. We are of the view that BI will be able to raise its inflation fighting credentials going forward in line with progress in the overall reform of the country.

#### Indonesia Has Maintained Prudent Fiscal Policy

Exhibit 43: Indonesia: Fiscal Balance

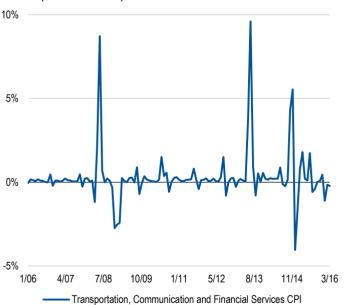


Source: Ministry of Finance (Indonesia).

#### Fuel Subsidies Caused Greater Inflation Volatility

Exhibit 44: Indonesia: Inflation in Oil-Related Items January 2006–March 2016

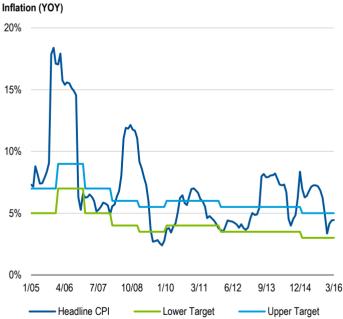
Inflation (Month-over-Month)



Source: Bank Indonesia.

Exhibit 45: Indonesia: Inflation Targets and Headline CPI January 2005–March 2016

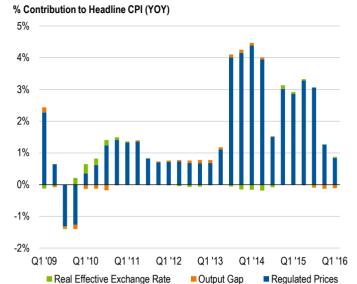
offer Company



Source: Bank Indonesia, Statistics Indonesia.

## Fuel Price Regulations Disrupted Central Bank Inflation Targeting

Exhibit 46: Indonesia: Contribution to Headline CPI Inflation Q1 2009-Q1 2016



Source: Statistics Indonesia, Bank Indonesia.

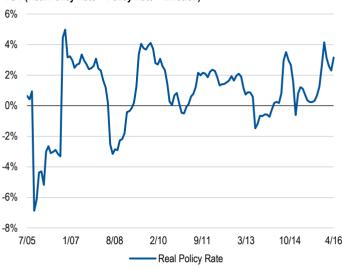
Over the last few years, we see the monetary policy stance as being appropriate, though BI's interest-rate policy has been somewhat inconsistent—as Exhibit 47 indicates, real rates have occasionally fallen into negative territory.

Macroeconomic stability and supportive monetary policy have allowed GDP growth to remain robust. Looking forward, Indonesia's demographics provide a solid underpinning for current and future domestic demand. Only about 5% of the population is 65 or older—making for very favorable demographics. We continue to see a steady increase in the rate of urbanization, accompanied by a decline in the unemployment rate, which has come down from 10% in the mid-2000s to a current level of about 6%. Exports make up less than 20% of GDP, and looking to the Q1 2016 GDP growth of 4.9% yoy, more than 90% of the growth came from private consumption and capital formation. As such, the strength of domestic demand is a fundamental strength of the Indonesian economy, in our view.

To further strengthen the country's prospects for sustainable robust growth, Indonesia's government should raise the very low revenue ratio in order to fund an increase in capital expenditure, notably on infrastructure. This has been an area of weakness in fiscal policy, in that most of the fiscal consolidation has been on the back of lower capital spending, rather than higher revenue generation. The revenue-to-GDP ratio is very low, at 15%. The government is committed to improving infrastructure, and while progress over successive administrations has been slow, the current leadership seems to be making greater progress than previous administrations. A strengthening of infrastructure should go hand in hand with further improvements in the business environment. As the

Exhibit 47: Bank Indonesia Real Policy Rates
July 2005–April 2016

YOY (Real Policy Rate = Policy Rate - Inflation)



Source: Bank Indonesia.

Exhibit 48: Indonesia: Regression Output with CPI as Dependent Variable

Q1 2009-Q1 2016

Variable	Coefficient	Std. Error	T-Statistic	Probability
Output Gap	0.200	0.539	0.371	0.714
REER	0.015	0.032	0.458	0.651
Regulated Prices	0.248	0.029	8.428	0.000
Constant	3.907	0.241	16.203	0.000
R-Squared	0.783	Mean Dependent VAR		5.467
Adjusted R-Squared	0.757	S.D. Dependent VAR		1.659

Source: Calculations by Templeton Global Macro using data sourced from Statistics Indonesia. REER = Real Effective Exchange Rate.

charts on the next page show, Indonesia has been improving both in terms of ease of doing business and of transparency; however, on an international scale, Indonesia does not rank very highly, and further progress will be needed in the years ahead.

We see the external sector as largely neutral to the Indonesian economy. Indonesia runs a small current account deficit that is not fully financed by net FDI flows, leading to a narrow balance of payments deficit of 1% of GDP. Balancing this vulnerability, however, is the fact that international reserves are more than twice the level of short-term debt. Public debt is not vulnerable to foreign exchange mismatches.

### Ease of Doing Business and Overall Transparency Have Improved in Indonesia



Indonesia Malaysia

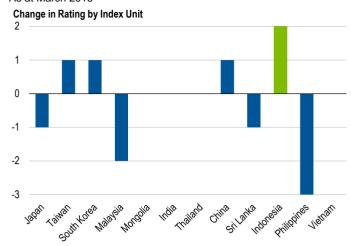
Source: The World Bank, Doing Business Report 2016.

India

-6

**Brazil** 

## Exhibit 50: Indonesia: Change In Transparency Score As at March 2016



Source: © 2016 by Transparency International. Licensed under CC-BY-ND 4.0.

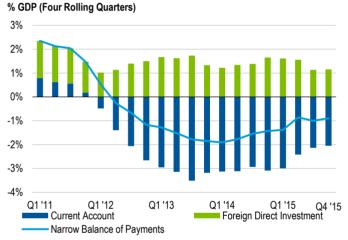
### Indonesia's Large Foreign Reserves Help Reduce its External Vulnerability

South Africa

Mexico

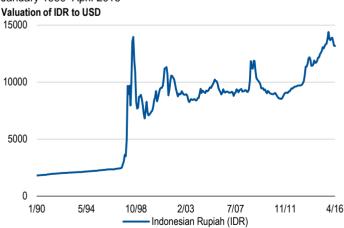
Turkey

Exhibit 51: Indonesia: Narrow Balance of Payments Q1 2011–Q4 2015



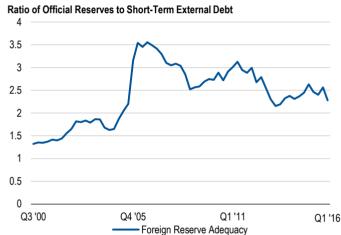
Source: Calculations by Templeton Global Macro using data sourced from Bank Indonesia.

Exhibit 53: Valuation of Indonesian Rupiah through 1997 Crisis January 1990–April 2016



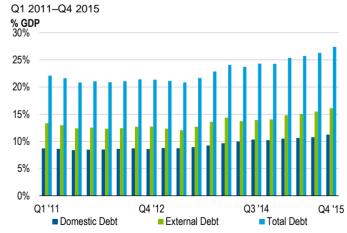
Source: International Monetary Fund, International Financial Statistics, 4/16.

## Exhibit 52: Indonesia: Foreign Reserve Adequacy Q3 2000–Q1 2016



Source: Calculations by Templeton Global Macro using data sourced from Bank Indonesia and Oxford Economics.

#### Exhibit 54: Indonesia: Central Government Debt



Source: Statistics Indonesia; Bank Indonesia; International Monetary Fund, International Financial Statistics, 4/16.

### 2.4 Malaysia (Overall LMRI Score, Current: +6; Projected: +5)

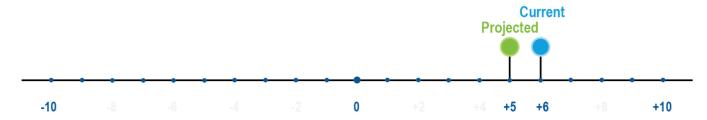
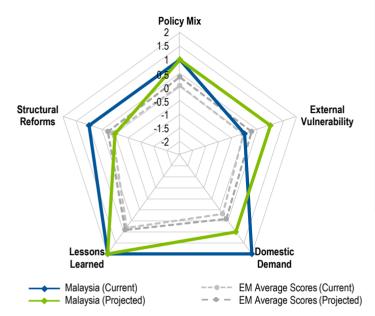


Exhibit 55: Malaysia: Current and Projected Conditions (LMRI) As at June 2016



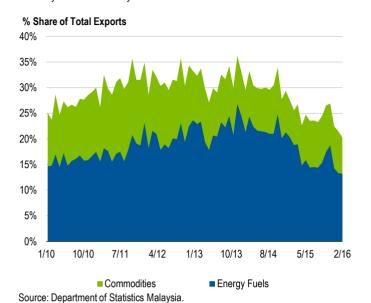
Source: TGM LMRI scores; EM averages derived from LMRI calculations.

#### SUMMARY OF OUR LMRI RATING FOR MALAYSIA

Malaysia is a very good performer based on our metrics. Our LMRI highlights Malaysia's very strong Domestic Demand, though with some weakening projected ahead; Malaysia earns top scores for Lessons Learned, both current and forward-looking, reflecting its adoption of a flexible exchange rate and prudent macro policies; it scores well on Structural Reforms, thanks to strong institutions and transparency, though we see headwinds ahead for further reform implementation; Policy Mix scores at a strong +1 both current and forward-looking, in recognition of the ongoing fiscal consolidation and prudent monetary policy; and External Vulnerability is limited, thanks to the high degree of export diversification, and is projected to improve further.

### Declining Commodity Prices Had a Severe Impact on the Malaysian Economy

Exhibit 56: Malaysia: Share of Commodity Exports January 2010–February 2016

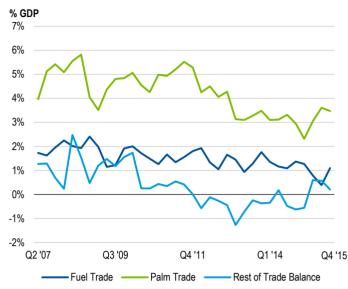


Malaysia has also been hit hard by the turn in the commodity cycle; moreover, lower commodity prices have been compounded by the slowdown in China, capital outflows and some political volatility. The policy response to these shocks, however, has been prompt, decisive and effective.

Malaysia's commodity exports fell by 30% over the course of 2015. The trade balance in commodities worsened by more than 2% in 2015 compared to 2013. As Exhibit 56 shows, commodities represent just about 20% of Malaysia's exports, a decline from over 30% in 2014. The commodity downturn, therefore, constituted a very severe shock.

A flexible exchange rate was the first line of defense: The authorities allowed the ringgit to depreciate by about 25% against the US dollar, to cushion the adverse terms of trade shock. The depreciation helped to limit the deterioration in the current account balance, which remained comfortably in surplus, despite the severity of the commodity price decline. Policymakers also used some of their accumulated FX reserves, to the tune of about US\$36 billion between mid-2014 and end-2015, to respond to the acceleration in capital flows and help stabilize market conditions. Malaysia's international reserves still cover 100% of short-term debt, a level that we view as adequate, albeit low compared to peers.

## Exhibit 57: Malaysia: Trade Balance Q2 2007–Q4 2015



Source: Department of Statistics Malaysia.

# Malaysia's Flexible Exchange Rate Helped Cushion its Terms-of-Trade Shock

Exhibit 58: Valuation of Malaysian Ringgit Since 1997 February 1997–May 2016 Valuation of Malaysian Ringgit (MYR) to USD

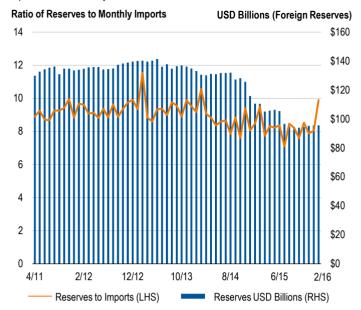


Source: Bank Negara Malaysia.

### International Reserves Still Cover 100% of the Country's Short-Term Debt

Exhibit 59: Malaysia: Foreign Reserves to Imports

April 2011-February 2016



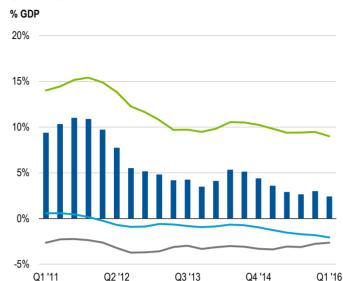
Source: Calculations by Templeton Global Macro using data sourced from Department of Statistics Malaysia and Bank Negara Malaysia.

The adverse commodity shock has been mitigated by the significant degree of diversification in Malaysia's economy and export sector, and by the ability of non-commodity industries to respond quickly to the changing environment. Manufacturing and services together account for 80% of the economy. Within commodity exports, energy accounts for about 65% of the total, indicating some diversification even within the category.

## Exhibit 60: Malaysia's Current Account

Current Account

Q1 2011-Q1 2016



Source: Calculations by Templeton Global Macro using data sourced from Department of Statistics Malaysia.

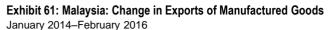
Goods

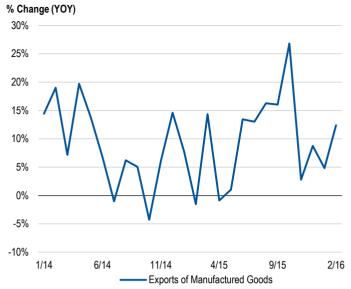
Services

Income

As commodity prices fell, resources shifted from the commodity sector to manufacturing exports, including electronics. The scatter plot on the next page shows the negative correlation (negative sloping line in Exhibit 62) between the non-energy trade balance and oil prices, as illustrated in Exhibits 61 and 62. When oil prices decline, Malaysia's economy reacts by reallocating resources to non-commodity sectors, boosting the

### Malaysia's Economy Reallocates to Non-Commodity Sectors when Fuel Prices Decline



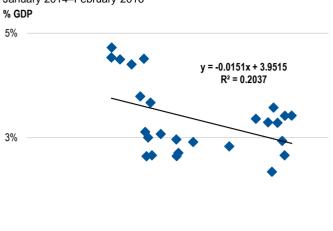


Source: Department of Statistics Malaysia.

positive correlation (positive sloping line).

# Exhibit 62: Malaysia: Correlation of Trade Balance ex Fuel with Oil Prices

January 2014-February 2016



Global Oil Prices (USD per Barrel)
Source: Department of Statistics Malaysia and Bank for International Settlements.
Exhibits 62 and 63 respectively show a negative correlation (negative sloping line) and positive correlation (positive sloping line).

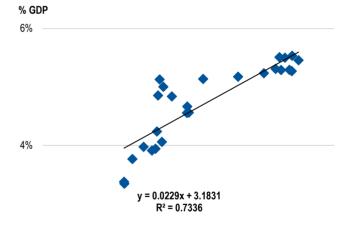
\$60

\$80

\$100

\$120

Exhibit 63: Malaysia: Correlation of Trade Balance Including Fuel January 2014–February 2016



\$0 \$20 \$40 \$60 \$80 \$100 \$120

Global Oil Prices (USD per Barrel)

Source: Department of Statistics Malaysia and Bank for International Settlements.

Exhibits 62 and 63 respectively show a negative correlation (negative sloping line) and

country's export performance and improving the non-energy trade balance (Exhibits 63 and 64). This time around the same dynamics were at play, cushioning the deterioration in the overall trade balance and current account.

### Exhibit 64: Malaysia: Exports and Imports

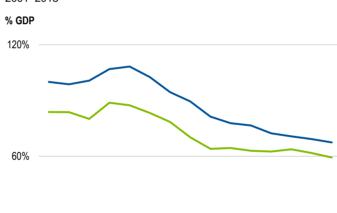
\$40

\$20

2001-2015

0%

\$0





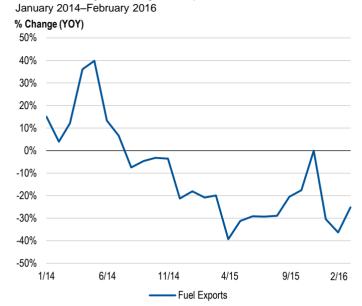
Source: Department of Statistics Malaysia.

The decline in commodity prices also had a significant impact on the government's fiscal revenues. Most of the government's non-tax revenue is oil-related, and this declined by about 1.5% of GDP over the 2014–2015 period (Exhibits 65–68).

2%

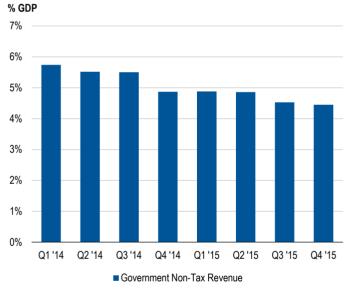
### Malaysia's Fiscal Revenues Decline when Commodity Prices Drop

Exhibit 65: Malaysia: Changes in Exports of Fuel



Source: Department of Statistics Malaysia.

Exhibit 67: Malaysia: Government Non-Tax Revenue Q1 2014–Q4 2015



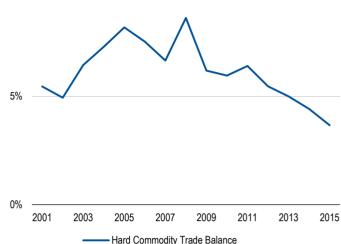
Source: Bank Negara Malaysia.

The government moved quickly to compensate for the decline in oil-related revenues. In April 2015, it introduced a 6% goods and services tax (GST), which has increased indirect tax revenue by more than 1% of GDP through Q4 2015. At the same time, fuel subsidies were reduced to below 2.5% of GDP

Exhibit 66: Malaysia: Hard Commodity Trade Balance 2001–2015

% GDP

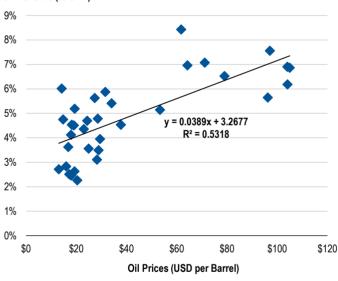




Source: Department of Statistics Malaysia.

Exhibit 68: Malaysia: Correlation of Oil Revenue with Oil Prices 1981–2014

Oil Revenue (% GDP)



Source: Ministry of Finance (Malaysia), Department of Statistics Malaysia and International Monetary Fund, Primary Commodity Prices, 4/16.

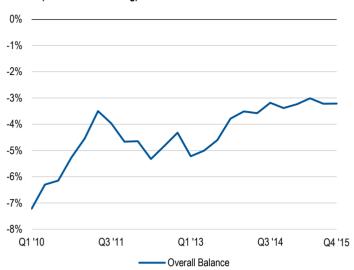
in 2015 from more than 3.5% the year before, in large part due to fuel price deregulation. The sum of the two measures resulted in a fiscal balance correction of about 2.5% of GDP, and helped reduce the fiscal deficit to 3% of GDP last year from over 5% of GDP five years ago.

### Quick Adjustments to Tax and Subsidy Policies Helped Reduce the Country's Fiscal Deficit



Q1 2010-Q4 2015

% GDP (Four Quarters Rolling)



Source: Bank Negara Malaysia.

Buttressing sound fiscal policy, the monetary authorities have maintained an independent and prudent policy stance, resulting in low and stable inflation: Consumer Price Index inflation has remained anchored close to 2%, notwithstanding the implementation of the GST and a significant depreciation of the exchange rate. The monetary policy stance has been carefully calibrated, allowing liquidity to keep expanding at a sufficient pace to support domestic demand growth. Overall GDP growth was 5% in 2015, lower than the previous year's 6%, but still robust. Given the ongoing fiscal consolidation, some additional slowdown is likely this year, but the long-term prospects remain very healthy.

Domestic demand is underpinned by both structural factors, which include Malaysia's young demographics and rising female labor force participation, and cyclical factors such as rising real wages and low unemployment. While household debt is high (over 85% of GDP as at Q3 2015), it is balanced by very high financial assets, which are twice the level of debt. GDP grew at 5.0% yoy in 2015, with a 3.1 percentage point (pp) contribution coming from private consumption. Together with a 0.9% pp contribution from investment, the net debt level drops to 82% of total GDP growth. Given the current cyclical strength of the economy, we have conservatively marked this factor down looking forward.

## Exhibit 70: Malaysia: Indirect Tax Revenue

Q1 2010-Q4 2015

### % GDP (Four Quarters Rolling) 4.8% 4.6% 4.4% 4.2% 4 0% 3.8% 3.6% 3 4% 3.2% 3.0% Q1 '13 Q1'10 Q3 '11 Q3 '14 Q4 '15

Source: Bank Negara Malaysia.

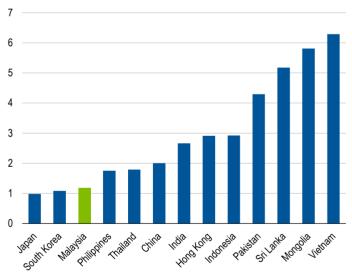
# Sound Monetary Policy Has Kept Inflation Low and Stable

Indirect Tax Revenue

#### Exhibit 71: Volatility of Inflation by Country

As at March 2016

#### Standard Deviation of Annual Inflation Rates



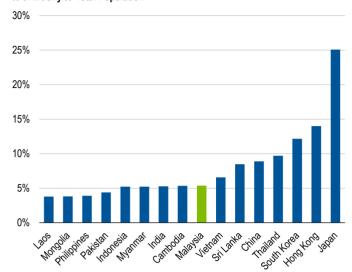
Source: Calculations by Templeton Global Macro using data sourced from International Monetary Fund, World Economic Outlook, 4/16. Standard deviation is a statistical measurement of the dispersion of historical data. A higher standard deviation means greater volatility.

### Young Demographics and Real Wage Growth Have Been Strengthening Domestic Demand



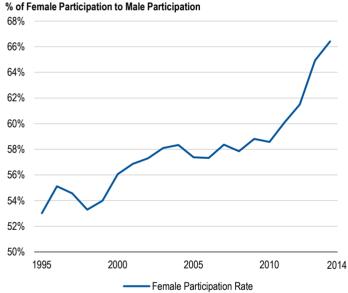
As at March 2016

#### % of Elderly to Total Population



Source: United Nations, Department of Economic and Social Affairs, Population Division (2015), World Population Prospects: The 2015 Revision.

Exhibit 74: Malaysia: Female to Male Labor Force Participation Rate 1995–2014



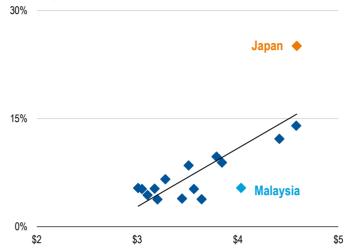
Source: The World Bank: World Development Indicators.

Malaysia has learned the lessons of the 1997 Asian financial crisis: A flexible exchange rate regime, a diversified economy and prudent macroeconomic policies have served the country well during the recent commodity shock, as has the prompt and well-designed policy response.

Malaysia also benefits from high quality institutions. Despite the current corruption scandal involving Prime Minister Najib Razak and 1MDB, Malaysia still scores highly with respect to

## Exhibit 73: Correlation of Old Age and Income Levels in Asia As at October 2015

#### % of Elderly to Total Population

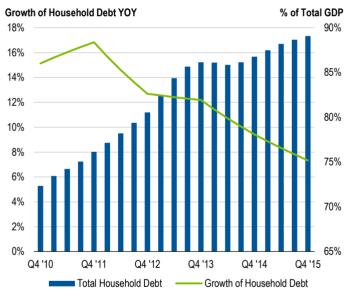


Source: Calculations by Templeton Global Macro using data sourced from International Monetary Fund, World Economic Outlook, 10/15. Asian countries as defined by the IMF.

Income per Capita in USD

Exhibit 75: Malaysia: Growth of Household Debt

Q4 2010-Q4 2015



Source: Malaysia Department of Statistics, Oxford Economics.

transparency—second only to Singapore in Southeast Asia, implying that corruption is seen as contained rather than endemic. However, we do see some threats going forward, including the current political situation making implementation of structural reforms more difficult in the future. In addition, populist and nationalist measures, in particular with respect to labor market policies, could have a negative impact on the ease of doing business in the country.

## Conclusion

The last few years have been testing for emerging markets, as a cyclical slowdown has been compounded by a set of severe shocks, comparable in magnitude to those experienced in the crises of the 1990s and early 2000s. Yet, contrary to widespread market fears, these shocks have not triggered a systemic EM crisis; they have instead resulted largely in slower growth and depreciation pressures on exchange rates.

This resilience is explained by the fact that many EMs have taken to heart the lessons of past crises, and have built substantial buffers and safeguards, including flexible exchange rates, higher stocks of FX reserves, stronger balance sheets and more robust macro policies, among others. The remarkable deepening of domestic financial markets over the past decade is perhaps the most important step that EMs have taken to reduce their vulnerability to financial crises.

Recognizing the major changes that EMs have experienced over the past decade, in this paper we have laid out a new framework to assess the investment risks and opportunities in individual markets. Our framework extends beyond the traditional indicators of external vulnerability, recognizing the much greater importance of local debt markets. Our framework therefore focuses on the strength of domestic demand, the quality of macroeconomic policies, and the extent to which individual countries have learned the lessons of past crises. Based on this framework we developed our proprietary Local Markets Resilience Index to rank countries in terms of both their current and projected conditions. We believe this methodology provides a much better roadmap to investment opportunities than the narrow focus on external vulnerabilities that still prevails in financial markets.

#### WHAT ARE THE RISKS?

All investments involve risks, including possible loss of principal. Special risks are associated with foreign investing, including currency fluctuations, economic instability and political developments. Investments in emerging markets, of which frontier markets are a subset, involve heightened risks related to the same factors, in addition to those associated with these markets' smaller size, lesser liquidity and lack of established legal, political, business and social frameworks to support securities markets. Because these frameworks are typically even less developed in frontier markets, as well as various factors including the increased potential for extreme price volatility, illiquidity, trade barriers and exchange controls, the risks associated with emerging markets are magnified in frontier markets. Bond prices generally move in the opposite direction of interest rates. Thus, as prices of bonds in an investment portfolio adjust to a rise in interest rates, the value of the portfolio may decline.

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For Exhibits 3, 9, 10, 29, 31, 42 and 55, there is no assurance that any estimate or projection will be realized.

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