



Monetary Policy in 2008

79	Overview
79	Monetary Policy in 2008
83	Monetary Operations in 2008
87	<i>White Box: Core Inflation: Measurements and Evaluation</i>
91	<i>White Box: Monetary Policy Communication in Malaysia</i>

Monetary Policy in 2008

OVERVIEW

Monetary policy in 2008 operated in a complex environment with rapidly changing inflation, economic and financial conditions. Monetary policy in the first half of the year was confronted with heightened risks of elevated inflation arising from supply-driven factors, and the risk that domestic demand could be affected by adverse external developments. The balance of risks to growth and inflation shifted rapidly during the course of the year. Inflation rose significantly to multi-year highs following high food and commodity prices and the Government's adjustment to domestic fuel prices. Notwithstanding the significant rise in headline and core inflation, price pressures were expected to moderate in 2009, as higher prices began to erode the purchasing power of households. In addition, the global financial turmoil was expected to have an adverse impact on the performance of the export sector.

Monetary policy in 2008 operated in a complex environment emanating from supply-driven inflationary shocks, financial market contagion and decelerating global growth

By the end of the third quarter, although headline inflation was still elevated in many countries including Malaysia, the evidence of its deflationary impact on growth had already become evident. By then, the financial turmoil had become more widespread and had begun to substantially undermine global growth. Concerns over the growth prospects began to take precedence over concerns about inflation. By the fourth quarter, the balance of evidence became strongly skewed towards the risks to growth, with the global growth and trade outlook deteriorating considerably and inflation in many countries starting to abate amidst rising slack capacity and retreating commodity prices.

MONETARY POLICY IN 2008

At the beginning of the year, the risks of rising inflation and the uncertainties surrounding the growth outlook were about balanced. There were significant concerns regarding inflation. The prognosis earlier during the year was for headline and core inflation to continue trending upwards, reflecting the pass-through of the higher global food and commodity prices onto the domestic economy. On the growth front, domestic demand was strong during this period, though with a slight moderation compared to 2007.

While global food and commodity prices were expected to remain elevated, the upward pressures on domestic inflation were assessed to be fairly contained for several reasons. The presence of Government subsidies on fuel and certain food items mitigated the pass-through of higher global prices into domestic prices. In addition, labour costs were expected to rise at a pace commensurate with improvements in labour productivity. Furthermore, the weaker global economic outlook was expected to contain further increases in global commodity prices, thereby easing the domestic inflationary pressures emanating from food and commodity prices. The expectation therefore was that headline and core inflation would be higher. Overall, inflation was forecast to be 2.5% - 3.0%, with a gradual declining trajectory towards the end of the year.

On the growth front, economic activity remained resilient, underpinned by strong private consumption and investment. As a commodity producer, the economy received an additional boost from higher trade receipts, especially from the sale of crude palm oil, petroleum and rubber. The forecast was for the economy to expand by 5% - 6% in 2008, a rate that is close to its estimated potential output. Notwithstanding the relatively healthy outlook for GDP growth, there were considerable uncertainties with respect to economic prospects going forward. Rising inflation, especially of food prices, which comprise 31.4% of the average expenditure of the Malaysian consumer, had affected

disposable incomes and threatened to reduce the discretionary spending of a large segment of Malaysian households. Profits of businesses were also affected by rising costs. Growth prospects were also bounded by moderating global growth which was gradually being weighed down by the financial turmoil in the major financial markets.

As a highly open economy, the most visible threat to Malaysia would be from the trade channel. While a large share of Malaysia's trade was with Asia, there were concerns that a rapid and significant decline in the final demand in the advanced economies, and an escalation in bearish consumer and business sentiments, could create significant risks to the external sector. There was also the risk of contagion, given the high integration of the Malaysian financial markets with the rest of the world. To Malaysia's advantage, Malaysian banks had minimal exposure to the problems in mortgage related products and markets of the advanced economies.

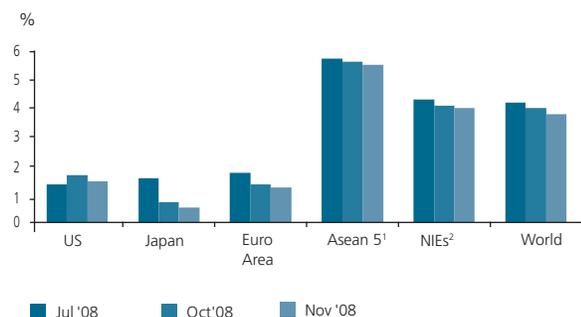
From the monetary policy perspective, the risks to growth and inflation in the first half of the year were therefore relatively balanced. As the risks of higher inflation and moderating growth became more evident as the year progressed, monetary policy was left unchanged. Monetary policy surveillance was focused on assessing the risks of second-round effects on inflation from the higher commodity prices. Indicators suggested that while inflationary expectations had increased,

monetary conditions remained stable, and wage demands continued to be moderate and were largely compensated by productivity growth. Recognising the limited role of monetary policy in dealing with the first-round effects of supply-driven shocks on inflation, there was a greater focus by the Government on measures to improve and increase production as well as reduce costs. In relation to this, the movement of rice across state borders was freed in stages to increase competitiveness and lower domestic prices, and rice buffer stocks were raised through increased imports from Thailand.

The monetary policy dilemma intensified significantly when inflation surged following the significant fuel price adjustment in June with growth prospects being negatively affected by the ensuing deflationary effect on the economy

The monetary policy dilemma however became more intense by the middle of the year. The gap between domestic and international fuel prices widened to unprecedented levels as global oil prices reached historical highs. As the fiscal costs of fuel subsidies became unsustainable,

Chart 3.1
Changing Outlook for Real GDP Growth in 2008 (Annual change, %)



¹ Indonesia, Malaysia, Philippines, Thailand and Vietnam
² Newly Industrialised Economies

Source: IMF, WEO July, October and November 2008

Chart 3.2
Contribution to Headline Inflation

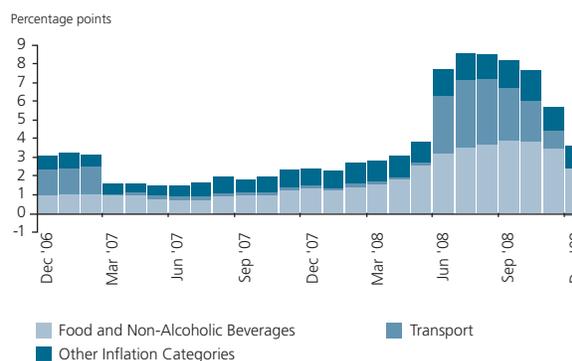
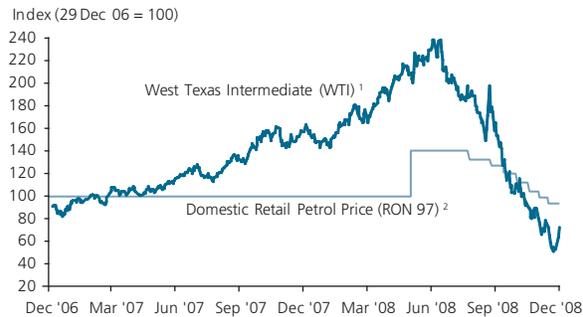


Chart 3.3
Global Oil Prices and
Domestic Retail Petrol Price (RON97)



¹ Source: Bloomberg

² Source: Ministry of Domestic Trade and Consumer Affairs

the Government raised domestic fuel prices by up to 40.4% on 4 June, which was the largest adjustment since 1990. Headline inflation, which was already experiencing upward pressure from rising food and commodity prices, accelerated to 7.7% in June from 3.8% in May. Inflation increased further to 8.5% in July and August. The inflation forecast for 2008 was revised upwards to 5.5% – 6.0% at the July MPC meeting.

Given the magnitude of the increase in fuel prices, the first-round effects on the prices of goods and services were expected to be large. While there were limitations to what monetary policy could do under these circumstances, there was however the concern that this might fuel inflationary expectations. A monetary policy response might have been warranted had there been indications of wages increasing disproportionately or evidence of second-round effects on inflation. Evidence from monetary policy surveillance however indicated that the sharp increase in prices had eroded the purchasing power of consumers and had led to cutbacks in discretionary spending, which would in turn result in slower economic growth. Without evidence of a strong wage response, the high inflation would not be sustained. Surveys and industry consultations by the Bank showed that wage demands remained moderate. Monetary and credit conditions showed relatively moderate growth rates. It was

also becoming more evident that the ongoing financial turmoil in the advanced economies had become more acute and had begun to negatively affect global economic activity, and thereby was expected to become a significant downside risk to the performance of Malaysia’s external sector. Thus, notwithstanding the rise in inflation, the downside risks to growth had also become significantly elevated. In light of these considerations, the decision therefore was for monetary policy to remain unchanged.

It was recognised that such a decision would be highly contentious given the evidence of high inflation. The combination of the spike in inflation and the then relatively imperceptible signs of slower global and domestic growth raised expectations for an increase in the OPR during this period. There were concerns that inflationary expectations would become unhinged, which would in turn complicate further the conduct of monetary policy. The decision to maintain the OPR at 3.5% created the perception that the monetary policy strategy undertaken by the Bank was ‘behind the curve’. The Bank enhanced its communications to explain the issues to the public. Specifically, the Bank elucidated its views on the unfolding economic and financial developments and the consequential impact that these developments would have on the medium-term domestic growth and inflation trends. It explained that the surge in inflation would be temporary and that inflation would moderate in 2009. The Monetary Policy Statement (MPS) was further augmented by additional statements and communication sessions with the industry and the public (Note: Box Article on Monetary Policy Communication in Malaysia).

By the end of the third quarter, there were clear signs that the global market turmoil had become a full blown crisis that had spread to other markets, with a greater number of asset classes being affected and involving more countries. The global growth outlook deteriorated considerably. Headline inflation in many countries, including Malaysia, although remaining at elevated levels showed signs that it had peaked. Concerns over growth prospects began to take a higher precedence over inflation.

In spite of the greater volatility, weaker sentiments and heightened uncertainty, the Malaysian financial markets continued to function normally. Global deleveraging meant that the local equity and bond markets were affected by the offloading of ringgit assets by non-resident investors. The ringgit, along with other currencies in the Asia Pacific region experienced a weakening trend since the second quarter of the year, amidst outflows of funds from domestic markets as the deleveraging in the crisis-affected economies intensified. Nevertheless, the ringgit adjustment was orderly, and the money market also continued to function efficiently. A more significant challenge came from the spillover effects of the economic contraction occurring in the advanced economies, which was expected to have a significant impact on Malaysia's export sector. Domestic demand, while supportive of growth, was also moderating amidst the more cautious consumer sentiment, softening labour market conditions and a more challenging business environment. An increasing number of inflation indicators suggested a moderation of inflationary pressures in the economy. The Bank had left monetary policy unchanged at a level considered to be sufficiently low to support economic activity.

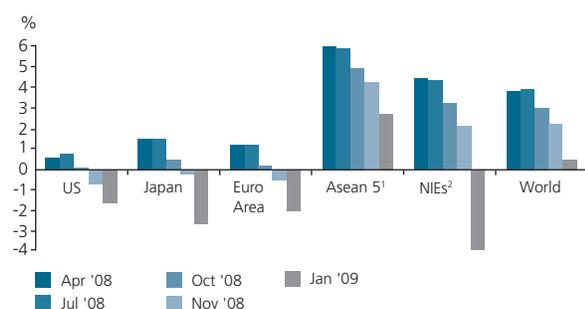
The severity of the global financial crisis in the fourth quarter however necessitated measures to avoid contagion to the domestic financial system. Hence, as a pre-emptive measure, the Ministry of

Finance and the Bank jointly announced on 16 October 2008 a full guarantee of all ringgit and foreign currency deposits at commercial, Islamic and investment banks, as well as deposit-taking development financial institutions regulated by the Bank. The guarantee was provided by the Government through Perbadanan Insurans Deposit Malaysia (PIDM), which is the deposit insurance corporation, until December 2010. The guarantee is extended to all domestic and locally incorporated foreign banking institutions.

The OPR was lowered as inflation moderated and growth prospects became significantly affected as the global financial turmoil turned into a widespread economic crisis

Global conditions deteriorated markedly and rapidly towards the end of the year, with global growth prospects worsening beyond what was earlier anticipated. Several major advanced economies were by then in a recession amidst continued severe stress in their financial systems. The sharp slowdown in global demand, the significant fall in commodity prices and the widespread contagion effect across financial markets exerted a greater downward pressure on the growth prospects of regional economies. The Malaysian economy was negatively impacted by these adverse developments, as reflected in the rapid slowdown in export performance and industrial production. Although domestic demand remained resilient, there were clear indications of slower private sector activity. The GDP growth forecast for 2008 was revised to 5.0% - 5.5%. For the year 2009, GDP growth was estimated by the Government to decelerate to 3.5%. As inflation pressures abated, the policy focus quickly turned to mitigating the severity of the domestic economic slowdown. The OPR was reduced by 25 basis points to 3.25% on 24 November 2008. To reduce the cost of intermediation, the Statutory Reserve Requirement (SRR) was reduced by 50 basis points to 3.5% with effect from 1 December 2008.

Chart 3.4
Outlook for Real GDP Growth in 2009 (Annual change, %)



¹ Indonesia, Malaysia, Philippines, Thailand and Vietnam
² Newly Industrialised Economies

Source: IMF, WEO April, July, October, November 2008 and January 2009

Apart from lowering the OPR, the policy focus was on ensuring that the monetary easing was transmitted to the economy. The worsening outlook had prompted several banking institutions to exercise greater caution in granting credit to their customers. To ensure adequate and ready access to credit, the Bank conducted dialogues with the banking institutions and businesses. There continued to be sufficient credit to support consumption and investment activity, as indicated by the continued increase in lending by banking institutions. Depositors were however affected by lower returns. Nevertheless, real interest rates were expected to trend higher as inflation moderated. To support depositors who were particularly dependent on income from deposits, the Bank issued the Merdeka Savings Bond in March 2009 amounting to RM2 billion as an additional savings instrument.

As the year drew to a close, the global economic and financial conditions continued to deteriorate. There remained considerable uncertainty with regard to the severity and duration of the global downturn. A sustained economic recovery would require the financial sector's functionality to be restored. Authorities in the advanced and regional economies intensified their fiscal and financial sector resolution measures while recognising that these measures would take time to be fully effective. For Malaysia, the external position remains strong and the high external reserves allow for a greater cushion to offset capital outflows. In addition, inflationary expectations have become more subdued, while the deeper financial markets have facilitated financial adjustments to be taken in an orderly manner. The banking system is also operating with strong capital buffers that facilitate the intermediation process. Nevertheless, the severity of the global shocks calls for macroeconomic policies to support domestic demand until conditions in the global economy showed signs of normalisation.

MONETARY OPERATIONS IN 2008

Conditions in the domestic money market were generally stable despite the heightened

volatility in global financial markets. The Malaysian money market continued to operate under a surplus liquidity environment. Volatility in the domestic financial market was also contained by the Malaysian banks' significantly lower cross-border credit exposures and smaller derivatives and foreign-currency denominated business.

The first half of the year saw a steady growth of domestic liquidity. As an indicator of the surplus liquidity level, total domestic liquidity as at 30 June 2008 was RM408 billion, which was RM63 billion or 18.3% higher than the RM345 billion level as at end-December 2007. The increase in surplus liquidity was mainly accounted for by portfolio inflows driven primarily by expectations of an appreciation of the ringgit against the US dollar. Weakness in the US dollar globally arising from the sub-prime crisis in United States caused investors to seek alternative investment destinations, including ringgit assets, which prompted the expectations of an appreciating trend in the ringgit exchange rate.

The liquidity and exchange rate trends reversed in the second half of the year. Although liquidity conditions remained ample, the surplus liquidity in the domestic money market began to moderate due to portfolio outflows, driven by the weakening global economic conditions and the deleveraging by foreign financial institutions. Domestic liquidity declined to RM258 billion as at end-December 2008. Requirements for liquidity were met by the maturity of previous money market borrowing operations.

Chart 3.5
Outstanding Liquidity Placed with
Bank Negara Malaysia

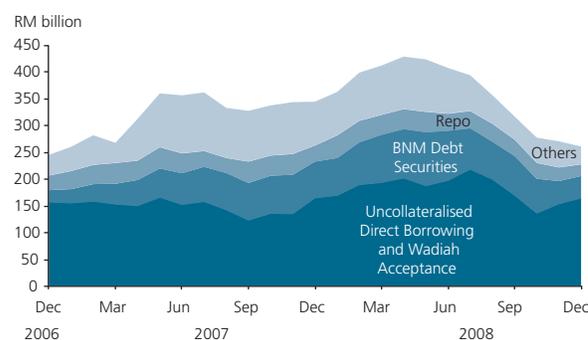
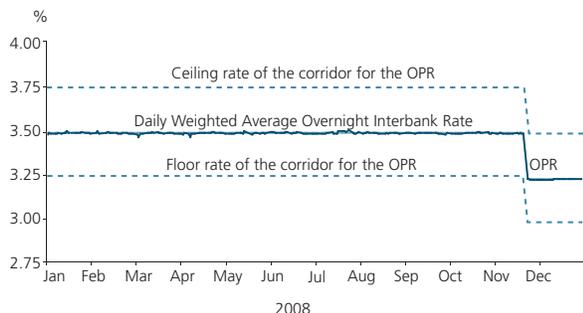


Chart 3.6
Overnight Policy Rate (OPR) and Daily Weighted Average Overnight Interbank Rate



Throughout the year, the Bank’s discretionary money market operations continued to maintain liquidity conditions that ensured that the overnight interbank interest rate traded within the +/- 25 basis point corridor around the OPR. During the year, the average overnight interbank money market rate traded within the range of 3 basis points below and 1 basis point above the OPR. Apart from the overnight rate, the other longer-term interbank rates continued to be primarily market determined, reflecting overall demand and supply conditions as well as prevailing interest rate expectations in the financial markets.

All interbank participants remained net lenders in the interbank money market throughout the year. For that reason, the Bank’s standing facility was only utilised 14 times throughout the year, of which only two were for providing funds to facilitate short-term transitory liquidity shortages that were solely due to operational factors.

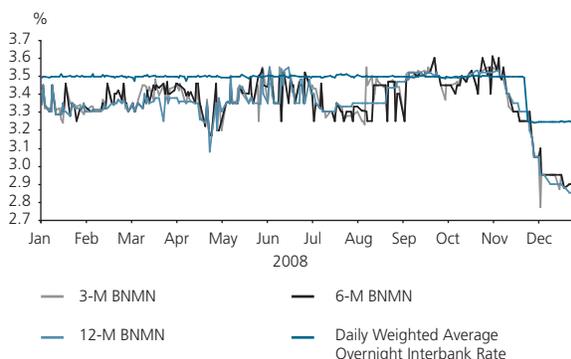
In terms of the types of monetary instruments, for the whole of 2008, uncollateralised direct borrowings and Wadiah acceptances continued to be relied upon as the primary instruments, accounting for 62% (uncollateralised direct borrowings at 47% and Wadiah acceptances at 15%) of surplus liquidity sterilised as at end-2008. Repurchase transaction (repo) operations, as well as net issuances of Bank Negara Monetary Notes (BNMNs) and the shariah compliant Bank Negara Monetary Notes-i

(BNMN-i) accounted for 8% and 16% of total outstanding instruments, respectively.

During periods of strong portfolio inflows and to a lesser extent, trade-related inflows in the first half of the year, BNMNs were used aggressively as compared to uncollateralised direct borrowings and Wadiah acceptances to absorb surplus liquidity, as there was a strong investor preference for short-term debt securities, particularly amongst non-resident investors. With the strong demand, the issuance yields for BNMNs were 11 to 27 basis points lower than the OPR, hence providing a cost effective means of mopping up the surplus liquidity. Accordingly, non-resident holdings of BNMNs also increased to a high of 61% or RM56.7 billion as at end-April 2008. With the increasing amounts of surplus liquidity, the Bank also issued a total of RM2.5 billion 1-year floating rate BNMNs via four competitive variable-rate uniform price auctions, mainly to lock in the surplus liquidity for a longer period without undertaking corresponding longer-term interest rate risks.

During the second half of the year, longer-term interbank money market rates exhibited some volatility following market expectations for changes in monetary policy, firstly due to rising inflation in the middle of the year and subsequently, slowing economic conditions. The heightened uncertainties in the global financial system following the increased impairment

Chart 3.7
3-month, 6-month, 12-month BNMNs and Daily Weighted Average Overnight Interbank Rate



of financial institutions in the crisis-affected countries led to the deleveraging process that in turn resulted in reversals in portfolio flows.

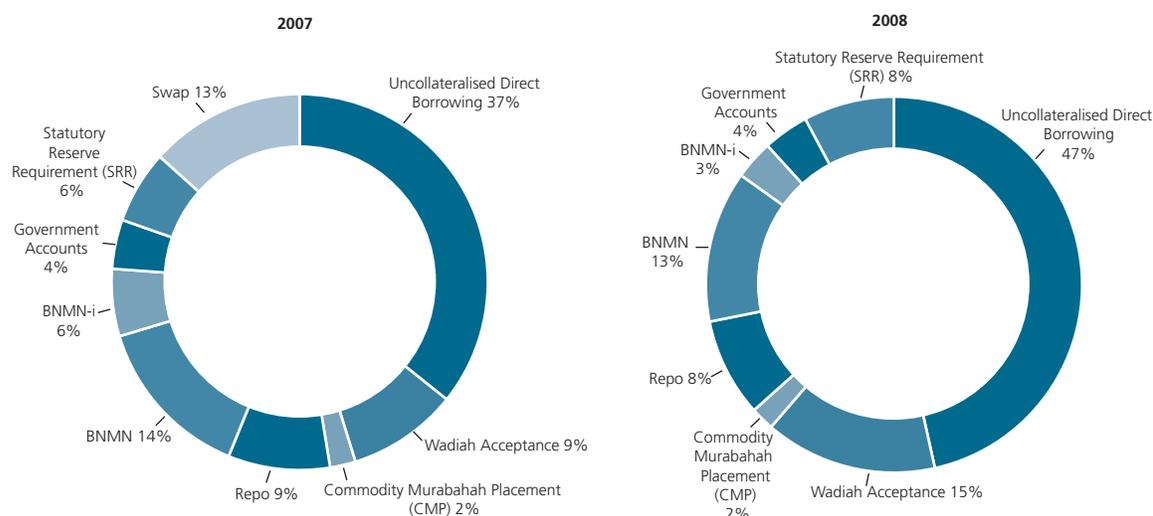
Monetary operations were then focused on shortening the average maturity of sterilisation operations so that the daily maturity of previous operations would offset any potential liquidity outflows. The maturity term for uncollateralised borrowings was reduced from 2 months to mainly below 45 days, while the maturity terms for both BNMNs and BNMN-i were shortened from 6 months to an average of slightly below 3 months. The average maturity for all monetary instruments employed in the monetary policy implementation process declined from 39 days in April 2008 to 19 days by end-December 2008. The short maturity strategy and the subsequent maturity of previous operations in the second half of the year enabled the Malaysian domestic money market to be well-insulated against excessive volatility due to portfolio outflows. The capital outflows were sufficiently met by the unwinding and non-rollover of previous operations, without any liquidity stress that otherwise would have required liquidity injections by the Bank.

Repo transactions, where possible, were also used extensively, representing 8% of total

surplus liquidity absorbed by the Bank. Funds-driven repo rates remained at a negative spread to unsecured interbank rates at approximately 25 basis points below interbank rates of equivalent maturities. This was due to the high demand for the underlying general collateral for short-term investment as well as compliance to prudential regulations. Lending of benchmark Malaysian Government Securities (MGS) through repo transactions was also in high demand. MGS benchmark securities were well sought after by banking institutions for market making purposes as well as for the short-covering of regulated short sales, which contributed to rates being consistently below the interbank borrowing rate of corresponding maturities by an average of 210 bps throughout the year.

Several developmental initiatives were implemented to increase operational efficiency. On 28 November 2008, the Bank introduced a competitive variable-rate multiple price auction process for commodity murabahah transactions, whereby participating Islamic financial institutions submitted profit-rate bids, which replaced a bilateral reverse inquiry process initially used for such transactions. This new development served as another mechanism for the price discovery process in Malaysian Islamic money market.

Chart 3.8
Outstanding Monetary Policy Instruments



In addition, on 5 November 2008, as part of pre-emptive measures to maintain stability of the financial system, the Bank made available its liquidity facility to insurance companies and takaful operators regulated and supervised by the Bank. Nevertheless, the facility was not utilised by any insurers or takaful operators as a significant portion of their assets were already in the form of liquid assets that were more than enough to meet their liquidity requirements should the need have arisen. Furthermore, the nature of the insurance business posed

substantially lower liquidity risks compared to the banking system.

In conclusion, the Bank, through its monetary operations in 2008, was able to successfully manage liquidity as well as contain volatility in the domestic money market through the use of a diverse and effective set of monetary instruments. In addition, the Bank's operational flexibility will enable the effective management of the challenges arising from the continued volatility in global financial markets and capital flows.

Core Inflation: Measurements and Evaluation

Introduction

Inflation is generally defined as a persistent increase in the price of goods and services over a certain time period. High inflation and expectations about the future course of inflation influence the aggregate spending of households and firms in a way that leads to inefficient allocations of real and financial resources. Such an environment normally results in a sub-optimal growth potential. Hence, price stability, a situation where inflation is relatively low and stable and does not distort economic agents' spending and investment plans, is central to achieving sustainable economic growth. The importance of anchoring inflation expectations and lags in the monetary policy transmission process point to the need for Bank Negara Malaysia to ensure policies on inflation are forward looking. For this reason, in fulfilling its policy mandate to maintain price stability, the Bank looks at different measures and indicators of headline inflation and core inflation. This box article describes the concept of core inflation and discusses how it is being used by the Bank as part of its information set in assessing current and future inflationary trends.

Rationale for Using Core Inflation Measures

In theory, movements in prices are the result of interactions between demand and supply conditions. However, factors that drive demand and supply conditions could differ. In particular, cyclical changes in demand conditions are generally persistent in nature. A change in the price level caused by a variation in demand conditions is most likely to remain for an extended period and represents a permanent change in the underlying inflation trend. By contrast, supply shocks, such as adverse weather conditions or disruptions to global oil production, are usually short-lived and often result in only a temporary deviation of inflation from its underlying trend.

Often, prices of goods and services are determined by the dynamic interaction between demand and supply conditions, which are at times hard to distinguish. An additional challenge to policy analysis is the fact that demand pressures are not directly observable. Measures of core inflation attempt to identify movements in prices that are actuated by demand shocks. To increase the degree of confidence, the Bank employs several methods to compute core inflation. These range from an exclusion-based method to one that is based on statistical techniques. All these methods seek to isolate the persistent component of inflation from transitory price movements. This allows for a better identification of the sources of price pressures.

Measures of Core Inflation

An important measure of core inflation used by the Bank is based on the **exclusion method**, which permanently excludes from the CPI basket, items whose price fluctuations are considered transitory in nature and do not have a lasting impact on the underlying trend in inflation. These include price volatile items such as fresh vegetables and seafood, price administered goods and those that are affected by government price controls. The exclusion-based core inflation series is relatively easy to understand and frequently used by the Bank in assessing the direction of inflation.

While the exclusion-based measure is an important methodology used to estimate core inflation, this is supplemented by other measures such as the **trimmed mean** and **weighted median** methods. Both techniques are based on the distribution of price changes. They place greater emphasis on the general price movements. Small or zero weights are assigned to large price changes that are considered as outliers.

Another method employed by the Bank to estimate core inflation is using the **exponential smoothing technique**. This method derives core inflation by exponentially smoothening current and past aggregate price data. The **double weighted measure**, meanwhile, involves assigning lower weights to highly volatile CPI items and higher weights to items that are less volatile. Instead of removing volatile items, this method seeks to minimise their effects. Yet another alternative way to computing core inflation is by using the **Kalman Filter technique**. It involves extracting a common signal from movements in CPI component. Finally, core inflation could also be derived using **principal**

Table 1
Measures of Core Inflation

Core Inflation Measures	Brief Descriptions	Advantages	Disadvantages
1. Exclusion-based	<ul style="list-style-type: none"> Exclude price-volatile energy and food items from the CPI basket Most commonly used measure among central banks 	<ul style="list-style-type: none"> Easy to construct and compute Easy to communicate 	<ul style="list-style-type: none"> Critics argued that the excluded items may also contain important signals about underlying inflation Excludes items that could represent a large share of the CPI basket (especially if food and energy account for a large share of CPI)
2. Trimmed mean	<ul style="list-style-type: none"> Items are arranged according to the magnitude of their price change during the month Trims an equal amount (15% for Malaysia) from each end of the distribution of price changes 	<ul style="list-style-type: none"> Easy to construct and compute 	<ul style="list-style-type: none"> The exact percentage that is excluded is still subject to debate
3. Weighted median	<ul style="list-style-type: none"> Items are arranged according to the magnitude of their price change during the month Core inflation is selected from the 50th percentile inflation rate at which half of the components in the CPI basket have higher inflation and the other half, less 	<ul style="list-style-type: none"> Easy to construct and compute Easy to communicate 	<ul style="list-style-type: none"> Item with large weights may dominate the median Median can sometimes differ significantly from the mean
4. Principal component analysis	<ul style="list-style-type: none"> Derives core inflation from the common price trends embedded in the various components of the CPI 	<ul style="list-style-type: none"> Uses disaggregated data from the CPI basket 	<ul style="list-style-type: none"> The technical nature of the technique reduces its usefulness in communications
5. Exponential smoothing	<ul style="list-style-type: none"> Exponential smoothening of current and past CPI data 	<ul style="list-style-type: none"> Remove seasonality from the data 	<ul style="list-style-type: none"> Works with some lags The technical nature of the technique reduces its usefulness in communications
6. Double-weighted measure	<ul style="list-style-type: none"> Assigns larger weights to less volatile items and lower weights to the more volatile items 	<ul style="list-style-type: none"> Easy to construct and understand 	<ul style="list-style-type: none"> May minimise important price signals from price volatile items
7. Kalman Filter	<ul style="list-style-type: none"> Extracts the common price signal that drives price movements in individual CPI components 	<ul style="list-style-type: none"> Optimal use of the disaggregated CPI data 	<ul style="list-style-type: none"> The technical nature of the technique reduces its usefulness in communications

component analysis (PCA). Basically, this method identifies patterns in the CPI's main components and expresses them in a way that highlights their similarities.

Each measure of core inflation has its strengths and weaknesses in its success in isolating price changes that are driven by demand-related factors, as opposed to supply-related factors. Table 1 summarises these strengths and weaknesses for the various measures of core inflation.

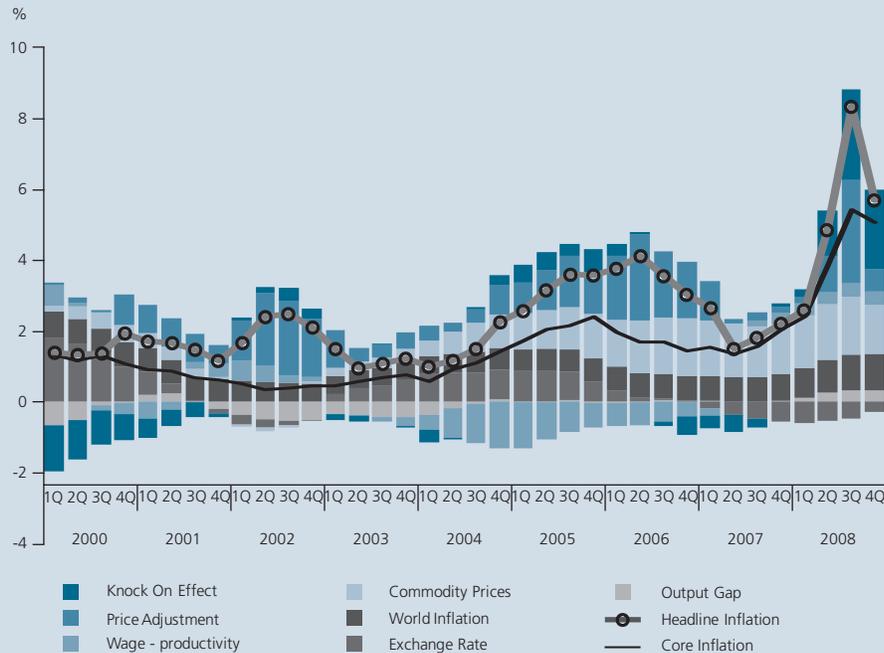
Uses for Core Inflation

From the policymaker's perspectives, core inflation provides important information not only about current inflation, but also about the future path of headline inflation. Therefore, core inflation analysis is a useful component of the information set used by the Monetary Policy Committee in setting the stance of monetary policy when balancing the risks to price stability and growth. The following two episodes of elevated headline inflation elucidate this point.

February 2006 - March 2007

During this period, headline inflation rose sharply, to average 3.4%, while average core inflation was only 2%. A disaggregation analysis of headline inflation (see *Chart 1*) reveals the increase was mainly the outcome of higher prices for fuel items in the *transport* category of the CPI, following the 30 sen per litre increase in retail fuel prices in February of 2006. The absence of second round effects and subdued core inflation implied that the increase in inflation was almost entirely due to the supply shock and was unlikely to be sustained beyond the near term. As shown in *Chart 2*, headline inflation did ease off as the supply-side effects began to wane in the second half of 2006.

Chart 1
Disaggregation of factors contributing to Headline Inflation

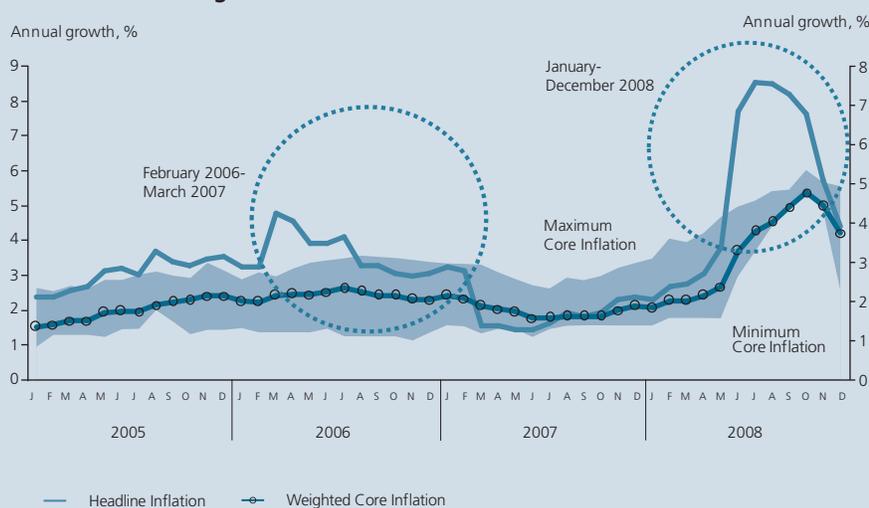


Note: The disaggregation of factors contributing to inflation is derived from an econometric model for exclusion based core inflation. Price adjustment refers to items excluded from core inflation.

January 2008 – August 2008

During this period, domestic prices, especially for food and energy, rose sharply in response to the higher global prices for crude oil and food commodities. To mitigate the impact of ballooning fuel subsidies on the Government’s fiscal position, prices of domestic retail petroleum products were increased significantly in June 2008. While this led to a sharp increase in price administered items in the CPI basket, it also gave rise to a large “knock-on” effect through the supply-chain to other domestic goods and services (see *Chart 1*). Consequently, the underlying inflation rose sharply during the period. In that sense, the rise in core inflation was not reflective of demand pressures but rather the first-round transmission of the fuel price shock across a wide variety of goods and services throughout the economy. With the subsequent reversals of global commodity prices and the downward revisions in domestic retail petroleum products, core inflation began to moderate in the fourth quarter of 2008.

Chart 2
Headline and Weighted Core Inflation



Note: Weights are assigned to the weighted core inflation based on the relative measure of core inflation root mean squared error (RMSE) performance. This technique requires one to regress headline inflation on different core inflation measures at various time horizons. From each regression, one has to calculate the RMSE for the in-sample forecast of the model. The closer the value of the RMSE to 0, the higher weight is assigned to the respective core inflation measure.

Conclusion

The various types of core inflation measures are useful components of the group of indicators used by the Bank to assess the incipient risks to price stability. It must, however, be emphasised that no single indicator forms the basis of policy decision. As with all indicators, the interpretation of the core measures has to be within the overall context of the current and expected economic environment.

Monetary Policy Communication in Malaysia

The Importance of Communication in Conducting Monetary Policy

Central banks can perform their roles and fulfill their goals more effectively when their policy actions and decisions are better understood by the public and financial markets. This has resulted in growing emphasis by central banks around the world to provide greater transparency to the public by expanding the modes of communication and increasing the frequency, amount and quality of information shared with external stakeholders. In this regard, Bank Negara Malaysia has in the recent years published more information and provided more detailed explanations on the Bank's role, policy objectives, as well as the assessment and rationale underlying its monetary policy decisions.

One of the key reasons for the importance of monetary policy communication is the recognition of the need to effectively manage expectations. By managing expectations about the future course of economic activity and inflation, central banks can influence aggregate demand in the immediate future given the forward looking nature of economic agents. Importantly, expectations of future prices are a key factor in determining actual inflation. When people expect prices to rise rapidly in the future, they react by bringing forward purchases of goods and services, which lead to the increase in the prices for these goods and services, or demand higher wages, thereby creating the very inflation they had earlier expected. Communications on the Bank's commitment and strategies to ensure price stability is therefore important for promoting greater public understanding and confidence that long-term inflation would remain low, and hence encourage agents to react accordingly. While good communication is not a substitute for good policy making, central banks need to ensure good policy decisions are supported by strategic communication efforts, which are also reinforced by a track record of consistent policy decisions to ensure the predictability, credibility and effectiveness of monetary policy.

Clear communication is also important for the efficient transmission of monetary policy to the economy, for example through the interest rate channel. Under the New Interest Rate Framework adopted in April 2004, the Bank seeks to influence the overnight market interest rate to be at the desired level of the Overnight Policy Rate (OPR). Adjustments to the OPR alone may not be sufficient for monetary policy to be effective in influencing aggregate domestic demand given the long and variable lags between the time the policy rate is changed and when it actually affects spending and investment decisions by economic agents. Rather, it is important for the market to respond to the signals of the Bank's current and expected monetary policy stance through the OPR, and appropriately adjust the prices of relevant financial assets, which in turn affect spending and investment decisions by economic agents. In the money market, this involves adjustments to other maturities and instruments such as interest rate swaps that influence the cost of funds, which subsequently form the basis of the retail lending rates charged to bank borrowers. In the bond market, expectations of the future path of interest rates affect the cost of raising funds to firms. Effective communication therefore also facilitates a more rapid transmission of the policy rate into the pricing of credit and longer-term rates, thereby enhancing the overall efficiency of the monetary transmission mechanism.

Given the significant impact of policy actions by the central bank on the economy through its influence on aggregate domestic demand, central banks find it necessary to provide an explanation of their decisions and the rationale underlying these decisions. Greater transparency by central banks thus enables a more objective assessment of the central bank's performance by external stakeholders. Furthermore, public discourse on policy matters can lead to improvements in internal deliberations and promote the formulation of more effective policies. Through greater engagement,

the Bank also aims to receive feedback from the industry, economic sectors, the market and the public, and provide an enhanced understanding of the central bank's reasoning, strategies and objectives.

There continues to be divergent views and differing practices on the appropriate degree of transparency and what constitutes an "optimal" communication strategy. This can mainly be attributed to, among others, the differences in the decision-making structures, policy frameworks, as well as the institutional environment in which a central bank operates. For example, an inflation targeting central bank would tailor its monetary policy communication strategy with respect to an explicit numerical target for inflation. In the case of Bank Negara Malaysia, while price stability is a primary objective, promoting sustainable growth and financial stability are also important policy objectives. For a central bank with multiple mandates, the pursuit of monetary policy which is consistent with the other mandates places greater emphasis on elucidating the assessment on the balance of risks to both growth and inflation whenever a policy decision is made. By fostering a better understanding among its stakeholders on the Bank's assessments of economic and financial developments and the policy initiatives, effective communication facilitates the successful transmission and acceptance of the Bank's policies. Accordingly, the Bank employs several channels for its communication.

Channels for Monetary Policy Communication

The Monetary Policy Statement (MPS) is the main channel for monetary policy communication for the Bank. The MPS not only states the monetary policy decision, but also provides the Bank's assessment of the performance of the economy, inflation and the policy issues. The first MPS was issued on 27 August 2003 and was initially released only on a quarterly basis to coincide with the announcement of the GDP growth figures. Since 2006, the MPS is issued after each Monetary Policy Committee meeting. The publication of more regular and timely information on monetary policy decisions is part of the Bank's on-going initiative to enhance a greater understanding of the country's economic and financial conditions, and that has become a factor affecting the formation of market and public expectations. The Bank also releases in advance the schedule of MPC meetings for the following year¹. The transparency of procedures and the clarity of monetary policy decisions to market participants have contributed towards facilitating orderly market adjustments following monetary policy announcements.

Bank Negara Malaysia also publishes regular reports that are readily available and widely disseminated to the public. In March each year, the Bank publishes its Annual Report. In addition to being an account of economic developments that took place during the previous year, the Annual Report includes the Bank's forecast for economic growth and inflation, as well as the monetary policy outlook, in order to provide the public with a comprehensive assessment on the balance of risks to economic growth and price stability for the year. The forecasts are subject to rigorous assessments within the Bank prior to publication, and are subsequently assessed regularly in light of new developments. Any revision to these forecasts will most likely be communicated either through the MPS or during the quarterly press conferences held in conjunction with the release of the quarterly GDP growth figures.

The Quarterly Bulletin provides a quarterly record of economic and financial developments, while the Monthly Statistical Bulletin provides timely and comprehensive statistics on the economy and financial system. To reduce the time lag of data releases and to increase the accessibility of information, the dissemination of these reports also takes place electronically through the Bank's website (URL: <http://www.bnm.gov.my>).

¹The advance schedule is normally released in conjunction with the final MPS in the preceding year.

Other important communication channels include public comments by the Governor through media interviews and speeches at public forums, which are accessible on the Bank's website. Press conferences during the release of the Annual Report and Quarterly Bulletins, as well as briefings to investors, analysts and economists, are also key communication channels for the Bank to engage with the public and participants of the financial market. In addition, the Bank conducts regular meetings, briefings and consultations with financial market participants, industry and business associations in order to engage them on economic and financial issues and policies.

Challenges in the Communication of Monetary Policy

For it to be effective, the communication of monetary policy matters needs to strike a balance between comprehensiveness, relevance and timeliness. The fact that the monetary policy horizons extend to the medium term means central banks need to undertake an array of quantitative and qualitative analyses to form their assessment about the growth and inflation outlook as well as the risks involved. As with any prediction about the future, such assessments are often wrought with uncertainty, and hinge crucially on the underlying assumptions regarding a range of factors. For example, forecasting the global price of oil in 2007 and 2008 amid a rapidly changing global financial and economic environment was a highly challenging exercise. In such a volatile environment, it would be necessary to update the forecasts more frequently. It is also important to explain to the public that any inflation forecast is not a monetary policy target, but that it could potentially involve a change in monetary policy.

While monetary data and indicators are widely available and extensively analysed by market participants and analysts, it is nevertheless still important for the central bank to provide market participants with its perspective on the latest developments. In some circumstances, such communication would confirm market beliefs, while at others, the central banks' perspective provides market participants with further assessments of the more recent developments.

The communication challenges clearly manifested themselves in the volatile environment during 2007 and 2008, evidenced by the keen debates on whether monetary policy in Malaysia ought to be tightened in response to high and rising inflation. On both occasions, the Bank explained in great length its rationale for not raising the OPR, which was contrary to the expectations of several market participants. Specifically, in the first half of 2008, the upward inflationary pressures on global economies, including Malaysia, were caused by supply-driven factors, namely the higher global food and commodity prices. In communicating the decision for the Bank's monetary policy stance to remain unchanged, emphasis was placed on explaining the diagnosis of the situation and why a monetary response was not required. It was explained that, first, as a demand management tool, the role of monetary policy in a supply-driven shock was fairly limited. Secondly, the assessment was for the pressure on inflation to be temporary since the factors that could create second-round effects of price increases were absent or weak. Third, the Bank highlighted the high possibility of an oncoming weakness of the economy that would exert a moderating impact on inflation going forward. Although the prognosis turned out to be correct, for several weeks, policy communication faced considerable challenges. It was only when actual signs of weakness in the global and domestic economies began to appear that there was a convergence of market views with that of the Bank.

Communication on monetary policy decisions and related issues is an on-going challenge. Effective central bank communication, nevertheless, would remain an integral part of the Bank's role in conducting monetary policy. Going forward, the Bank will continue its focus on improving its channels of communication, and on enhancing the availability of relevant information on the monetary policy decision-making process and outcomes.