Chapter 4 Saudi Arabian Monetary Agency (SAMA) and Monetary Policy

When I had money everyone called me brother.

Polish proverb

Learning Outcomes

By the end of this section, you would understand:

- The organizational structure and functions of SAMA
- SAMA's evolving responsibilities in different financial areas
- Saudi monetary policy and instruments
- Effectiveness of monetary policy
- SAMA and exchange rate policy
- Money supply creation
- Process of financial deepening in the economy
- Inflation in Saudi Arabia

Introduction

Sitting at the head of Saudi Arabia's financial system is the Saudi Arabian Monetary Agency (SAMA). Established by Royal Decree in 1952, it has now completed 58 years of service to the country. It has been an observer and key player in financial matters, and has seen its role expand with the evolution of the Kingdom's economy and financial system. The history and role of SAMA encapsulates the evolution of Saudi Arabia's banking and financial structures in the gradual institutionalization of the country's financial market. How SAMA operates and the tools and policies it adopts will have a great impact on all of Saudi society, not merely on the financial sector. SAMA has come a long way from those early days and proved a capable regulator during the global financial crisis of 2007–2010, ensuring that the Saudi financial sector was not affected by the global contagion and that Saudi banks remained relatively unscathed.

As this chapter will explain, SAMA plays a leading role in the "financial deepening" of the markets, through the creation of new *financial instruments* and of the regulatory and legal framework within which such developments can occur. At the same time, these changes incorporate evolving public perceptions of monetary assets and increasingly active participation in the marketplace, while they create a higher level of sophistication leading to economic development (Azzam, 1997a). Although the Saudi financial and capital markets still have some way to go to reach the level of well-developed financial markets, SAMA has played a significant role in creating appropriate conditions for investors to mobilize resources domestically. Erratic oil revenues coupled with the needs of a young and growing population can only accelerate SAMA's efforts at financial development, and that in turn could encourage *capital inflows* for Saudi and foreign investors who seek better opportunities in the Kingdom.

Asserting Independence

The independence of a central bank to perform its mission without coming under undue pressure from governments is critical to the success of a central bank's policies and public confidence. Over time, SAMA has managed to acquire increased independence, which is a far cry from the original institution that was set up with technical assistance from the United States in 1952 to act as the country's de facto central bank within the confines of Islamic law.

SAMA is supervised by a Board of Directors that is headed by a Governor and Vice-Governor, both of whom are appointed by a Royal Decree by the King for terms of 4 years. These terms can be extended by Royal Decree for similar periods. SAMA's board also consists of three other members nominated from the private sector, who are also appointed by a Royal Decree to serve for periods of 5 years. The nominations and appointments of members of the Board of Directors, including the Governor and Vice-Governor, rest with the Minister of Finance and the Council of Ministers.

Senior SAMA managers have been in place for many years, providing stability and relative independence in decision-making, although they operate in close coordination with the Ministry of Finance. In February 2009, Dr. Mohammed Al Jasser was appointed as SAMA Governor after serving as Vice-Governor under the longserving and well-respected Hamad Saud Al Sayari, who had been in the position of Governor since 1983 – making him one of the longest-serving central bank governors in the world. Dr. Jasser is an able international technocrat who had also served as Saudi Arabia's Executive Director to the International Monetary Fund (IMF) and is fully conversant and comfortable in dealing with global financial issues. His appointment as Governor could not have been better timed both to ensure a smooth transition at the helm and also to act as a steadying hand during the global financial crisis.

Following Dr. Jasser's appointment, several other senior-level management changes took place at SAMA and Dr. Abdulrahman Al Hamidy was appointed as





Vice-Governor in August 2009, followed by Dr. Abdelrahman Al Kalaf as Deputy Governor for Technical Affairs and Mr. Ibrahim Abdullah Al Nasser as Deputy Governor for Administrative Affairs, both in November 2009.

Figure 4.1 illustrates SAMA's organizational chart.

Previous SAMA Governors served for various periods - George Bowlers (1952-1954), Ralph Standish (1954-1958), Anwar Ali (1958-1974), Abdulaziz Al-Quraishi (1974–1983) – and brought with them a blend of different management styles and professional backgrounds, mostly drawing upon Western central bank and IMF philosophies. Close technical and training cooperation is carried out with leading Western central banks and this has resulted in SAMA adopting a basically Western central bank approach in terms of bank supervision and risk management (Dukheil, 1995). While this might be true, it does not mean that SAMA does not have different policies from Western central banks, but that such differences can be explained by environmental influences based on the nature of the Saudi economy and of public perceptions and acceptance of this sector. The manner in which these particular environmental issues are handled will often determine the choice of organization that evolves. The growth of Islamic banking is one particular point, and SAMA, along with the Bahrain Monetary Agency (BMA), has been successful in regulating this fast-growing sector and ensuring that it operates under the same "fit and proper" banking supervisory regime that is imposed on conventional banking.

SAMA's Stated Functions

SAMA's 1952 founding charter stipulated that it would conform to Islamic law. It could not be a profit-making institution and could neither pay nor receive interest. There were additional prohibitions, including one against extending credit to the government, but this was dropped in 1955 when the government needed funds and SAMA financed about one-half of the governmental debt that accrued in the late 1950s (Abdeen and Shook 1984).

The introduction of the *Banking Control Law* in 1966 was a watershed in SAMA's history, as the new regulation clarified and strengthened SAMA's role in regulating the Saudi banking system (SAMA, 2004, Jasser, 2002). The Banking Control Law vested SAMA with broad supervisory powers and allowed the monetary agency to issue regulations, rules and guidelines regarding eight of the international supervisory developments that called for provision of capital adequacy, liquidity, *reserve requirements* and loan concentration ratios. The Banking Control Law supported the concept of a "universal banking model" that permitted banks to provide a broad range of financial services including banking, investments and securities through their branches.

SAMA sees its main roles as follows:

- issuing the national currency, SR
- · acting as banker to the government

- supervising commercial banks operating in Saudi Arabia
- advising the government on the public debt
- managing the Kingdom's foreign exchange reserves
- conducting monetary policy for promoting price and exchange rate stability
- promoting economic growth and ensuring the soundness of the Saudi financial system

In addition to the above-stated goals, SAMA had also over time acquired for itself several other regulatory functions such as supervision of the insurance sector and any remaining money exchanges. Operationally SAMA carries out these functions through its head office in capital Riyadh and through its ten branches located in all major Saudi cities.

SAMA's Evolving Responsibilities

In order to better understand SAMA's current roles and responsibilities, one must also understand the historical trajectory of the monetary agency in order to better appreciate the significant developments that have taken place in the Kingdom's financial history in comparison with other nations. When analysing Saudi Arabia's current position, it is sometimes easy to forget just how fast and how far the Kingdom has had to travel in a short period of time, "learning by doing" along the way.

SAMA has had a colourful and unorthodox history since its establishment in 1952, and this has been well documented by others (Abdeen and Shook, 1984, Johany, 1986, Dukheil, 1995, SAMA, 2004). When SAMA was established, Saudi Arabia did not have a monetary system exclusively its own. Foreign currencies circulated in the Kingdom as a medium of exchange along with silver riyal coins. Saudi banknotes had not yet been issued and there were no national Saudi banks. Banking was conducted through foreign bank branches and specialized trading houses – the most famous being the Netherlands Trading Company, which later became the Saudi Hollandi (Dutch) Bank.

Major transactions had to be carried out using foreign gold coins, such as the popular "Maria Theresa" dollar, or large quantities of silver riyals. However, expanding oil production from the late 1950s increased national revenues and international payments due to expanded international trade, which necessitated a different financial system. Demand for cash and inter-regional payments grew substantially and the use of coins became almost impossible. An additional motive for financial institutionalization was the absence of a fixed exchange rate between the silver riyal coins and foreign gold coins, so that exchange rates varied widely.

SAMA almost died at birth, as its establishment coincided with acute government financial difficulties due to runaway spending and a near depletion of reserves. The introduction of the paper riyal was abandoned at that time. SAMA, however, assumed responsibility for maintaining the exchange rate of the Saudi silver riyal vis-à-vis the US dollar within a band set by the government. In essence, this was not much different from the current SAMA exchange rate policy.

In 1953 SAMA completed the country's indigenous monetary system by issuing Saudi Arabia's own gold coins and by eliminating the circulation of foreign currencies. In 1954 it began issuing so-called "pilgrim receipts" for relieving pilgrims of the burden of carrying heavy metallic currency; these receipts were acceptable for encashment throughout the Kingdom. Again, we can see the genesis of the use of traveller checks by modern pilgrims. The popularity of "pilgrim receipts" and the acceptance of a non-metal form of payment by the public paved the way for the issuance of the SR notes in June 1961. From that date, all gold and silver coins and all pilgrim receipts were de-monetized. It had taken nearly 12 years from the date of SAMA's establishment for a paper currency system to be accepted in Saudi Arabia.

According to SAMA, the last five decades can be classified into four broad eras, each characterized by distinctive features (SAMA, February 2004):

- 1960–1972: In this era, SAMA focused on establishing the basis for commercial banking regulations against a background of expanding domestic banking business and of Saudi Arabia's acceptance of full convertibility of the SR in March 1961, in accordance with Article VIII of the IMF Articles of Agreement.
- 1973–1982: During this period, SAMA was preoccupied with containing the inflationary pressures of a booming Saudi economy fuelled by the massive oil price rises of 1973/1974, and with managing the expansion of the banking system to cover most of the country. SAMA also saw itself catapulted into the international limelight through its management of substantial Saudi for-eign exchange reserves, which built up during the boom period. These have been estimated at around \$170–180 billion by 1984 (IMF, 1999). During this period, as the author can testify from his own personal banking experience, SAMA was the magnet to all international bankers hoping to "recycle" some of these "petro-dollars."
- 1983–2004: During this time, SAMA's priorities were to introduce financial market reforms and advise the government in managing the public debt. Both SAMA and Saudi commercial banking came of age with the completion of the so-called *Saudization* of the local branches of foreign banks operating in the Kingdom and the introduction of a wide range of new financial products domestically. The pros and cons of the concept underpinning foreign bank *Saudization* will be dealt with at length in the next chapter, but the issue of advising the government on the level of public debt was certainly of some concern to SAMA during the period 2000–2003, when the level of national debt rose to almost 100% of GDP.

During this period, SAMA took the lead in encouraging Saudi banks to invest in and use advanced technologies. Today Saudi banking is at the cutting edge of technology usage with automated cheque clearing systems, electronic fund transfer and "transaction plus zero" days share trading settlement system – probably one of the most advanced in the world. 2005–ongoing: Unlike the previous period, which was characterized by a global monetary easing triggered by the Internet bubble burst in 2000 and fears of deflation, the period from 2005 was a period of monetary tightening. SAMA raised its repo rates from 2.5% levels in early 2005 to 5.50% levels in 2007 and inflation considerations predominated the later years. SAMA set out commercial bank prudential guidelines to slow the pace of consumer and margin lending and raised the cash reserve requirements. Following the collapse of Lehman Brothers in September 2009, SAMA lowered its reportate to around 2% in January 2009, and injected liquidity into the banks by lowering the cash reserve ratios. This period can be characterized as one that saw a more proactive interventionist stance by SAMA in ensuring that the Saudi banking system was not affected by the world's financial crisis and remained solvent. SAMA also oversaw the orderly settlement of some high profile Saudi corporate debt defaults and requested Saudi banks to take on appropriate reserves and strengthen their capital base. In this period, SAMA also oversaw the growth of the Saudi insurance sector and introduced a regulatory framework for the sector. The Saudi accession to the WTO in 2005 also presented SAMA with added regulatory oversight responsibilities for the "new wave" foreign banks that entered the Kingdom and which is still ongoing in terms of new licences applied.

Central Bank Monetary Policy

SAMA is vested with conducting monetary policy, and this includes exchange rate policy within a framework set by the government. How effectively has this been achieved and what are the major issues faced in the pursuit of these policies?

Generally, monetary policies, in conjunction with fiscal policies, are used to influence economic growth and inflation in an economy within desired limits. Both monetary and fiscal policies are called demand-management policies because they try to influence the economy's output indirectly through increasing or decreasing the economy's aggregate demand for goods and services.

In most countries, a *central bank* acts as the chief monetary authority and lender of last resort to the banking system. By "lender of last resort" we mean lending money to banks on an overnight basis or for longer periods when banks are unable to borrow money elsewhere at market rates. This function of a central bank as the last-resort lender provides a certain degree of stability to a banking system.

Central banks try to influence the economy by changes in interest rate levels and, therefore, the money supply. Various monetary tools are at the disposal of central banks to achieve intermediate and long-term goals. One such tool is the *discount rate*. This is the rate the central bank charges banks for borrowing funds from it. The central bank usually has the power to restrain commercial banks in their lending by raising or lowering the discount rate as needed, thus restricting or loosening credit

conditions. This allows the central bank to control bank lending indirectly, and it is a signal to the market of central bank intentions. A central bank also tries to influence the level of interest rates and hence the pace of a nation's economic growth by adjusting the level of *reserve requirements*. This effectively reduces or increases borrowing rates through increasing and decreasing the level of statutory (obligatory) reserves a commercial bank must keep with the Central Bank, calculated on the basis of its non-borrowed deposit base. Another effective tool for a central bank is to increase or decrease bank reserves through *open-market operations* – the buying and selling of government securities in the open market. This action decreases or increases the pool of non-borrowed bank deposits, and hence money supply in the system.

In analysing SAMA's monetary policy in more detail, several factors have to be borne in mind about the economic environment that SAMA finds itself in. These can be summarized as follows:

- Saudi Arabia is an open economy with no restrictions on capital flows which makes capital control policies in effective.
- The bulk of economic activity and revenues are oil-driven and SAMA has not much control as to government inflows.
- Economic openness and oil dependency means vulnerability to external shocks.
- A fixed exchange rate regime against the US dollar which hampers SAMA's independent interest rate policies.
- A passive player in terms of the government's macroeconomic objectives of minimizing the impact of oil revenue swings through government-induced counter-cyclical measures, involving building surpluses in upswings and running deficits in downturns.

Structure of the Saudi Financial System

There is close cooperation and coordination between the major regulators of the Saudi economic and financial system. Figure 4.2 illustrates the major responsibilities of the regulators.

Figure 4.2 highlights several potential overlapping areas of supervisory jurisdiction such as the CMA's supervision of foreign investment banks and SAMA's regulation of foreign retail banking branches, the licensing of new corporates by the Ministry of Commerce, which includes foreign and Saudi financial entities, and the Ministry of Finance's supervision of the specialized government credit lending agencies, which lie outside SAMA's supervisory domain, but can impact monetary policy through their lending and money supply creation process. Over the past decade as the Saudi economy has evolved, the various government bodies have cooperated closely through "learning by doing," and there is a high degree of both informal and formal communication to ensure that policies are in harmony.



Fig. 4.2 Saudi Arabia financial and economic regulatory responsibilities (Source: SAMA, 2010)

Central Bank Monetary Policy: The Theory

Monetary policy can be broadly defined as the process by which central banks seek to influence the quantity of money in the economy to achieve certain macroeconomic objectives. These often include economic growth, low level of unemployment, inflation targeting, exchange rate targeting and monetary aggregates control. Monetary policy is often described as being expansionary when the level of interest rates is lowered and contractionary or tight when the level of interest rates is raised.

Central banks have to cooperate closely with the major spending bodies such as Ministries of Finance to ensure that their policies are not counter to each other, but in the final analysis central banks are independent to act on a discretionary basis as guardians of monetary policy, especially by influencing the quantity of money and hence the general price level within an economy. Figure 4.3 illustrates the sharing of economic and monetary responsibilities of a central bank and a Ministry of Finance as exemplified in Saudi Arabia.



Fig. 4.3 Saudi economic and monetary policy responsibility

Saudi Monetary Policy in Practice

The key objectives of Saudi Arabian monetary policy are to stabilize inflation and the general level of prices, to maintain a fixed exchange rate of the SR against the US dollar and to allow free movement of currency and capital. According to SAMA officials (Al Jasser and Banafe, 2003), there are limitations to current monetary policies in Saudi Arabia "due to the openness of the economy, with the riyal effectively pegged to the US dollar since the suspension of the Special Drawing Right (SDR) riyal link in May, 1981." In practice this has resulted in riyal interest rates closely tracking dollar rates, with a small premium, a phenomenon we will further analyse below.

In line with other central banks in the region, SAMA is solely responsible for monetary policy formulation and implementation. It is free to select its operating procedures and to determine the choice of instruments as well as when to apply them. Only in a few cases prior approval is needed from the Ministry of Finance, such as when changing the statutory reserve requirements. To all intents and purposes, SAMA is relatively independent of government pressure.

SAMA relies on four-policy instruments in conducting monetary policy: cash reserve ratio/minimum reserve policy, repos and reverse repos, foreign exchange swaps and, finally, placement of public funds. Figure 4.4 illustrates SAMA's monetary policy framework in terms of overall strategy and implementation tactics and operating objectives and goals.

SAMA applies no direct controls, particularly with respect to the control of interest rates and foreign exchange. The first is due to SAMA's charter, which prohibits the payment and receiving of interest; furthermore, there is no discount rate policy. As such, interest rates play a subsidiary role, as they are predominantly affected by US dollar interest rates. However, SAMA has over the years successfully used the "repo" rate policy as a proxy for establishing an interest rate benchmark in the money market in lieu of a formal discount policy. As regards foreign exchange control, SAMA has adopted a regime of free movement of capital



Fig. 4.4 SAMA's monetary policy framework

for Saudi Arabia. As part of monetary policy implementation, SAMA does not use other direct controls, such as credit ceilings. The monetary agency could, however, impose credit concentration ceilings on certain economic sectors, as well as overall loans-to-deposit ratios for Saudi commercial banks, in order to curb or expand bank lending.

Table 4.1 summarizes the major policy instruments that SAMA has, their recent use, and the rationale for using them as well as perceived effectiveness of such instruments in the Saudi financial sector.

Article 8 of the SAMA Banking Control Law prevents banks from lending more than 25% of their reserves and paid-up capital to any one entity, but at SAMA's discretion, this can be increased to 50%. A significant "secondary" monetary tool at SAMA's disposal is a maximum overall loans-to-deposit ratio that can be extended. While there is some leeway, the current maximum loans-to-deposit ratio stands at a conservative 75% for Saudi banks compared with 85-90% ratios for the US banking industry as a whole. Central banks sometimes use what is termed *moral suasion*, whereby a central bank attempts to influence commercial bank lending by persuasion rather than by direct means. In Saudi Arabia, this tool had not been particularly effective, especially in the early days of Saudi banking, because, when faced with a decision on lending in a booming era, the Saudi commercial banks chose profit maximization over SAMA "advise." This was compounded in the pre-Saudization banking era, when significant out-of-Kingdom forces and pressures were exerted on the foreign bank branches operating in the Kingdom. However, once Saudization of the Saudi banking system was completed in the mid-1980s, including the establishment of regular senior-level bank management meetings with SAMA, this policy tool became more effective. It will be interesting to see how SAMA will be able

Policy instrument tool	Rationale and operational usage	Effectiveness
Cash reserve ratio (CRR)	 To ensure banks have adequate liquidity to cover customer deposits Raised twice in April and May 2008 from 7 to 9% and then 13% for first time since 1980 on current account and from 2 to 4% on savings account Reduced to 7% on current account in November 2008 	 Used for implementing structural changes in bank liquidity (credit creation control) and for fine-tuning short-term liquidity Produces strong signal effects but infrequently used Not imposed on inter-bank transactions
Statutory liquidity ratio (SLR)	 Banks required to maintain minimum amount of specified liquid assets equal to 20% of demand and time deposits 	 "Free liquidity" at disposal of banks is reduced and can influence overall bank lending structure (short/long term)
Repos	 SAMA alters liquidity position of banks by dealing directly in the market to make temporary additions to bank reserves through short-dated repurchase agreements (overnight) 	 Allows for short-term injection of reserves and automatic withdrawal upon repo maturity Efficiency depends on SAMA's holding of securities and size and depth of market
Reverse repos	• Need for banks to place excess liquidity with SAMA through overnight matched sale-purchased operations	 SAMA can absorb rather than provide bank reserves A definitive purchase of financial assets reversible at short notice not affecting prices in bond market; serves to regulate the money market
Foreign exchange swaps	 Intention to influence capital outflows, avoiding disruptions to monetary policy from foreign exchange markets Used for liquidity management and currency speculation 	 More flexible than repos/reverse repos in terms of their maturity and volume per deal Affect liquidity but do not generally exercise influence on foreign exchange rate
Placement of public funds	• At SAMA's discretion to place governmental institutions' funds with selected banks	 A "rough tuning" instrument providing banks with long-term liquidity support Can signal crisis management and problems in banks
Foreign exchange intervention	• At SAMA's discretion in times of acute speculation	• Rarely used to stabilize spot and forward market

 Table 4.1
 SAMA's monetary policy instruments: comparative analysis

Source: SAMA, Annual Report, 2003

to align the interests of Saudi Arabia with the interests of the "new wave" foreignowned bank branches that were licensed to operate in the Kingdom post-2005 WTO accession.

Analysing the operational usage and effectiveness of the various policy instruments at SAMA's disposal in Table 4.1, we note the sudden and dramatic use of the cash reserve ratios (CRRs) that were used in 2008 for the first time since 1980. In 1980 SAMA reduced the CRR to 7% on current accounts and 2% on deposit accounts, but 28 years later it reversed policy by dramatically raising the CRR to 13% on current accounts and 4% on deposit accounts to send a strong "signalling" effect to the Saudi banking sector to curb back on lending. By the end of 2008, the CRR on current accounts had been reduced to 7%, but SAMA's intentions were taken on board by the Saudi banks. A consequent effect of raising the CRR is that such higher reserves will eat into bank profits even if sometimes they do not materially impact on lending growth. The reason of this "indirect bank tax" is that reserves at SAMA do not earn interest whereas other deposits through the reverse repo do. Another consequence of a higher CRR ratio is that banks might therefore increase the spread between the lending and deposit rates in order to maintain their previous level of profitability. Raising lending rates could also reduce lending growth.

Exchange rate targeting remains a plank of SAMA's monetary policy instruments through foreign exchange swaps and occasional foreign exchange intervention.

The Centrality of SAMA's Exchange Rate Policy

According to analysts, economic theory suggests that when a country fixes its exchange and interest rate and is subject to high capital mobility, it loses its ability to conduct an independent monetary policy. In terms of economic policy, this means that in Saudi Arabia, fiscal, not monetary, policy is the primary instrument for economic growth management. Fiscal policy – or more precisely government expenditures – can be used to increase or decrease GDP, while monetary policy is focused on fixing the exchange rate and interest rates (NCB, 2001, Abalkhail, 2002, Jasser and Banafe, 2003). Monetary policy is used to "fine-tune" the effects of fiscal policy. With the SR effectively pegged to the US dollar since 1981 at a rate of 3.75 to the dollar, there have been limitations to Saudi monetary policy on interest rates adjustments. In effect, the SR interest rates closely track dollar interest rates, often with a small premium. This is graphically illustrated in Fig. 4.5, which sets out US and SR 3-month deposit rates for the period 1994–2009. SR premiums reflect periods of sharp falls in oil prices, cuts in government expenditures and regional tensions.

In essence, Saudi interest rates – and by implication, Saudi monetary policy – are closely tied to that of an external central bank, specifically that of the United States. What might be prudent and necessary monetary policy in the USA (expanding or dampening the money supply) might not necessarily be the most appropriate interest rate level desirable for Saudi Arabia at the same period of time. A further concern for SAMA is that, under the adopted fixed exchange rate policy, if SR interest rates did not closely track that of the US dollar, an *arbitrage* opportunity would exist for either US or Saudi investors to borrow in the low-interest-rate currency and invest in the high-interest-rate currency, making a risk-free profit due to the fixed exchange rate, after allowing for inflation differentials between the two countries.



Fig. 4.5 US and Saudi interest rates 1994–2009 (Source: SAMA)

In Saudi Arabia, the exchange rate is central to monetary policy. SAMA's intervention under the fixed exchange rate regime is influenced by two factors: the level of foreign exchange outflow from the country and the level of dollar/riyal interest rate differentials. As such, SAMA's stated goals centre on internal price stability and balance of payments considerations. The monetary agency believes the fixed dollar/riyal peg has worked well due to the fact that "all of Saudi exports and most of its imports are denominated in dollars; the riyal is fully backed by foreign exchange reserves; such reserves are the result of oil revenues and investment income; the riyal is not a misaligned currency in terms of its nominal and effective exchange rates; and, finally, the stability of the dollar/riyal exchange rate sharply reduces risks for foreign investors." Table 4.2 sets out some of the major arguments for and against fixed exchange rate regimes that are applicable to Saudi Arabia.

Table 4.2 indicates that there are powerful arguments for both fixed and floating exchange rates. As far as Saudi Arabia is concerned, there is certainly some basis for reduction in investor risk due to a fixed rate policy. Saudi Arabia did not experience any of the upheavals seen in other countries during the East Asia and Mexican currency crisis of the mid- and late 1990s. However, there is some disagreement on the level of imported inflation and nominal and effective SR exchange rates, due to the SR being pegged to the US dollar. Disagreements on whether Saudi Arabia should adopt a fixed exchange rate pegged to one currency or to several currencies tend to arise as a result of the short- or long-term assumptions being made. Some argue that the fixed peg against the dollar has served Saudi Arabia well and will continue to do so in the long term with a minimal *devaluation* risk outlook as long as "there are no excesses ... (and) government overspend, or external deficits surge" (Azzam, 2002).

As stated earlier, Saudi Arabia has a pegged exchange rate regime, and monetary policy is geared to exchange rate targeting and pursuit of price and financial stability. In addition to its routine dollar sales to Saudi commercial banks, SAMA intervenes in the US dollar/SR spot and forward markets if need be to stabilize any signs of a

Advantages	Disadvantages
 Fixed exchange rate regimes Maintains investors' confidence in the currency, thus encouraging domestic savings and investment and discouraging capital outflows Reduces inflationary pressures associated with devaluation 	 Does not allow the implementation of independent monetary policy Exchange rates cannot be used to adjust for external shocks or imbalances A fixed peg is also a fixed target for speculators
 Floating exchange rate regimes Allows pursuit of an independent monetary policy; when an economy suffers a downturn, monetary expansion can soften the impact Allows a country to adjust to external shocks through exchange rates; that is, lower export prices and higher import prices would help the country regain external equilibrium 	 Reduces investors' faith in the currency, thus discouraging capital inflows to avoid exchange risk Floating rates can overshoot and become highly unstable, leading to speculation

 Table 4.2
 Advantages and disadvantages of fixed and floating exchange rate regimes

Source: Adapted from Azzam, 2002, p. 98

volatile currency market condition resulting from speculative activity. In November 2008, SAMA for example, introduced unlimited swap arrangements for local banks, allowing them to exchange riyals for equivalent amounts of dollar.

SAMA's swap actions were important for several reasons. First, there had been a large outflow of speculative funds initially betting on an exchange rate revaluation once oil prices fell sharply in 2009 and the massive deleveraging in global financial markets. This had affected bank deposits and led to a shortage of US dollar denominated funds. Second, the rapid growth in loans in 2008 and shortfall in the growth of deposits contributed to a rise in the Saudi banks' loans-to-deposit ratios, which exceeded at one stage the 75% ceiling prescribed by SAMA and constrained the capacity of the banking sector to take new loans.

The fixed exchange rate policy of the Kingdom raises a number of challenges, sometimes rendering the monetary policy rather rigid. This occurred during a period of intense speculation on a possible revaluation or even a "depeg" away from the dollar during 2008. As the SR's peg to the US dollar meant that SAMA had to reciprocate any Federal Reserve cuts to prevent arbitrage opportunities, the Saudi macroeconomic conditions unsupportive of any domestic cut further strengthened the "depeg" argument. This was made evident in SAMA's repo rate cuts which ran contrary to the appropriate policies when Saudi Arabia was witnessing record high inflation levels and rising liquidity. The rate cuts as illustrated in Fig. 4.6 led to more severe negative real interest rates and fuelled inflation further.

SAMA however sees no permanent solution emerging from a revaluation of the currency. It was argued, correctly as it turned out in 2009, that revaluation might temporarily reduce inflation, but the pressure might still be stocked up by domestic



Fig. 4.6 Saudi Arabia: interest rate developments (Source: SAMA)

bottlenecks in supply. Revaluation might also have reduced the government revenues from oil and the value of SAMA's official reserves. As such, SAMA depended on the other instrument policies described earlier such as the easing of reserve requirements to free up liquidity.

Saudi Banks Have Ample Reserves

Saudi banks have built-up reserves well above SAMA's official CRR requirements as illustrated in Fig. 4.7 and Table 4.3.

From Table 4.3 we note that the average statutory deposit ratio with SAMA has ranged from 4.3 to 4.5% in the period to 2005, but rose to 5.3% levels by Q1 2009. To put this in historical context, the average deposit reserve ratio stood at 6.3% in



Fig. 4.7 Banks reserves well above requirement (Source: SAMA)

	1999	2001	2002	2005	2007	2008	2009(Q1)
(A) Deposits with SAMA	SR Mill	ion					
Cash in vault	5,468	3,453	4,892	7.201	10,019	4,007	10,627
Current deposits	572	197	1,750	2238	3143	751	1259
Statutory deposits	10,504	12,599	14,270	21,039	36,142	44,297	46,414
Other deposits	1	2,874	7,732	2167	59,310	41,116	79,542
Bank reserves	16,545	19,122	28,643	32,646	108,614	97,171	137,842
(B) Ratios (%) to bank deposits							
Cash in vault	2.2	1.2	1.5	1.5	1.4	1.3	1.3
Current deposits with SAMA	0.2	0.1	0.5	0.5	0.4	0.1	0.1
Statutory deposits with SAMA	4.3	4.5	4.3	4.3	3.0	5.2	5.3
Other deposits with SAMA	_	1	2.4	0.4	8.3	4.9	9.0
Bank reserves (%)	6.7	6.8	8.7	6.7	15.1	11.5	15.6

 Table 4.3
 Reserve position of Saudi banks (end of years)

Source: SAMA

1970, 11.5% in 1980 and 4.5% in 1986/1987. However, "other" reserve deposits held with SAMA peaked at SR 12 billion or 9.5% in 1986/1987 (SAMA, 2003), a reflection of SAMA's occasional requests for such "extra" reserves to be deposited by banks during periods of "extraordinary" banking activities. During 1986/1987, the Saudi banks, as shall be explored more fully in the next chapter faced some loan collection difficulties, and SAMA's request for additional reserves was a prudent measure to safeguard the banks' liquidity "safety net." Similarly, in 2002, Saudi banks witnessed private capital repatriation from abroad following the September 11, 2001 events and SAMA encouraged banks to place such funds with it in "other deposits" to avoid overheating certain sectors of the economy.

Inter-bank domestic market transactions are exempted from reserve requirements, but offshore banks' riyal deposits with the domestic banks are subject to CRR.

SAMA has always felt that Saudi banks should not be subject to sudden liquidity pressures due to local or regional uncertainties. As such, a relatively high level of statutory liquidity ratio (SLR) in comparison with banks in more developed economies is imposed on Saudi banks. A minimum amount of specified liquid assets equal to 20% of their demand and time liabilities is set, making Saudi banks fairly liquid, but imposing a "withholding tax" on lost potential earnings by Saudi banks.

Reliance on "Open-Market" Operations

As indicated in Table 4.1, SAMA has several other monetary policy instruments at its disposal, including *foreign exchange swaps*, *placement of public funds* and *openmarket operations*. Placement of public funds with banks is entirely at SAMA's discretion and complements its efforts to fine-tune day-to-day liquidity instruments.

The placement of public funds is a way of "rough-tuning" the money supply; basically the Central Bank is seen to provide long-term liquidity support to a bank. In Saudi Arabia SAMA does this by placing the funds of semi-autonomous government institutions. SAMA has used this in the past to provide support to those banks facing liquidity problems or going through crisis management. The effect, however, is to reduce the returns of those government institutions whose funds are being placed at lower-than-market rates, but, more importantly, it sends a negative signal to the market about the state of health of the recipient bank.

Central bank support, unless it is a temporary measure to be followed by an asset and liability restructuring and by management changes, might induce banks to take more risks, creating a "moral hazard" situation. SAMA has used this type of support infrequently, aware that uncertainty about one bank could easily spread to the rest of the banking sector.

In common with most other developed central banks, SAMA has come to rely more on *repos* and *reverse repos* as the most flexible operating instruments of monetary policy, through the buying and selling of government bonds and securities in so-called "open-market operations." A central bank can alter the liquidity position of banks through dealing directly in the market by reducing liquidity (selling securities) or injecting liquidity (buying back securities), but the effectiveness of such operations depends on the size and depth of the capital market, specifically the number of institutional players who are buying and selling securities besides the central bank.

The Saudi *bond market* is still in its early stages, mainly restricted to SAMA, the Saudi banks and a few other institutions. The new Saudi *Capital Market Law* envisages broadening the range of instruments and players over time, as will be discussed in later chapters. In the short term, open-market operations are an effective and more precise tool in changing the money supply of the banking system through the buying and selling of government short- and long-term securities. These instruments are deemed to be "gilt-edged" or default-free, with other financial instruments priced above them to reflect liquidity and credit risk.

In 1986 the Saudi Arabian government introduced its first borrowing instrument – the Bankers Special Deposit Account or BSDA – as a means of financing growing budget deficits and as an alternative to drawing down on foreign assets to finance the budget deficits. Table 4.4 sets out the main securities that are currently offered by SAMA and it illustrates how far SAMA has come since those pioneering days.

Table 4.4 reveals an extensive "menu" of financial securities that are now on offer, ranging from very short term liquid instruments such as 1-week treasury bills to long-dated 10-year bonds. The introduction of floating rate notes (FRNs) in 1996 added a new dimension and provided a further rate risk-adjusted option for purchases of Saudi government securities. Pricing is competitive compared to other market instruments, with premiums added to longer-dated securities, especially for government development bonds (GDBs), which in turn are priced at a premium to comparable US bonds. Repo facilities are provided at 35% of total bank holdings of government securities and offered at Market Related Rates or MMRs. SAMA's official repurchase rate (ORR) is also available to banks seeking credit, up to the maximum limit of 0.5% of eligible securities. The ORR rate level is determined by

Security issue	Currency denomination	Duration	Pricing	Offering	Observation
Treasury bills (T-Bills)	SR	1, 4, 13, 26 and 52 weeks	SR Interbank BID rate	Weekly basis	Replaced the 180 days Bankers Special Deposit Accounts
Floating rate notes (FRNs)	SR	5 and 7-year maturities	Saudi Interbank Offer Rate (SIBOR) Plus Margin	Monthly basis	Introduced in 1996 to provide rate risk hedging
Government develop- ment bonds (GDBs)	SR	2, 3, 5, 7 and 10-year maturities	Priced to reflect relative value in alternative investments (US bonds) plus 25–75 basis points premium	Quarterly basis	Issued on a fortnightly basis until 1996

 Table 4.4
 SAMA: current securities offerings

Source: SAMA Annual Reports

SAMA. Given the extremely small amount of credit available to banks at the ORR, this serves more as a signal to the domestic money market in the absence of an official discount rate, than as a transactional influence. "Reverse repos" allow Saudi banks to deposit surplus funds with SAMA for a short period of time. The rate of investment is called the reverse repo rate (RRR) and is priced at below inter-bank bid rates.

Repos and reverse repos are thus automatic mechanisms for regulating the banking system's liquidity. According to SAMA's most recent annual reports, repo and reverse repo agreements entered into with commercial banks averaged SR 1.6 billion during the first quarter of 2009 compared with SR 1.4 billion in the corresponding period of 2008. The figures for reverse repo – banks placing excess liquidity with SAMA – were more staggering, averaging at SR 74.2 billion for first quarter 2009 compared with SR 78.4 billion for all of 2008. A significant factor was the placement of time deposits with domestic banks on behalf of government entities, but also indicated a risk aversion by Saudi banks to extending further credit to the Saudi private sector following the high-profile debt problems of Saudi corporate names such as the Al Gosaibi and Saad Groups during 2009.

Money Supply Creation and Monetary Policy

As analysed above, when exchange rate policy becomes the main plank of Saudi Arabia's monetary policy, it seems difficult to pursue a counter-cyclical monetary policy that is independent of the role of fiscal policy on Saudi GDP growth, money demand/supply and inflation. The major factors influencing monetary aggregates in the Kingdom are the government's fiscal operations and private sector balance-ofpayments deficits.

In an oil-based economy like Saudi Arabia, the creation of money typically proceeds as follows. The Government maintains its accounts with SAMA. The receipt of oil revenues by the government, nearly all in US dollars, directly produces a rise in government deposits held in SAMA's international bank accounts. These foreign oil revenues have no immediate impact on domestic liquidity, since by definition domestic liquidity is held only by the private sector. Only when the government makes payments to contractors is the inflow of foreign exchange translated into domestic liquidity. When expenditures are made, the government draws checks on SAMA, which means SAMA's liabilities are shifted to the banks, thus facilitating credit creation by the banks.

SAMA effectively transforms the dollars held by it on behalf of the government into SRs, while still holding the dollars as backing for the "created" SR money supply. It is the private sector's transactions with the rest of the world that affect domestic liquidity. Given that the Saudi economy is an open economy, and that there are no capital restrictions, a large fraction of the domestic riyals received by households, contractors and foreigners operating in the Kingdom are converted into foreign currencies to pay for imported goods, remittances and investments abroad. This reverses the process of money supply creation, and partially offsets the money creation effects of the government. This is illustrated diagrammatically in Fig. 4.8.

The diagram is a simplified one, as it assumes that all government SR payments are converted into dollars and are transmitted as leakages out of the system. The net effect in this case is that while SAMA receives back all SRs through dollar sales to the Saudi banking system, it has in effect "extinguished" the available stock of SR money supply through its drawdown of foreign currency deposits.

In Fig. 4.8 the outflows from SAMA's foreign currency accounts exactly match the dollar leakages of the private sector. In reality, the amount of "leakage" is a function of the amount of remittances, the propensity to import and the amounts retained in the domestic economy by Saudi companies and individuals. The Saudi domestic money creation process seems to set it aside from other economies, where the quantity of money supplied responds to demand for the local currency through the banking system, through the selling of foreign assets or through the "printing of money." In the Saudi model, external government transactions also have no impact on domestic liquidity, as they represent bookkeeping entries in SAMA's foreign currency accounts.

Given the above, it is important to assess the causative factors for changes in Saudi Arabia's broad money supply, or M3, so as to work out the actual net domestic expenditure of the government and the balance of payments deficit of the private sector. This is set out in Table 4.5 for selected years from 1986 to 2009.

From Table 4.5, we note that the rate of monetary expansion M3 fluctuates over the period in question, reflecting a variety of factors. The positives include government expenditures during periods of regional tensions (such as the 1990/1991



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Fig. 4.8 Saudi Arabia: domestic money creation process

	1986	1989	1997	2002	2007	2008	2009Q1
	SR bill	SR billion					
Net domestic flows through government spending ^a	71.7	69.1	145.3	154.2	461.2	339.7	101.2
Commercial banks claims on the private sector	1.2	2.8	10.1	18.8	101.9	156.7	101.2
Net private sector balance of payments	-85.7	-96.0	-121.9	-161.0	-216.1	-344.0	-130.2
Net other items ^b	23.3	25.9	-24.2	37.1	-220.3	-7.7	61.1
Change in M3	10.5	1.8	9.3	49.1	129.2	139.4	131.6
Annual growth rate of M3 (%)	7.0	1.0	5.2	15.2	19.6	17.6	15.5

 Table 4.5
 Factors affecting changes in Saudi M3 (selected years)

^aIncluding net loans disbursed by government-sponsored credit institutions ^bIncludes payments for goods and services as well as capital outflow

Source: SAMA

Gulf War) as well as higher oil revenues (2007, 2008). Counteracting these positive developments are net private sector balance of payments outflows, which were consistent for all the years. "Net other items" showed periods of capital outflows (1991–1997), but was mostly a net capital inflow in 2002 following uncertainties after 11 September 2001. Capital outflows were prominent in the high oil price boom years of 2007 and 2008, but there was a net capital inflow in 2009 reflecting uncertainties over international financial market events in 2008/2009.

Composition of Saudi Arabia's Money Supply

Evidence from many countries that have developed their financial markets seems to suggest that people will gradually shift towards savings and other yield-bearing instruments and away from cash and current accounts over time. A shift from a cash-orientated society is taking place in Saudi Arabia, as illustrated in Table 4.6.

End of year	Currency/M3	M1/M3	M2/M3
1972	44.4	73.3	88.8
1982	25.5	64.1	86.2
1997	16.8	51.9	80.3
1998	16.0	49.7	79.3
1999	18.3	52.0	80.4
2000	16.2	52.6	81.5
2001	14.9	54.3	82.1
2002	13.7	53.2	81.6
2003	14.2	54.4	81.8
2004	12.1	54.4	82.2
2005	12.1	51.2	81.3
2006	10.5	47.3	81.6
2007	9.3	48.6	84.4
2008	8.9	45.8	85.4
2009(1Q)	8.6	47.6	84.5

 Table 4.6
 Saudi Arabia monetary ratios (%)

Source: SAMA

While Table 4.6 shows a downward trend in currency held outside banks over time (currency/M3), seasonal fluctuations occur in Saudi Arabia each year around the two major Muslim calendar events: the *Ramadan* month of fasting and the *Hajj* or pilgrimage season. Demand for cash increases sharply during these periods, as well as to a lesser extent during the summer school vacation, when currency outside banks reaches its peak.

A key factor in the steady rise in demand deposits is the increase in such deposits as bank customers feel more confident about the monetary stability of the country and the soundness of the banking system. The expansion of the use of credit, debit and direct payment cards will also necessitate the use of such accounts to satisfy the *transaction motive* for holding money. The growth in time and saving accounts also indicates that the population's general reluctance and inhibition to receive interest payments due to religious reasons is somewhat diminishing, thereby increasing the *investment motive* for holding money. The increase in time deposits over the years has had a more significant effect on the Saudi banking industry, as this has encouraged Saudi banks to increase the maturity profile of their loans to longer periods and to improve the terms of such longer-term loans. They can more easily match their assets with a longer liability base, further monetizing the Saudi economy.

Financial Deepening of the Saudi Economy

"Financial deepening" is sometimes difficult to quantify, and different measures have been used for other Arab Gulf countries that can be applied to Saudi Arabia (Eltony, 2000). The measures used are as follows:

K – Currency ratio (cc/M1)Z – Monetization ratio (M2/GDP)KK – Mobilizing longer-term assets (M1/GDP)

Table 4.7 shows the results of this financial deepening over the period 1971–2008, encompassing the pre-boom, boom and adjustment periods of the Saudi Arabian economy.

КК
11.3
11.7
20.2
16.1
26.1
22.8
23.4
25.6
26.9
28.2
29.2
37.1
39.7
47.2
50.1

Table 4.7 Financial deepening in Saudi Arabia (%) 1971–2008

 K – Currency ratio (cc/M1); Z – Monetization ratio (M2/GDP); KK – Mobilizing long-term assets (M1/GDP)
 Source: SAMA The currency ratio (K) reflects the degree of sophistication of the domestic financial sector. The monetization ratio (Z) reflects the size of the financial market, while KK is a measure of the extent of monetization and mobilization of long-term assets.

The Saudi data show that the currency ratio (K) followed a decreasing trend, similar to Kuwait data over the same period for the Eltony study. This signifies a high degree of diversification of financial institutions and greater use of non-currency forms of transaction media, such as other bank accounts. The ratio fell from nearly 63% in 1971 to around 20% in 2008.

The monetization variable (Z) also indicates significant improvements over the data period. This ratio has increased significantly from 14% levels in the early 1970 period to 50% in 2008, indicating further expansion in the financial market relative to non-financial markets. This in turn implies a faster accumulation of a wide range of financial assets, such as savings accounts. The KK ratio reflects the degree of sophistication of the financial market shown by the level of dependency on cash or liquidity preferences in the Saudi economy. This also has shown significant improvement over the study time period. In summary, the Saudi financial sector is showing substantial improvement in achieving financial deepening.

SAMA and Inflation Control Policies

According to SAMA, monetary policy continued to be "geared to the objective of maintaining domestic price and exchange rate stability." The considerable inflation witnessed by Saudi Arabia during the early "boom" years of 1974–1976, when inflation reached around 30% p.a., has been effectively tackled (Johany, 1986), but it became a major concern during the period 2007–2009 before subsiding again. Table 4.8 and Fig. 4.9 illustrate the sharp rise in the cost of living index in Saudi Arabia from almost negligible levels of under 1% in 2005 to nearly 10% by 2008. By end 2009, this had fallen to around 4.6% levels.

	2005	2006	2007	2008
Non-oil GDP deflator $(1999 = 109)$	4.1	3.7	1.6	2.4
Cost of living index $(1999 = 108)$	0.7	2.2	4.1	9.9
Non-oil GDP (at constant prices)	5.2	5.1	4.7	4.3
Government expenditures	21.5	13.5	18.5	11.5
Money supply (M3)	11.6	19.3	19.6	17.6

 Table 4.8
 Annual growth rates of selected indicators, including inflation (2005–2008)

Source: SAMA

Table 4.8 also summarizes the main inflation indicators as well as setting out the growth in money supply and Gross Domestic Product (GDP). In order to arrive at a better estimation for changes in the domestic economy and to isolate the impact of oil on the GDP, the non-oil GDP deflator is used. This is a price index that employs the current year's output mix for calculating a price index, using a base



Fig. 4.9 Saudi Arabia money supply growth M2 and CPI % change (Source: SAMA)

year. Because GDP refers to the value added within Saudi Arabia during a year, the non-oil GDP deflator is a measure of domestic inflation. However, it is still an imperfect measurement as much of Saudi Arabia's GDP is produced by foreign-owned factors of production (labour) and the GDP deflator includes this element. What Table 4.8 also seems to indicate is that inflation has been impacted by the growth in money supply with M2 money supply growing rapidly from 2007. While there are other factors that account for Saudi inflation which will be analysed below, there is also some evidence that the quantity of money that the government was injecting was a factor rather than the velocity of money, which declined as illustrated in Table 4.9.

Years	M1	M2	M3
1998	3.82	2.46	1.98
1999	4.12	2.64	2.11
2000	4.42	2.86	2.32
2001	3.94	2.60	2.13
2002	3.66	2.46	2.01
2004	2.11	1.14	1.14
2005	2.04	1.32	1.07
2006	2.09	1.25	1.02
2007	1.92	1.10	0.91
2008	1.67	0.96	0.80

Table 4.9 Income velocity of money (non-oil sector) 1998–2008

Source: SAMA

Table 4.9 indicated that there was no positive correlation between Saudi money supply growth and the level of inflation. As such, the monetarist equation MV = PY does not seem to hold, where *M* is money supply, *V* is velocity of money, *P* is the price index and *Y* is real income.

The quantity theory of money relates output in the economy to the velocity of money, the money supply and the price level. Velocity of money is defined simply as the rate at which money circulates in the economy. If velocity is high, money is circulating quickly, and a relatively small money supply can fund a relatively large amount of purchases. On the other hand, if velocity is low, then money is circulating slowly, and it needs a much larger money supply to fund the same number of purchases. From the above figures, there seem to be other factors which also influenced inflation.



Fig. 4.10 Drivers of inflation (Source: SAMA)

The pick-up in Saudi inflation was seemingly accentuated by the following factors, illustrated in Fig. 4.10, which sets out the key drivers of inflation:

- Supply bottlenecks in 2007/2008, especially in the real estate sector where residential demand for a young population was strong. The rental element of the consumer price index was a key factor. This is illustrated in Fig. 4.8; rent rose by 18.3% during 2008, impacting the CPI index due to the heavy weighting this item has in the index.
- During the oil-led boom of 2007/2008, Saudi Arabia and many of the Arabian Gulf countries suffered from shortages of skilled labour, causing salaries to rise, especially in the construction and finance sectors.
- Global food prices were a contributing factor during 2008, with the price of wheat and rice forced up by the shift in biofuels in some countries, restrictions on rice exports by some key exporting nations in order to combat their own domestic shortages and unusual global weather patterns affecting food production.
- Trading partners' inflationary pressure, with imports from non-dollar regions affecting Saudi imports from such regions.

By 2009, some of these strains began to unwind and price pressures subsided as illustrated earlier in Fig. 4.10.

The Economic and Social Impact of Inflation

Although Saudi Arabian inflation levels eased by 2009/2010 to 4.6–5% levels, there is some concern that the era of virtual low-or zero-level inflation in periods of induced economic growth was over, and inflation was a phenomenon that Saudi Arabia and others in the Gulf economies have to learn to live with. High rates of inflation can have several consequences on nations, as they tend to operate on different channels (Moody's, 2008):

- Fiscal Inflation, if unanticipated, can have a beneficial effect on a government's debt burden as the stock of local currency debt is eroded in real terms. This played a role in the past when some countries (e.g. some Latin American countries in the 1980s) attempted to "inflate their debt away." This effect is often offset over the longer term, however, by a range of negative developments. Governments can find it difficult to maintain fiscal discipline during inflationary periods as citizens demand compensatory increases in salaries, subsidies and welfare payments to offset their declining purchasing power. Governments' creditors can demand higher and more flexible interest rates. Inflation can also undermine confidence and cause an exchange rate depreciation which can swell the cost of servicing foreign currency debt in local currency terms.
- 2. Political High rates of inflation often raise social tensions as the purchasing power of citizens, especially those on lower incomes, is undermined. Governments and public and private employers are sometimes reluctant to raise wages, subsidies and welfare payments quickly enough in order to offset this, partly because of a justified fear that such increases will exacerbate inflationary pressures and lead to further demands. The social impact of inflation can be particularly harmful if surging inflation damages the real sector and causes higher unemployment.
- 3. *Economic* High rates of inflation can jeopardize growth by deterring productive investment, perverting market incentives and encouraging wage hikes. The free functioning of markets can also be hampered by the introduction of unorthodox economic measures such as price controls as governments attempt to stem inflation through alternative means.

Elements of all the above inflation control measures were introduced by Saudi Arabia in 2008/2009 and included cuts in custom tariffs on food such as foreign poultry, dairy products and vegetable oils from 20 to 5%, reduction in levies on building materials such as paints, electrical cables and plastic pipes to 5% and complete elimination of duties on wheat products. The government, besides introducing the staggered 15% salary rise for government employees, also introduced subsidies



Fig. 4.11 Regional inflation rates (%) (Source: IMF)

on rice imports, other cost-of-living allowances and welfare payments (Saudi Press Agency, May, 2008). According to the IMF, the Middle East region experienced the highest level of inflation in 2007 out of any region globally and the second highest level in 2008 after the Commonwealth of Independent States (CIS) as illustrated in Fig. 4.11.

In 2007, the Middle East region inflation averaged at 10.4% and almost double the emerging market average of 6.4%, and was still higher in 2008. The last year in which the Middle East region's average inflation rate exceeded 10% was in 1995.

However, there is a broad variation in inflation rates among countries of the Middle East and in the Gulf Cooperation Council countries in particular, as illustrated in Fig. 4.12.

According to the 2008 IMF data, year-on-year inflation ranges from a high of 16.4% in Egypt to a low of 3.7% in Morocco. Saudi inflation rates are below those of



Fig. 4.12 Monthly inflation rates in Middle East countries (Source: IMF)

Qatar, the United Arab Emirates (UAE) and Oman, but slightly higher than Kuwait and much higher than Bahrain's, all members of the GCC.

Managing the Kingdom's Reserves

One important function that SAMA performs is managing Saudi Arabia's external reserve assets. While reserve assets have seen a sharp reduction from peaks in the mid-1980s due to government drawdowns to fund deficits, SAMA still considers this function an important means of diversification in its effort to improve the Kingdom's reserve portfolio.

In line with its evolution of financial instruments and risk management techniques, and in common with other central banks that manage national reserves, SAMA has made a more active use of a broad range of such investment instruments and has developed more performance benchmarks, compared to a mid-1970s investment strategy that was largely confined to bank deposits. Assets allocation then meant deposit allocation among major international banks based on their credit rating.

SAMA's Investment Committee is headed by the Governor and meets regularly to assess market conditions, asset allocation and market performance before deciding on investment decisions. The overall aim is still to preserve principal value with maximum liquidity and returns. As such, safety, liquidity and risk-adjusted returns are the driving goals. SAMA continued to apply these basic principles of investment guidelines during the global financial crisis of 2008/2009 and Fig. 4.13 illustrates SAMA's net foreign assets which reached a peak in October 2008 of around \$430 billion before falling back.

The fall in SAMA's foreign assets in 2009 could be explained by several factors, including a rise in government deposits with Saudi banks, the repayment of around



Fig. 4.13 SAMA net foreign assets (Source: SAMA)

\$18 billion of Saudi bills and bonds held by Saudi commercial banks, and a Saudi transfer of around \$10.2 billion to the IMF as part of the Kingdom's commitment to the IMF following the April 2009 G20 London meeting.

In its investment policy, SAMA also emphasizes portfolio benchmarking and performance measurement in order to evaluate internally managed and externally managed discretionary portfolios. In terms of current credit ratings for counterparty institutions, SAMA requires a minimum rating of "C" by the Fitch IBCA rating agency for bank deposits. Sovereign fixed income and supranational and corporate obligations have to be rated at AAA or AA by Moody's and S&P. The US dollar is used as the base currency and it dominates the currency composition of SAMA's portfolios, followed by other major currencies such as the Euro, Sterling and Yen. Currency allocations are not linked to trade flows according to SAMA. The benchmarks that SAMA uses reflect the monetary agency's diversity of assets and risk tolerance and include S&P 500 for the US equity markets, JP Morgan Global Bond Index for multi-currency bond portfolios, Morgan Stanley Composite Index for Europe and TSE for Japan. External fund managers are allocated funds and manage portfolios under SAMA-approved asset guidelines. Portfolio performance is measured on a total return basis with liquidation based on either poor performance or for reasons of asset allocation.

The global financial crisis that erupted in 2008 and affected many sovereign investors seemed not to have affected SAMA's investments as much as other GCC sovereign investors who had ventured into global equity markets for higher returns. Figure 4.14 sets out the size of assets under management by SAMA and other regional Sovereign Wealth Funds (SWFs) as of 2007 and 2008.



Fig. 4.14 Assets under management by SAMA and regional SWFs (Source: SAMA, IMF)

The conservative management of SAMA reserves has meant that savings have not been eroded by the collapse of global markets and asset prices at the end of 2008 and are in a relatively liquid form. The majority of SAMA's assets are estimated to be government debt, notably US bonds. SAMA is not expected to have seen the degree of losses estimated to have been realized by the funds for future generations or oil stabilization funds in other GCC countries. Although Saudi Arabia has indicated that it is setting up an investment fund in 2009 (*Sanabel*), it is expected to be only a very small portion of its assets (less than USD 6.0 billion), and SAMA is expected to pursue its current conservative capital preservation investment policy.

Future Development and Challenges

SAMA is faced by several domestic and international challenges in the years ahead that could test the monetary agency's ability to adapt to new circumstances. Table 4.10 summarizes SAMA's major challenges in the short, medium and long term.

SAMA has come a long way from those early exotic days of 1952 and, in essence, it is now a fully fledged central bank in all but name. It has tried to overcome the

Short term	Medium term	Long term
 Control of money laundering and terrorism funding E-commerce application and internet banking 	 Establishing guidelines for Islamic banking supervision and regulation Ensuring Saudi banks comply with new BIS capital adequacy ratios 	 Effective participation through Islamic Banking Financial Services Board Effective participation in Gulf Cooperation Council Monetary Union and proposed single currency for GCC
• Ensure Saudi banks are adequately prepared following WTO accession	• Supervision and integration of newly licensed foreign banks into Saudi banking system	• Implement fine-tuning instruments for inflation targeting
 Overseeing effective Saudization of bank personnel Establishment of data base and supervision of the insurance sector Completion of mergers of local money exchangers into one financial institution 	 Effective participation in international financial supervisory standards Supervision and regulation of non-bank financial institutions into the markets such as mortgage lenders Develop secondary market instruments for capital market 	 Supervision and regulation of cross-border Saudi bank mergers and acquisitions Re-examine SR/US dollar fixed exchange parity policy and exchange rate targeting mechanism Apply lessons from 2008/2009 financial crisis in terms of vigilance on capital requirements and liquidity cushion
• Overseeing partial privatization of government-held bank shares in capital market	• Upgrade SAMA's Banking Training Institute to provide broader financial services expertise	 Ensure better risk management processes control and corporate governance Initiate macroeconomic monetary policy forecasting models and publish minutes of policy meeting and decisions for private sector guidance

Table 4.10	Challenges faced by SAMA
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limitations imposed on it through its founding charter and has successfully introduced a range of innovative capital market instruments to add to the liquidity options of the Saudi commercial banks.

By its own admission, SAMA recognizes that in the years ahead it faces a range of domestic, regional and international challenges. Key objectives set out by SAMA include expediting the issue of regulations and legislations aimed at promoting and expanding the range of financial services in conformity with the "trends towards liberalization of international financial markets and WTO requirements" (SAMA, 2009). This, according to the monetary agency, requires the streamlining of operations of the capital and insurance markets and other financial services. SAMA also advocates changes to the current judicial system as it relates to commercial, financial and banking transactions and contracts, such as insurance and mortgages, as Saudi commercial banks do not currently possess the legal means to mortgage property in their own name.

The fact that the Saudi government is considering the introduction of a commercial mortgage law is a step in the right direction towards safeguarding Saudi financial institutions' rights while deepening the mortgage sectors' financing capability.

The list of challenges set out in Table 4.10 seems daunting, but SAMA has already started to confront some of the issues. A notable success has been the vigorous implementation of procedures to prevent money laundering and the funding of terrorism. SAMA received a clean bill of health on these matters from the Financial Action Task Force (FATF) in April 2004. The Kingdom was commended by FATF for taking several measures including freezing the accounts suspected of illegal dealings and requesting that all Saudi banks complete "know your customer" formalities or close accounts. Under SAMA's recommendations, the Saudi cabinet endorsed Saudi Arabia's first anti-money laundering law, which stipulated stiff penalties.

Saudization of bank personnel is proceeding apace with SAMA insisting that qualified Saudi personnel be appointed to key positions, based on appointment criteria focused on technical proficiency. To help upgrade local banking skills, SAMA's Banking Training Institute is running a wider range of training courses to meet future financial market needs, including those for the local insurance markets.

Islamic banking services and operations are becoming more important for SAMA, given the expansion of such services by most Saudi banks and the GCC countries. SAMA became a member of the Islamic Banking Financial Services Board in 2002, which will help in establishing new guidelines and rules to oversee this important market segment. Future development might necessitate a separate banking control law, targeting Islamic financial institutions and subjecting them to proper rules and supervision. This has been successfully achieved in nearby Bahrain, where Islamic banking supervision coexists side by side with "conventional" and investment banking activities. The new SAMA Governor Dr. Mohammed Al Jasser has been quoted in public that Islamic financing has an important role to play in the stability of the region's financial system as the 2008/2009 global financial crisis highlighted the apparent safety record of the Islamic banking sector versus the

conventional banking sector. The key long-term issue is prudent supervision of this sector to avoid moral hazard, given the trust placed by ordinary investors when investing with Islamic institutions.

Other long-term issues that might need to be addressed include revisiting SAMA's 1966 Banking Control Law to allow the monetary agency to make more effective use of the full range of monetary policy instruments. In particular, there must be a wider use of the open-market operations, with outright sales and purchases of government securities by the central bank itself as a monetary tool, as opposed to the current policy of action initiated by Saudi commercial banks. This will add depth and breadth to the capital market.

Following the resurgence of inflation in the Gulf economies in 2008, SAMA's inflation control policies will become more important and mechanisms will have to be adopted and fine-tuned that sometimes gives SAMA the flexibility to act in a counter-cyclical manner to US monetary policy and reduce the effect of a pegged currency regime for the SR.

Managing the branches of foreign banks operating in Saudi Arabia post WTO accession in 2005 will also be an added challenge to SAMA in the medium and long term. With globalization of banking and financial services, the relationship between regulators and foreign banks or subsidiaries of foreign banks operating in their jurisdictions has come under greater scrutiny. The global financial crisis of 2008/2009 has added further urgency in the matter to avoid contagion to domestic institutions through systemic failures and risks emanating from the foreign banks' parent companies. SAMA seems to have adopted a "dual" regulatory approach. This includes a Saudi element as well as close coordination with the foreign banks' final home regulator.

In the long term, SAMA might face cross-border banking and other financial services mergers and acquisitions issues, with Saudi banks forming international strategic alliances and foreign banks acquiring interests in the Kingdom. This will test SAMA's cross-border regulatory and supervisory skills. SAMA will also need to supervise foreign-owned financial institutions in the Kingdom, whose objectives might be divergent from broader national considerations. This was the case in some instances in the 1970s, before the *Saudization* of foreign banks; it was one of the major factors for the *Saudization* drive to *align national* interests with those of the *Saudized* banks.

The issue of the GCC unified currency and monetary union seems to have taken a setback before the approach of the 2010 deadline. During 2010 it was decided that Riyadh would be the home of the envisaged GCC central bank, a decision which caused the UAE to withdraw from the planned GCC monetary union in protest. Oman had previously notified that it was not joining the proposed GCC currency, while Kuwait had opted for a managed exchange regime for its currency, instead of the peg against dollar favoured by Saudi Arabia, Bahrain and Qatar. Whether to opt for a unified GCC currency pegged to one currency – the US dollar – or to adopt a more flexible multi-currency peg will also be an important issue that SAMA will have to face. This could affect its current fixed parity rate policy. SAMA will have to coordinate with these central banks on *economic convergence* and on internal harmonization of policies relating to inflation and budget deficit issues. This will require greater macroeconomic discipline by member states as well as central bank independence in voicing their concerns should target rates not be adhered to. SAMA acts, for all intents and purposes, as an independent central bank but its independent role must be further clarified to avoid undue influence by short-term economic measures based on political expediency.

SAMA now feels confident that it has gained sufficient experience from the *Saudization* era to be able to manage the new circumstances, helped by its active participation and membership in leading international multilateral bodies such as the IMF, the World Bank and the Bank for International Settlements (BIS), which SAMA joined in May 2009 and comprises 27 countries. The avoidance to date of any major financial crisis in Saudi Arabia compared to other economies worldwide attests to SAMA's regulatory and supervisory policies. The key is to ensure that Saudi Arabia's financial sector remains a vibrant and leading segment of the economy in the future.

Summary of Key Points

- SAMA has evolved from being a monetary agency with a limited role into a fully fledged central bank with relative independence, a broad range of monetary tools at its disposal and with effective supervisory powers of the financial sector.
- Monetary policy is the primary focus of SAMA, whose key objectives are to stabilize inflation and the general level of prices, to maintain a fixed exchange rate policy against the US dollar and to allow a free movement of currency and capital.
- SAMA uses four main policy instruments in conducting monetary policy: cash reserve ratio/minimum reserve policy, repos and reverse repos, foreign exchange swaps and placement of public funds. It has increasingly relied on repos and reverse repos, the so-called "open-market" operations.
- Today SAMA offers a broad range and mix of securities on behalf of the government, ranging from short-term treasury bills (under 1 year) to 10-year government development bonds, priced at a premium to similar dated US Treasury bonds.
- SAMA's monetary policy assigns a high priority to its current fixed exchange policy as a means of controlling inflation, despite recent depreciation of the US dollar against major international currencies.
- Domestic money supply creation is a function of dollar reserves held abroad, domestic government spending and the effects of domestic purchases of foreign currencies for trade and remittances.
- There is evidence to suggest that the Saudi economy is going through "financial deepening" with a reduction in the level of currency ratio, increasing monetization and mobilization of long-term assets.

Summary of Key Points

• SAMA is faced by future challenges including more effective participation in the GCC monetary union and the proposed single currency, developing a corporate bond market, the supervision and control of cross-border Saudi bank mergers and "new wave" foreign bank entry to the Saudi market, as well as overseeing the growth of Islamic finance and banking products in the Kingdom and combating inflationary trends.