South African Reserve Bank

Research and the Making of Monetary Policy in South Africa

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The role of analysis and research in the formulation and implementation of monetary policy can be classified into two broad categories. The first draws on the strong theoretical traditions that began in the early twentieth century with Keynes and Friedman on the role, conduct and impact of monetary policy in relation to the business cycle. While the second, irrespective of the theoretical preferences of a monetary policy committee (MPC) or its members, relies heavily on deriving a common view of our best guess of the current state of the global and domestic economy. This view, in turn, influences how we think about the future of the economy, and more specifically, the various channels of the monetary transmission mechanism. It is the latter that will be my main focus here.

MPCs, routinely review various parts of the whole financial and economic landscape before every meeting to ensure that policy decisions are predicated on a comprehensive understanding of the key factors that influence the economy. These include several important areas such as the state of the global macro economy, the nature of domestic and international markets, the financial sector, critical developments in the real economy and the official forecast.

Being a small open economy, it is not surprising that our starting point for domestic monetary policy originates from the global economy. Our assessment of global economic conditions has two important objectives. The first is to give us a sense, in general terms, of the state of global economy via the interaction of inflation and growth rates, as well as other policy variables such as output gaps and the change in real interest rates in a variety of countries. This then provides the basis for our understanding of how a complex interplay of political developments and other economic policies influence our view of the global economic outlook. The second is more specific and relates to the economic behaviour of our main trading partners and their impact on our potential to export goods and services as well as our ability to attract foreign funds and investment. Our assessment of global developments also extends to our understanding of international financial and asset markets, as these have an in important bearing on investor sentiment and associated portfolio flows in and out of our economy.

Against, the backdrop of intricate global economic developments, we then focus on several important aspects in our assessment of the domestic economy. These include efforts to elucidate the complex nature of the financial markets and financial intermediation on economic activity, and more importantly how this relates to investor sentiment and consumer confidence. Both of which are viewed as critical in our assessment of the factors that influence investment decisions by residents and non-residents alike.

The interface between the real and the financial sector is another critical element in our policy decision making process. In the past, the growth in broad money supply was an important indicator of economic activity but this has more recently been eclipsed by the credit lending mechanism and the appropriate level of credit. The growing importance of credit extension is fairly obvious in that it has the ability to constrain economic growth, and even create unsustainable leverage or fragility in the economy. This analysis is largely manifested in the review of loans and advances from the banking sector to the households and non-financial corporations. Moreover, our assessment of monetary and credit aggregates as well as the flow-of-funds statistics provides a unique perspective on whether developments in the financial sector, are a symptom, cause or consequence of changes in the real economy. It is worth noting that the financial statistics are expanded to cover both the banks and the non-bank financial intermediaries. In addition, much emphasis is placed on the current and expected state of public finances, as well as the impact of fiscal policy initiatives in relation to the implementation of monetary policy actions. Movements in government consumption and production and how these contribute to quarterly GDP estimates are also important to the national accounts framework which I discuss later on.

As far as the tracking of the real economy is concerned, we measure the pulse and the state of the domestic economy through a comprehensive array of statistics and sentiment indicators, which includes the balance of payments statistics, labour market and other high frequency real economic indicators. Naturally, our ability to make a suitable assessment of the domestic economy is dependent on the reliability, and timeliness of the various indicators.

There are a few important issues to take note of here, and that is, although the pace of near term growth is informed by the national accounts framework, we as the MPC, are also interested in the many other variables that are linked to the national accounts. These would include the current trend and composition of the national savings rate, the extent of the domestic household debt to disposable income ratio and other related stock and flow indicators. For example, it is important for us to determine to what extent private consumption expenditure is funded by more debt or an increase in real income.

The entire framework of the national accounts is estimated from the production, factor income and expenditure side and provides an almost `general equilibrium like framework' for the economy. This has the added advantage that it allows us to gain a better perspective of the stance of the economy from different vantage points. Understanding components of expenditure, is central to getting to grips with growth leavers. One of the most important components are movements in fixed capital formation. Critical as these are, it is often the most difficult variable to get robust results from firm surveys.

The national accounts framework extends to the balance of payments which not only forms a significant part of expenditure side of the national accounts, but also plays an important role as a critical interface between the trade and financial accounts. Needless to say, the assessment includes an in depth analysis of the economic fundamentals that determines the trade balance, as well as the vulnerability or stability on the financial account in the form of capital flows to and from the country.

The inflation targeting monetary policy framework is essentially forward looking, and would be extremely difficult to implement without the timely and accurate measurement of the consumer price index (CPI). While the basket of goods and services in the CPI is comprehensive in scope, it is the origin of emerging inflationary pressure that remains the most challenging for the MPC. This has become more prominent of late as the growing proportion of services in the consumption basket has introduced a whole new dimension to our understanding of pricing behaviour. For instance, the trend in services inflation is generally less prone to fluctuations related to the business cycle and supply side shocks than the consumer goods and durable components of the CPI.

In addition, Stats SA have also recently redesigned the producer price index, which is another important progressive step in enhancing the statistical base on which we make decisions. Instead of providing a single aggregate PPI figure, the new methodology focuses more on how a variety of final and intermediate manufactured prices, commodities and other input costs such as electricity and water transmit inflationary pressure through to the economy. As a result the current PPI, unlike its predecessor, distinguishes between input and output prices and does not provide an aggregation of the two.

Needless to say, a very important part of our flexible inflation targeting approach is to gain a better understanding of the trend and relationship between real growth and employment. In the case of the latter, we analyse the unemployment rate very carefully in an attempt to assess how much of our unemployment is cyclical and how much is structural. The MPC also closely monitors the change to unit labour costs and the pace of productivity growth as these are considered important variables in the price formation process over the longer term.

Making sense of the data is partly a function of how credible the data is, whether the measurement of the same universe gives conflicting evidence or not. When we see a new trend, notwithstanding well-developed methods of seasonal adjustment we still have to be sure that we are separating signal from noise.

Naturally, in a forward looking inflation targeting environment, our assessment of the current and future state of the economy culminates in the forecasting process. Seeing that we are here for a forecasting award, let me now focus the attention on the forecasting process;- not so much in the abstract, but to rather give you a real appreciation of the many difficulties we face.

The monetary policy statements released by the SARB after each meeting devote a great deal of time to explain our forecasts for headline inflation, core-inflation and future growth prospects. For good reason, these estimates guide our view of the future and in the process provide a suitable assessment of the balance of risks to the forecast. Not only are the projections important for monetary policy decision making, but they also provide a useful communication tool to the public.

At this juncture, it may be useful to take a step back and ask what is so important about a reliable and consistent forecast and how exactly do monetary policy practitioners make use of this tool. Understandably, the key focus of the forecast relates to the numbers that the public tend to monitor closely. While I have no intention of trivialising the numbers or magnitudes generated by the model as these reflect important information about the pace, and change in the economy, it is really the interpretation and awareness of what the results suggest that remains most important for monetary policy decision making.

Structural models and forecasts remain critical to our understanding of how the economy works, and as a result, many central banks have made large investments to gain an insight to the interaction of the various channels in the transmission mechanism that these types of models generally provide. This in itself is a very important exercise in its own right, and the model is built to reflect the unique characteristics and behavioural patterns of agents in the South African economy. The model can then be used to illustrate the possible effects and consequences of simultaneous shocks to the economy. These would include how the domestic economy responds to supply side shocks in the form of a hypothetical rapid increase in oil and food prices and a depreciation of the currency. In the process the model provides valuable insight to a variety of indicators such as the exchange rate pass through, the extent of the output gap and the sensitivity of domestic growth to global growth within a theoretically consistent framework.

Naturally, our models focus on a many key economic variables, but for obvious reasons our assessment of the outlook is centred on the expected trend of headline inflation and real GDP growth. Revisions of our forecasts are based primarily on new data and a change to our key assumptions. In the case of growth, the revision may have been caused by a change to the starting point and/or the projected growth prospects of our major trading partner countries. The starting point is hence often estimated for the current quarter, as we as all other private sector forecasters, eagerly await Stats SA’s official GDP numbers that are only released eight weeks after the quarter has commenced. In addition, these growth numbers are also subject to sometimes large revisions. On our assessment of global growth prospects, we do not reinvent the wheel but rather rely heavily on our peers who invest more resources on their projections on the global economy. Therefore, much of our time and effort is used to determine the impact that these changes may have on our own economy.

Several important factors influence our outlook for inflation. These include our assumptions about commodity prices, exchange rates, unit labour costs and the extent to which the economy is performing below or above its level of potential, otherwise known as the output gap. Generally, all these variables are extremely difficult to forecast, and the exchange rate is notoriously renowned for its degree of difficulty. In a similar fashion, the same can be said about oil and food price increases that are often determined by geo-political conflict and droughts and not so much by pure economic fundamentals.

A simple question often posed to the MPC relates to what the true value of the forecast is if it is constantly revised as new information becomes available. Some sceptics would say the main value of forecasts are the very assumptions you impose on the model, and that by getting these wrong the forecast becomes a failure. My simple response to this rhetoric is that what matters most is what our economists are well trained to do, and that relates to how well the economy is forecast on the basis of the full information set that was available at the time of the forecast. For example, were all the influential factors that could potentially alter the forecast highlighted and taken into consideration, or was the assessment of the balance of risk appropriate for that point in time. I believe it is rather these criteria to which the forecast should be judged and not so much the conventional way in which the forecast value is compared to the final outcome.

In conclusion, the key challenge for research in the context of regular monetary policy meetings is to ensure there is consistency in the analysis and interpretation of the highly fragmented and complex information set that becomes available over time. As we continue to improve our analysis of the state of the economy, there are a few things that will occupy us over the next few years. Some channels such as the trade and to a limited extent the financial flows are reasonably well established in our analysis and factored in the models, but these will need to be augmented by the complex nature of international spill-over effects and the potential consequences of further international banking and financial sector constraints.

In view of the growing importance of financial stability to monetary policy, the analytical demands placed on economists have intensified as we come to grips with issues related to asset price behaviour and their link to the real economy. In particular, housing and its impact on confidence, wealth creation and household vulnerability has become central to the business cycle and cannot be ignored in any monetary policy making process. This extends to other areas such as the balance sheet analysis of households, financial and non- financial corporations as well as government. After all, any understanding of the cause and consequence of the financial crisis would begin with a critical assessment of the balance sheets of the financial sector.

To really gain perspective on the true stance of the economy is not a trivial exercise as it requires strong research capacity, a really good appreciation of the statistical methods used and what the release of preliminary data implies. All of this cannot be achieved without the presence of an excellent statistical infrastructural environment. Beyond this is the challenge of enriching our analysis to include more cooperation and interaction with key stakeholders in the economy. One way of doing this is to interact with the economic agents across all sectors and regions of the economy. This type of intelligence gathering on the current state and outlook for the domestic economy across business and industry can be valuable in the detection of possible early warning signals prior to the release of the official statistics and data. As a result, this approach has evolved to become an integral part of monetary policy formulation in many central banks across the globe, and countries such as the UK, Canada and Australia have often remarked on the benefits of the process.

Lastly, I wish to thank you for the kind opportunity to address this audience