Monetary policy and the measurement of inflation: prices, wages and expectations

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Realistic measurement of inflation is of crucial importance for the conduct of monetary policy, which, almost universally, seeks to achieve price stability and keep inflation within reasonable bounds along with promoting financial stability. This is because an unrealistic measure of inflation to go by in monetary formulation could be unproductive or even counterproductive.

The importance of having a realistic measure of inflation has acquired added significance and prominence in the recent period, with an increasing number of countries, especially in the industrialized world, adopting a monetary policy framework of "inflation targeting", which involves a formal commitment to a specific rate of inflation; and in order not to put their credibility at risk, their monetary authorities take extra care to ensure that this specific rate is based on a realistic measurement of the current rate of inflation and the prospective economic and financial conditions that are likely to affect it in the year ahead.

Conceptually there are several measures of inflation, each having its own merits and shortcomings, but the one that is most appropriate and commonly used for monitoring inflation is the Consumer Price Index (CPI). It covers prices of those items that enter into the representative consumption basket of the household sector and is typically available on a monthly basis with short time lags. Once published, it is rarely revised. It is also widely known and used in revising contracts for inflation. Thus, on grounds of transparency and timeliness, the CPI is the preferred index for monitoring inflationary trends.

However, to make the CPI credible, it is important that it should be computed by an independent national statistical agency, separate from the central bank, that should have an elaborate organizational set-up to collect detailed, reliable and up to date data on prices on a frequent basis and to undertake family budget surveys periodically to incorporate in the representative consumption basket the changes that take place in consumers' needs and preferences over reasonable time periods. It should also make suitable adjustments in the CPI should there be a substantial quality change in any item that is included in the consumption basket.

The staff of the statistical agency should also be competent enough to distinguish between "once off" or transitory factors and more permanent factors affecting inflation and remove volatile items to construct the "core" CPI as distinct from the "headline" (total) CPI. This is important because in several cases, the core index provides an appropriate measure of the underlying inflationary trend for the central bank to determine appropriate policy responses.

While a realistic and credible measure of inflation plays a crucial role in the conduct of monetary policy, it is equally important that central banks be autonomous in formulating their policies without interference from other quarters. At the same time, they should have adequate powers and instruments at their disposal to implement their policies effectively. Further the financial system should be developed and well integrated so that the effects of monetary measures taken in one of its parts are transmitted and felt by other parts promptly.

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In the case of oil exporting countries, there are some other special factors which profoundly affect the conduct of their monetary policy. Their dependence on the export of a single commodity, viz oil, makes the role of fiscal policy paramount and constitutes the major source of liquidity in these economies. Then, their non-oil production base is relatively limited. As a result, they depend on imports of goods and services for meeting their domestic requirements. This makes the domestic price situation of imported items highly reflective of the price trends abroad and, at the same time, disturbs their balance of payments equilibrium. Also, oil producing countries have generally pegged their currencies, which has resulted in their interest rates closely tracking the developments in international financial markets. This serves to relatively restrict the maneuverability in their monetary policy actions. In addition, their financial systems are not as developed and integrated as in advanced countries and so provide a less efficient transmission mechanism for monetary policy measures.

Saudi Arabia's case

As in most countries, the primary objective of monetary policy in Saudi Arabia is to maintain domestic price and exchange rate stability and promote financial stability.

For achieving the objective of domestic price stability, the Saudi Arabian Monetary Agency (SAMA), the central bank of the country, does not follow the policy of "inflation targeting". Instead, it takes measures to ensure that inflation remains within reasonable bounds and does not adversely affect the growth process and the welfare of the community. For this purpose, it constantly assesses the developing price situation and acts accordingly, taking other economic indicators also into account.

The most handy and useful indicator for the price situation available to SAMA is the Cost of Living Index (CLI), which is prepared and published by the Central Department of Statistics and Information of the Ministry of Economy and Planning on a monthly basis with less than a month's time lag. This index is a fairly good and reliable inflation indicator based on retail prices of items that enter into the consumption basket of a cross section of the population. Its geographical and item-wise coverage has been enlarged, its weighting system revised and the base year changed from time to time on the basis of periodical consumer expenditure surveys, the latest one having been done in 1999. The number of cities from which price data are collected now covers all the administrative regions of the Kingdom. The number of items for which prices are collected also has been considerably enlarged. The base year of the index, 1999, is in line with the base year used in the system of national accounts. This permits a meaningful comparison between the trends in the CLI and the GDP deflator. Moreover, the CLI has nine sub-indices for various groups of items of expenditure, which have proved to be analytically very useful in determining the areas experiencing inflationary pressures most.

It may be mentioned that in Saudi Arabia no distinction is made between headline and core inflation by excluding food and energy prices from the CLI. This is because food constitutes the largest expenditure item in the CLI, and its exclusion would render the core CLI unrepresentative of the cost of living of the general public. Energy prices are not excluded as energy does not constitute a substantial component in consumer spending and as such it is less important as an inflation factor in Saudi Arabia than in non-oil economies.

In addition to the general price index, wage trends and inflation expectations are generally helpful in monetary management. However, in Saudi Arabia wages are more stable due to a liberal labour policy, while inflation expectations have been governed by the prolonged stability in prices.

The policy measures that SAMA takes to promote domestic price stability seek to ensure that the growth in domestic liquidity is broadly in line with the growth of supply of goods and

services in the economy. In this connection, it faces certain limitations that arise from the structural makeup of the Saudi economy.

Saudi Arabia, being an oil based economy, has two distinct features that profoundly affect the conduct of monetary policy. First, the oil income accruing to the government makes fiscal operations the major source of domestic liquidity. This is indicated by the fact that the net domestic expenditure of the government accounted for as much as 77% of the total domestic liquidity (gross) generated during 2003–07 (Table 2). Secondly, the non-oil production base of the country is relatively limited, necessitating a large import of goods and services. This results in a substantial private sector balance of payments deficit through which the bulk of the gross liquidity generated in the economy leaves the country (73% in 2003–07). These two influences on domestic liquidity are quite powerful but are not directly amenable to SAMA's control. The factor affecting domestic liquidity that lends itself to SAMA's control is bank credit to the private sector, but because of the relatively limited size of the private sector, its influence on domestic liquidity is much smaller than that of government domestic expenditure and the private sector's deficit in its external transactions. Additionally, with the current expansion of both money and capital markets, the efficacy of monetary policy in Saudi Arabia is being strengthened.

In spite of the above limitations, SAMA has succeeded in achieving its monetary policy objectives by conducting its policies in coordination with the fiscal and trade and payments policies of the government. By reinforcing each other, these policies have proved quite effective in achieving monetary and financial stability in both the domestic and external spheres. This is demonstrated by the remarkable stability in the domestic price level and the exchange rate of the Saudi riyal at the same time over a long period.

For about the quarter century up to 2005, inflation in Saudi Arabia, as measured by the CLI, remained on average well below 1 percent per annum. It is only since 2006 that inflation has been on the rise in the country. It may be mentioned in this connection that, since 2002, the increase in government spending has led to intensification in economic activity, especially in the private sector, and the economy has started to get close to its capacity. The increase in government spending has also caused accelerated growth in the money supply, which averaged 13% per annum during 2002–05 and spurted to over 19% in 2006 and 2007. These developments indicate that it is the substantial rise in government expenditure based on increased income accruing from oil exports, rather than any monetary policy impulse, that has contributed to the recent emergence of inflationary pressures in the country. The sharp increase in international food prices and an inordinately large pickup in domestic rents, two items that together carry a substantial weight (44%) in the household's expenditure budget, have also been important contributory factors.

The inflation rate picked up to 2.2% in 2006 and to 4.1% in 2007. It rose further in 2008 to reach the highest level in 30 years, at 11.2% (year over year) in the month of July.

The upsurge in inflation prompted responses from both the government and SAMA. To provide relief to the people, the government has granted a subsidy on basic food stuffs, reduced import tariffs and service charges, provided an inflation allowance for three years and raised social insurance benefits. Also, mortgage and other relevant laws are in the process of being approved, and the Public Authority for Housing has been established. SAMA, for its part, increased the reserve requirement for banks against their demand deposits from 7% to 9% in November 2007, to 10% in January 2008, to 12% in April 2008 and to 13% in May 2008. It also raised the reserve requirement for time and savings deposits from 2% to 4% in May 2008. SAMA also took prudential measures to restrain the growth in consumer credits. Moreover, it kept the benchmark repo rate unchanged at 5.5% from February 2007 until 11 October 2008 to signify its anti-inflationary resolve.

These monetary measures by SAMA proved quite effective in restraining credit extension by banks. Meanwhile, rent and food prices also steadied. In consequence, the inflation rate declined from its peak level of 11.2% in July 2008 to 10.9% in August and further to 10.4% in

September. In view of these developments and to ensure that economic activity does not suffer due to tight credit conditions, especially in the context of bearish influences of the prevailing global financial crisis, SAMA relaxed its policies by bringing down the reserve requirement for banks on their current account deposits from 13% to 10% on 12 October 2008, and further to 7% on 23 November. It also reduced the repo rate from 5.5% to 5.0% on 12 October, to 4% on 30 October and to 3% with effect from 22 November 2008. These measures are expected to boost the liquidity position of banks which would enable them to expand credit and thereby provide the much needed stimulus to domestic demand for sustaining economic activity, especially in the context of the prevalent worldwide recessionary trends.

It can thus be seen that SAMA has used its policy instruments flexibly to suit the changing circumstances, with its policy stance always remaining geared to promoting and achieving the objectives of domestic price and financial stability and the exchange rate stability of the Saudi riyal.

The exchange rate of the Saudi riyal (SAR) has been maintained at SAR 3.75 per US dollar since 1986. It may be mentioned here that the Saudi riyal has been formally pegged to the US dollar since the beginning of 2003 at SAR 3.75 per dollar. Prior to that it was pegged to the SDR, but since 1981, when the margins of 7.25% around SDR/SAR parity were suspended, a de facto link was maintained with the US dollar, which is the intervention currency. Since mid-1986, the link has been maintained at SAR 3.75 per U.S. dollar, on a de facto basis up to the end of 2002 and formally since then.

The exchange rate of the Saudi riyal vis-à-vis other international currencies have also remained within tolerable limits. SAMA keeps a careful watch on the Saudi riyal market to ensure its smooth functioning and takes corrective measures should there be any disruptive activities. Only on a few occasions, some pressures on the Saudi riyal's exchange rate have developed, but these have been promptly relieved by SAMA's intervention in the market.

The moral that emerges from the above episode of SAMA's monetary management is that in an oil-based economy, there is a greater need for a coordinated approach between monetary, fiscal and other economic policies than in other economies.

Table 1 – Saudi Arabia: Cost of Living Index
(1999 = 100)

Year	General index	% change
2001	97.8	-1.1
2002	98.0	+0.2
2003	98.6	+0.6
2004	98.9	+0.3
2005	99.6	+0.7
2006	101.8	+2.2
2007	106.0	+4.1
2008		
July	117.3	+11.2 (yoy)
August	117.9	+10.9 (yoy)
September	118.3	+10.4 (yoy)

Table 2 – Saudi Arabia: Factors Affecting Domestic Liquidity (M3)

	2003–07 (billions of Saudi riyals)	% share in gross generation of domestic liquidity
Government net domestic expenditure	1,154.7	77.3
Change in bank credit to the private sector	397.6	26.6
Miscellaneous factors	-58.2	-3.9
Gross generation of domestic liquidity	**1,494.1**	**100.0**
Leakage through private sector bop deficit	-1,090.6	-73.0
Net generation of domestic liquidity	**403.5**	

Table 3 – Saudi Arabia: Changes in Non-oil GDP, Domestic Liquidity and Cost of Living Index (In percent)

Period	Non-oil GDP in constant prices	Domestic liquidity (M3)	Cost of living index
1981-1990 Average	1.8	7.4	-0.2
1991-1995	2.1	5.2	2.1
1996-2000	3.7	5.7	-0.4
2001-2005	4.1	11.7	0.1
2006	5.1	19.3	2.2
2007	4.8	19.6	4.1
2008			
July		20.8 (yoy)	11.2 (yoy)
August		21.8 (yoy)	10.9 (yoy)
September		19.4 (yoy)	10.4 (yoy)