Chapter 2
Evolution of Monetary Policy Implementation in Rwanda

2.1 Introduction

Monetary policy in Rwanda has undergone profound changes since the establishment of the National Bank of Rwanda (NBR) in 1964. For a period of 26 years, the NBR conducted direct monetary control in the absence of a money market. In 1990, the bank shifted to the use of indirect monetary policy instruments following the advent of free-market economic policies, also known as the “Washington Consensus”, such as the introduction of the Structural Adjustment Programs (SAPs), supported by the Bretton Woods institutions (BWIs).

With most African countries gaining independence in the early 1960s, there was increasing optimism that rapid economic growth and development could be attained across the continent, a view that was shared with the donor community. Since the private sector was non-existent in Africa at that time, economic growth and development in most African states had to be primarily government-driven. With the support of donors, governments in Africa invested in large state-run basic import-substitution industries, which were sheltered from competition via the enactment of protectionist regulations to control prices, restrict trade, and allocate credit and foreign exchange (Owusu 2003). They were further supported by substantial public investments in infrastructure such as roads, ports, telecommunications, and power generation; as well as in health and education. Initially, good economic performance was recorded in many African countries. For example, annual economic growth in sub-Saharan Africa averaged 3.4% between 1961 and 1980.

This good economic performance was however short-lived as poor growth of the productive sectors, a declining level and efficiency of investment, increasing debt, high population growth, and weak institutional capacity constrained the development momentum in the early 1970s. By the mid-1970s, economic performance was lagging behind that of other parts of the developing world, leading to high budget and balance of payments deficits and significant public debt (Calamitsis 1999; Heidhues and Obare 2011). For the donor community, the failure of African economies to realize sustainable development was attributable to their governments and the policies
that they were pursuing, including weak resource management, inadequate exchange rate policies, excessive state intervention, and especially, the protection of inefficient producers, the unnecessary subsidization of urban consumers, and corruption. One of the macroeconomic policies used during that period in Africa was direct monetary policy used by central banks to support governments’ economic development agendas.

Generally, a central bank implements monetary policy by directly using its regulatory powers through direct instruments, or indirectly using its influence on money market conditions. Direct instruments operate by setting or limiting either prices (interest rates) or quantities (amount of credit) through regulations. In that context, authorities directly influence balance sheets of commercial banks and financial market conditions that do not play any role in the determination of financial prices and allocation of credits as it would have been if indirect monetary policy instruments were used instead. The most common instruments in a directly controlled monetary policy regime are interest rate controls, credit ceilings, and lending at the discretion of the authorities, rather than for commercial reasons.

By using interest rate controls, a central bank can announce the minimum and maximum rates of interest and other charges that domestic banks may impose for specific types of loans, advances, or other credits and payments on deposits collected by commercial banks from the public. When a central bank uses credit controls as an instrument of monetary policy, it controls the volume, terms and conditions under which banks guarantee loans to the private sector, such as instalments of loans. In this regime, resources of the banking sector are also used to finance governments’ deficits, contributing to crowding out of the private sector and encouraging the development of the informal financial system as was the case in different African countries in the years 1970–1980s.

As a response to the rising economic hardships, Structural Adjustment Programs (SAPs) by the Bretton Woods institutions (i.e. the World Bank and the IMF) were introduced across Africa in the 1980s and continued to operate throughout the 1990s. The SAPs involved a combination of free-market policies such as privatization, fiscal austerity, free trade, and deregulation. These policies were expected to lead to more open and efficient economies and ultimately contribute to the improvement of living standards and to the reduction of relative poverty.

As in other African countries, there was great need for rapid and sustained economic growth in Rwanda after the country gained its independence. However, as a result of lack of good governance and poor economic policies, weak economic development was recorded since the second half of 1980s with average economic growth progressively dropping from 4.4% in 1975–1980 to 2.5 and 2.4% in 1980–1985 and 1985–1990, respectively Ansoms (2005). Rwanda adopted the SAPs in November 1990, underlying the adoption of market-based principles in the management of the economy to determine different prices on various markets. Nevertheless, the move undertaken at that time was suspended, due to the war that started in 1990 and the genocide against the Tutsi in 1994.

In a context of lack of good governance and economic policy failure, the use of direct monetary policy instruments such as interest rate controls, credit ceilings, and
direct lending at the directive of political authorities, based on other consideration rather than economic criteria, had exacerbated the economic problems. Therefore, the introduction of SAPs paved the way for shifting away from direct monetary control to an indirect approach, based on the use of market-based instruments to implement monetary policy. This chapter describes monetary policy instruments used in both directly controlled monetary policy and indirect monetary policy, and presents the key outcomes of the NBR monetary policy during the two separate policy episodes.

2.2 Era of Direct Control (1964–1990)

When Rwanda gained its monetary sovereignty in May 1964, the NBR adopted direct monetary control to support the government’s objective of promoting rapid economic growth after the country gained its independence. This monetary regime was used in the context of a generally controlled economy by the government. Political authorities kept control on prices of goods and services as well as on labour market wages. At its inception, the NBR’s mandate was to maintain monetary stability and implement credit and exchange rate policies to support the economic development of the country. The direct monetary policy regime in Rwanda was characterized by a system of credit ceilings and sector credit allocation, a subsidized and regulated interest rate regime and exchange rate controls, as well as import licensing.

2.2.1 Monetary Policy Instruments

During the period of direct monetary control, the NBR used credit and interest rates control, the refinancing facility, and reserve requirement to manage the amount of money in the economy. In the absence of financial markets, coupled with a rudimentary banking sector and limited skilled staff, this approach was relatively easy to implement and contributed to achieve government objectives of channelling resources to certain priority sectors of the economy as defined by the government. Below is a description of each of the monetary policy instruments mentioned above as well as the fixed exchange rate regime.

Credit Control

To implement its credit policy, an annual growth objective of the credit to the private sector to be provided by commercial banks was set by NBR at the beginning of each year and the set amount was distributed among commercial banks based on their respective deposits mobilized from the public and their net worth. In addition, the NBR had to determine the maturity and allocation of credit to specific sectors based on economic activities considered as priority by the government. To closely monitor the evolution of monetary growth, NBR had to authorize beforehand any credit granted by a bank to its customers exceeding a certain amount or defined a
certain threshold of the total amount of credit granted to one customer by different banks.

This procedure was compatible with the set objectives of credit growth and control of the development in monetary aggregates on one hand. On the other hand, it was a way for NBR to help commercial banks reduce credit risk in a period when banks did not have capacity to assess risks associated to requested loans. Moreover, the country’s judicial system was not well equipped to help banks pursue defaulting borrowers, including difficulties for commercial banks in bringing action against defaulting borrowers, complicated procedures for recovering loans, and serious shortage of judges in the country.

To incentivize banks to finance high-risk economic activities, particularly agricultural projects, a special guarantee fund was established and all banks were required to contribute 10% of their pre-tax profits to this guarantee fund. In addition, commercial banks had to ensure that all loan applications submitted for approval were backed by the required collaterals: for example, ensuring that land and houses used as collateral by individuals had formal titles. Also, commercial vehicles, equipment, and trade inventories were eligible to be used as collateral and the value of collateral had to cover 200–300% of the loan value.

Furthermore, the NBR required commercial banks to constitute provisions for doubtful loans or those under litigation with an equivalent of 100% of the value of such outstanding loans plus accrued interest. Additionally, from October 1987, commercial banks were strictly required to respect the solvency ratio of 10% when deposits exceed FRW 3 billion and 7% when deposits were less than FRW 3 billion to enhance their stability. The solvency risk is when a bank cannot meet maturing obligations, because the value of its assets is less than the amount of its liabilities. In order to avoid such a risk, banks need to keep an adequate buffer of capital, so that in case of losses, they can reduce capital accordingly and remain solvent.

Due to liquidity scarcity in the banking system, as banks could only mobilize limited and short-term deposits from the public, loans to the private sector by commercial banks and banques populaires were limited to short-term loans except for house loans for their employees. Only the Development Bank of Rwanda (BRD) had the capacity of providing long-term loans (over five years) for productive activities and short-term loans to its staff. At least three quarters of collected deposits from the public had to be devoted to financing short-term operations, generating benefit or maintaining the equilibrium of the balance of payments. Due to the limited level of deposits in the banking sector, the NBR used the discount window to facilitate the financing of commercial banks.

Between 1968 and 1979, on average, deposits represented 56.9% of the broad money M3 that amounted FRW 5.8 billion and currency in circulation representing 43.1%. Total deposits mobilized by commercial banks amounted only FRW 3.3 billion on average in the period under review of which 86.8% were demand deposits and only 13.2% were term deposits. Owing to limited and short-term deposits from the public, loans to the private sector by commercial banks was only FRW 7.9 billion in the period under review (Fig. 2.1).
Regulation of Interest Rates

The general conditions applied by banks with regard to interest rates and commission fees were also defined by the NBR. The government regulated interest rates considering the observed and projected economic developments and financial conditions in the country. Term deposit interest rates were supposed to attract savings from households and enterprises, but not so high to increase the lending rates at levels that would potentially constrain investors. About lending rates, they were divided into two categories. First, preferential rates for activities are considered to be of economic or social importance, such as export crop financing, agricultural production, and import of inputs for industry, and second, ordinary rates for non-priority activities, such as construction and personal loans.

The rationale for controlling interest rates was that credit had to be cheap so as to promote investment and support targeted borrowers. One of the challenges created by the control of interest rates was that the interest structure typically did not account for loan maturity or risk, and in fact created perverse lending incentives for banks, with riskier sectors such as agriculture being given a preferential rate. Furthermore, lending rates were sometimes too low to compensate for both risks and overhead costs associated with loans to privileged borrowers.

Between 1967 and 1987, term deposit rates increased from 1.0 to 3.0%, 2.0 to 3.3%, 2.5 to 4.0% and 3.5 to 4.5%, for 1, 3, 6, and 12 months maturity, respectively. Lending interest rates for sectors considered as priority by the government were kept constant at 9.0%, while for other sectors, it increased from 9.0% in 1967 to a maximum of 17.0% in 1979, before fixing the maximum rate at 12.0% in 1987.
The control on lending rates was facilitated by the use of the discount window by commercial banks, as interest rates offered by NBR at that refinancing facility were a key determinant of banks’ lending rates structure.

**The NBR’s Refinancing Facility**

As indicated, deposits mobilized by commercial banks were insufficient to satisfy the demand for loans from the public. To achieve its objective of supporting the promotion of rapid economic growth after Rwanda gained independence, commercial banks were authorized to acquire funds from the NBR’s discount window. This instrument was key at that period as it enabled the NBR to implement its credit policy particularly to enforce the selective credit control. Every year, the NBR determined a ceiling of funds available and appropriate rates at the discount window to finance productive activities, taking into account the government’s economic planning and the level of liquidity in the banking system. Through the discount window, banks were able to have a short-term facility to finance current operations such as working capital and the promotion of agriculture and exports sectors, and a long-term facility to finance investment. These special measures contributed to finance the modernization of the primary sector, particularly tea and coffee farming, the production of minerals, the promotion of decentralization of economic activities, the promotion of international transport services, the building of the storage capacity of oil products, and the construction of local authority houses, to name a few.

**Foreign Exchange Regulations**

Between 1964 and March 1995, the exchange rate of the Rwandan Franc (FRW) was managed through a fixed regime, with the value of the FRW fixed by the President of the Republic after consultation with cabinet members and based on the NBR’s recommendation, as indicated in the legislative decree number 06/81 of 6 February 1981 establishing the fixed exchange rate regime. The foreign exchange transactions and capital account were fully centralized and controlled by the NBR. During that period, foreign reserves of the banking system were held by the NBR, which was also the sole institution authorized to carry out exchange transactions. Initially, the exchange rate was pegged to the Belgian Franc (BF), then to the American dollar (USD) and finally to the Special Drawing Rights (SDR).

From 1964 to March 1966, the FRW was fixed to the BF whereby one BF was exchanged against one FRW, before being pegged to the USD between April 1966 and 1973. In April 1966, the FRW was fixed to the USD at a rate of one USD equivalent to 100 FRW. The same rate was maintained up to 29 December 1971, before revising it to 92.11 FRW because of USD depreciation. In 1973, the FRW was pegged again to the BF at rate of 100 BF for 230 FRW, before being re-attached to the USD at a rate of one USD against 92.84 FRW in 1974. Between 6 September 1983 and March 1995, the FRW was fixed to the SDR at a rate of one SDR equivalent

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1Between 1980 and 1990, the value of coffee and tea exports represented 83% of total export earnings. The share was 91% on average between 1986 and 1988.

2NBR, 25th anniversary, 1989.
to 102.71 FRW. Since 1995, foreign exchange transactions and the capital account were progressively liberalized, with the exchange rate framework shifting from a fixed regime to a more market-driven exchange rate regime.

**Reserves Requirement**

To ensure the stability of the banking sector in the country, all deposit-taking institutions were obliged to constitute 10% of their profits as legal reserves and 5% of profits when the reserve fund reached FRW 100 million. It is since August 1990 that the NBR adopted the reserve requirement system aimed at protecting depositors against liquidity and solvency risks of banks but also used as monetary policy instrument to regulate money supply. Initially, the reserve requirement ratio was fixed at 5% for all deposits in the banking sector before being revised down to 1% in December 1991.

To take into consideration the prevailing banking liquidity conditions and to continue supporting commercial banks to finance the economic development, different amendments were introduced. In March 1992, the reserve requirement ratio increased to 5% of banks’ current deposit, and remained at 1% for other deposits, before being increased to 7% of current deposit and 5% of other deposits in April 1994.

### 2.2.2 Outcomes of NBR Monetary Policy Between 1964 and 1994

As indicated above, most African countries and the donor community were optimistic for rapid growth and development after these countries became independent in the early 1960s. However, poor economic performance was recorded in those countries in the early 1970s due to different factors including bad governance and poor economic policies. After averaging at 4.4% in the period 1975–1980, Rwanda’s economic growth slowed to an average of 2.5% in 1980–1985 and 2.4% in 1985–1990. In the context of weak governance and unsound economic policies, the use of direct monetary policy instruments such as interest rate controls, credit ceilings, and direct lending at the directive of political authorities exacerbated the economic problems across the African continent.

Direct monetary policy instruments created inefficiency in financial resource allocation by channelling loans at preferential rates to non-productive companies. In addition, they led to disintermediation and constrained the development of the financial sector by limiting competition in the banking sector and the entry of new banks in the country. Furthermore, prior authorization provided to banks for granting credit often led to lack of appropriate assessment of risks faced by banks (NBR at 50 anniversary and Journal officiel de la République Rwandaise du 1/10/1987). As a result, between 1980 and 1993, broad money and credit to the private sector as a percentage of GDP, two indicators of financial sector development, fluctuated between 12.2 and 17.1% and between 5.1 and 9.1%, respectively. Annual gross loans to the private sector were very low in the period 1980–1993, amounting to FRW 13 billion on average.
compared to FRW 622.3 billion in the period 2000–2019 and total deposits in the banking sector were 40 times lower than their 2000–2019 level.

2.3 Period of Market-Based Monetary Policy Instruments

Developed countries started to phase out the use of direct instruments in the 1970s. The adoption of indirect monetary policy instruments by central banks was in line with the general objective of improving market efficiency by enhancing the role of price signals in the economy. In the monetary sphere, indirect instruments, referred to as market-based instruments, are used to change the supply of base money and central bank monetary liabilities through the transactions of the central bank with banks and non-banks at market-based prices and on a voluntary basis (Balino et al. 1995).

Contrary to direct monetary control, monetary authorities influence the balance sheet of commercial banks by changing items of its own balance sheet such as reserve money. Using monetary policy instruments such as open market operations, central banks change the supply of reserves to the banking system which in turn affects the supply of money in the economy through the money supply process as explained in Chap. 3. These actions of central banks affect money market interest rates as well as deposit and lending rates. In turn, these changes in financial prices will lead to adjustment of the medium-term supply and demand conditions in the goods market, and therefore affecting the price levels. These transmission channels however depend on different factors including the structure and level of development of financial markets and the financial system in general, as described in Chap. 1.

The liberalization of the economy in Rwanda gradually took place since 1995 after the genocide against the Tutsi and the financial sector experienced significant changes as a result. These changes paved the way for the introduction of indirect instruments of monetary policy. Policy reforms included the removal of interest rate controls, requirements for banks to lend to specific sectors, and credit ceilings, and appropriate rules and regulations were enacted to strengthen bank supervision. While the direct control of credit was abandoned in 1992, interest rates were fully liberalized in 1996, with lending interest rates being liberalized sooner than deposit interest rates. The instruction No.2/95 of March 1995 liberalized all lending and deposit interest rates on operations made in FRW, except fixed-term deposit rates, which were liberalized later in 1996.

The reform of the exchange rate system began with the launch of the SAPs in 1990 and different measures were taken progressively. Residents were authorized to open accounts in foreign currencies in commercial banks. In 1995, the flexible exchange rate system was introduced and new regulations were put in place. The main features of these new regulations were the determination of the exchange rate by the market forces, the establishment of foreign exchange bureaus, the authorization of foreign direct investments (FDI) in Rwanda, and the transfer abroad of the returns on FDI. The current and capital account operations were fully liberalized in September 2010.
Allowing more flexibility in exchange rate in a stable macroeconomic and political environment contributed to more financial integration and progressive improvement in monetary transmission through exchange rate channel. The two factors, flexible exchange rate and financial integration, are among macroeconomic drivers of monetary transmission mechanisms. In a country with floating exchange rates, monetary policy is transmitted to aggregate demand through domestic interest rates and through the exchange rate, the latter affects the composition of absorption between domestic and foreign goods. In this case, as the degree of financial integration increases, the power of monetary policy to affect aggregate demand increases with it.

The reason is that increased integration implies a reduced scope for monetary policy to create rate-of-return differentials between domestic and foreign assets. A policy-induced change in the domestic interest rate must create a larger offsetting expected change in the exchange rate. As response to an increase in domestic interest rate, the domestic currency is expected to depreciate, and an appreciation is expected in response to a decrease in domestic interest rate. This shows how higher degree of financial integration is very important for the functioning of channels of monetary policy transmission. Indeed, the higher the degree of financial integration, the greater the extent to which exchange rate changes reinforce the effects of interest rate changes on aggregate demand, which improve the monetary transmission mechanism. As a result of fully capital account liberalization in Rwanda, more flexible exchange rate, strong macroeconomic fundamentals, and political stability, FDI in Rwanda increased over time (Fig. 2.2).

Regarding the sectors these flows are invested in, as at the end of 2018, ICT sector accounts for the largest share with 29.1% of the total, followed by the financial sector (19.3%), the manufacturing sector (13.4%), the electricity, gas and steam sector (11.0%), and other sectors (27.2%) (Fig. 2.3).

![Fig. 2.2 Trend in Net FDI (2010–2019). Source NBR, statistic department](image-url)
2.3.1 Monetary Policy Instruments

From 1997 to 2018, the NBR implemented a monetary targeting policy regime using reserve money as an operational target and broad money as an intermediate target, with the objective of achieving price stability as it will be presented in Chap. 3. Targets on reserve money were achieved by managing the banking system’s liquidity using the following monetary policy instruments: open market operations; statutory reserve requirement; the standing lending and deposit facilities; the discount window; and foreign exchange market operations.

Owing to the absence of the money market in Rwanda, the reserve requirement system and discount window were the only monetary policy instruments used in Rwanda between 1995 and 1997 to regulate the banking system’s liquidity. Open market operations were introduced after the establishment of the money market in August 1997 by the regulation no 02/97. This laid a foundation for the development of indirect monetary policy instruments and opened doors for the NBR to implement open market operations and respond more efficiently to the market liquidity conditions. The NBR launched weekly tenders, specifying required conditions such as maturity of transactions and the amount to inject or mop up. Commercial banks responding to the tenders are the ones to decide the amount for bids and interest rates. After estimating the banks’ liquidity and taking into account the set targets on money supply growth, the NBR was the one to determine the total amount of liquidity to mop up or to inject in the banking system. Furthermore, transactions of short-term obligations such as treasury bills (T-bills) facilitated the mobilization and allocation of resources, and enabled the government to borrow from the domestic market instead of directly borrowing from the NBR. Prior to the establishment of the money market, 50% of annual government revenues were from the NBR. In 1997, direct lending to the government was prohibited with the objective of building the NBR’s credibility, limiting pressures on inflation originating from fiscal policy and improving the effectiveness of monetary policy. The only possibility of addressing
issues linked to cash management by the government due to tax revenue fluctuations is the use of the overdraft facility, not exceeding 11% of the state’s current revenue collected during the previous year (article 49, NBR law, 2007).

**Open Market Operations (OMOs)**

Open market operations may be simply defined as central bank transactions with commercial banks at the central bank’s initiative. Thus, an open market operation (OMO) occurs when a bank buys or sells government securities on the open market through auction. The usual aim of OMOs is to influence the short-term interest rate or the supply of reserve money and thus indirectly control the total money supply in the economy. When a central bank sells securities, it reduces domestic banks’ reserves and as a consequence, reduces the monetary base. On the other hand, when it buys securities, it increases the monetary base. OMOs are implemented using different instruments such as repurchase agreement operations (repo and reverse repo), treasury bills, and central bank bills.

Since 2004, Rwanda’s banking sector has consistently been awash with significant excess liquidity resulting from high public spending, especially backed by stable and huge aid inflows, high economic growth achieved in the last two decades averaging around 8%, and limited remunerative alternatives to money as the financial market was less developed. The structural excess liquidity has been a limitation to the use of OMOs in Rwanda, up to 2016. Between 2004 and 2016, the stock of broad money (M3) rose by around 19.5% a year on average and the banking reserves above the statutory requirement increased from 17% between 2004 and 2008 to 38% in 2009–2012 and 46% in 2013–2016. As shown by Gichondo et al. (2017), between 2004 and 2016, the optimal excess reserve was estimated to be around FRW 14.3 billion on average, which was far below the observed excess liquidity held by banks in Rwanda (Fig. 2.4).

Several authors have observed that abundance of liquidity is likely to have adverse consequences for the ability of monetary policy to influence demand conditions and, thus, to stabilize the economy (Agénor et al. 2004; Aryeetey and Nissanke 1998).
Indeed, if for example banks hold liquidity in excess of requirements, actions of the monetary authorities aiming at increasing liquidity in the banking sector and stimulate aggregate demand by increasing loan to the private sector will prove largely ineffective. Thus, one would expect excess bank liquidity to weaken the monetary policy transmission mechanism. As a result of high excess liquidity in the banking sector, the refinancing instruments and liquidity injection tenders were rarely used. Since then, the NBR focused on the development of liquidity mop up instruments to counteract prevailing liquidity conditions. Therefore, the NBR introduced an overnight facility and a 7-day auction before introducing the repurchase agreements and treasury bills for monetary policy purpose. However, due to improvement in liquidity forecasting and management, and development of money market, particularly interbank market which make it easy for banks to borrow in order to cover contingencies, excess liquidity reduced significantly since 2017 and NBR started to use reverse repo operations making the central bank rate cost of funds for banks an effective signal of monetary policy stance (Fig. 2.5).

**Repurchase Agreement Operations (REPO and Reverse REPO)**

In order to improve the management of the banking system’s liquidity, the NBR introduced REPO operations in August 2008 to replace the overnight facility and the 7-day auctions. A repurchase agreement is a contract involving two simultaneous transactions in a single contract. It is the sale of securities for immediate payment and the commitment by the seller to buy back the securities at maturity. On the other hand, a reverse REPO is the purchase of government securities and commitment to sell them back at maturity. REPO transactions entail the mop up of liquidity, while reverse REPOS involve the injection of liquidity in the banking system.

In 2008, the key repo rate (KRR), was introduced and set at 8% per annum, and the interbank interest rate corridor was set to 125 basis points (1.25%) below and above the KRR. With that new policy, the NBR money injection was conducted at a competition basis, the minimum interest rate being the ceiling of the “corridor”. In a similar manner, the bank absorbed excess funds on a competitive basis, the maximum interest rate rate being fixed at the floor of the “corridor”.

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**Fig. 2.5** Trend of excess reserves. *Source* NBR, monetary policy department
In December 2009, the Monetary Policy Committee (MPC) decided to use the KRR only as a reference to borrow/lend liquidity from/to the market. It indicated the maximum rate at which the NBR mops up excess liquidity from the banking system and the minimum rate it injects liquidity in the banking sector. The KRR has been regularly reviewed by the monetary policy committee (MPC) based on the assessment of inflation outlook, as well as on the development in banking sector liquidity conditions. This policy instrument has progressively become a tool for signalling the NBR’s monetary policy stance, and communicating with the market. In 2012, the NBR decided to use the KRR as a reference rate for its money market operations in order to induce the efficiency and development of the money market. Indeed, while the use of indirect monetary policy instruments is influenced by a country’s financial system, the proper use of those instruments supported by appropriate liquidity forecasting also contributes to the development of the money market. It increases the efficiency of financial intermediation, and the level of competition in the financial sector. Repo and reverse repo transactions were fixed at only 7-days maturity, and operated within a corridor, the lower and upper limits being overnight deposit and lending standing facilities, respectively.

In December 2009, the MPC decided to cut the KRR from 9%, to 7.5% and set the discount rate at KRR + 4% and it was further revised down to 7% in March 2010, and to 6% in November 2010. Due to inflationary pressures experienced in 2011–2013, the MPC decided to raise the KRR to 6.5% and to 7.5% in October 2011 and May 2012, respectively. The NBR started to ease monetary conditions mid-2013 as the inflationary pressures were fading away. The KRR was cut to 7.0% in June 2013, to 6.5% in June 2014, to 6.25% in December 2016, to 5.5% in December 2017, to 5% in May 2018, and to 4.5% in April 2020 (Fig. 2.6).

Treasury Bills and Central Bank Bills

Generally, central banks use government securities and central bank bills as main debt instruments in their open market operations. The two securities have no credit risk, their maturities do not exceed one year and are at the bottom end of the return spectrum. Country experiences show that the choice between the use of the two securities depends more on country circumstances, the level of coordination between central banks and fiscal authorities, as well as existing legal guidelines on the matter.

![Fig. 2.6 KRR developments](source: NBR, monetary policy department)
Table 2.1  T-bills and central bank bills outstanding in FRW billion

|                      | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | Average |
|----------------------|------|------|------|------|------|------|------|---------|
| Treasury bills (TB)  | 95.2 | 156.5| 163.9| 222.5| 238.8| 303.7| 343.2| 217.7   |
| Central bank bills (CBB) | 7   | 11.5 | 21.2 | 13.5 | 4    | 14.2 | 11.1 |         |
| Total Treasury bills and central bank bills | 102.2 | 168  | 185.1| 236  | 242.8| 309.7| 357.4| 228.7   |
| TB shares (in %)     | 93.2 | 93.2 | 88.5 | 94.3 | 98.4 | 98.1 | 96   | 94.5    |
| CB shares (in %)     | 6.8  | 6.8  | 11.5 | 5.7  | 1.6  | 1.9  | 4    | 5.5     |

*Source* NBR, Financial market department

Furthermore, central banks normally use their own securities in situations where the market for government securities is undeveloped\(^3\) or when securities issued by the governments and other monetary policy instruments are insufficient to absorb excess liquidity (Habermeier 2012).

For the case of Rwanda, the NBR decided to intervene on the money market by issuing T-bills with 28, 91, 182, 364 days maturity in accordance with provisions of the instruction no. 05/98 of 24 September 1997. While the use of T-bills was a way of limiting the inflationary pressures from the NBR’s financing of the government, T-bills are also used for monetary policy purposes, to absorb liquidity from the economy. Later central bank bills (CB-bills) were introduced to sterilize excess liquidity whenever T-bills and other instruments failed to bring the reserve money to the targeted levels. During the period of 2012 to 2018, the average T-bills outstanding was FRW 217.7 billion, while the outstanding CB-bills amounted only to FRW 11.069 billion on average (Table 2.1).

The use of both central bank bills and treasury bills in Rwanda is facilitated by the NBR’s transparency in the process of issuing bills, and good coordination between the NBR and the Ministry of Finance and Economic Planning (MINECOFIN).

While investments in central bank bills are restricted only to commercial banks, other financial institutions holding a current account with NBR as well as other investors, be individuals or legal entities approved by the NBR to bid through their banks, are free to invest in the T-bills on the primary market. As indicated in Table 2.2, investors mostly preferred short-term T-bills (4, 13, and 26 weeks) between 2012 and 2015, accounting for 83.5% of total outstanding T-bills. This is explained by the predominance of commercial banks in the T-bills market and the short-term nature of liquidity in the banking sector.

Indeed, from 2012 to 2018, on average, 41.5% of deposits in the banking sector were current deposits, while the term and foreign deposits are made up 36% and 22.5% of the total deposits, respectively. In addition, more than 90% of term deposits were mostly of less than 12 months maturities. However, since 2016 the share of outstanding T-bills for 52 weeks has been increasing (from 26.8% in 2015 to 49.6% in 2018) as the market became more attractive to institutional investors. The share

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\(^3\)This is also the case in countries where investors do not have confidence in the capacity and willingness of their governments to pay debts.
Table 2.2  Treasury bills outstanding shares by maturity

| Tenor   | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
|---------|------|------|------|------|------|------|------|
| 4 weeks | 34.8 | 19.2 | 11.9 | 17.1 | 21.4 | 8.4  | 8.6  |
| 13 weeks| 33.2 | 37.4 | 32.0 | 24.2 | 18.4 | 18.6 | 14.6 |
| 26 weeks| 17.2 | 32.6 | 32.3 | 31.9 | 23.0 | 28.5 | 27.2 |
| 52 weeks| 14.7 | 10.9 | 23.8 | 26.8 | 37.3 | 44.5 | 49.6 |
| TOTAL   | 100  | 100  | 100  | 100  | 100  | 100  | 100  |

Sources NBR, Financial market department

of institutional investment in total outstanding increased from 11.8% in December 2013 to 57.2% in December 2018, while the share of banks reduced from 81.4% to 33.1% in the same period, the remainder being from retail investors.

To encourage banks to invest their liquidity in long-term securities (more than 26 weeks), the NBR’s preference has been to issue more CB-bills with 52 weeks maturity. As a result, on average, 78.8% of outstanding investment in central bank bills were of 52 weeks maturity between December 2012 and December 2018.

The Standing Facilities

Standing facilities are central bank operations at the initiative of banks. The lending and deposit standing facilities are the only two facilities available at the NBR since 1 June 2012 in order to enhance liquidity management. The standing deposit facility (SDF) allows commercial banks to place excess reserves with the NBR at CBR minus some percentage points decided by the monetary policy committee. The standing lending facility (SLF) helps banks to borrow from the NBR to fill any liquidity gap that might unexpectedly arise from the daily settlements on money market or other payment operations. To access this facility, banks provide collateral, limited to government securities only, for overnight loan at a predetermined interest rate.

Standing facilities have not been frequently used due to structural short-term excess liquidity in the Rwandan banking sector. The standing deposit facility was more used in October and November 2012, with a total amount of FRW 202.5 billion transacted at 5.5% (corresponding to KRR of 7.5% −2%). Then, the facility was only used four times in 2013, with a corresponding amount of FRW 7.8 billion at 5.5% and once in 2014 for an amount of FRW 12 billion at 3.67%. Due to excess liquidity in the banking sector in 2014, repo rates were lower than rate on SDF, defined as KRR −2. Thus, to avoid overnight deposit facility to become more attractive than repo operations, the NBR decided to accept overnight deposits at the repo rate −2%. However, with the improvement in liquidity management and monetary policy operations, the NBR decided in 2019 to remunerate deposits under the deposit facility at KRR −2% and lending facility charged at KRR plus 1%; with the purpose of improving the transmission mechanism between the KRR and money market rates.
**Reserve Requirements (RR)**

Most central banks require depository institutions to hold minimum reserves against their liabilities, generally in the form of balances at the central bank. While reserve requirements are held for prudential purposes and liquidity management in most cases, the prudential benefits of RR are now covered by supervision and regulation requirements such as capital adequacy, liquidity requirements, deposit insurance, and standing credit facilities by central banks. This explains why currently in most central banks, RR are used to assist monetary authorities in liquidity control, but not as an essential part of monetary policy operating system, because open market operations (OMOs) constitute the pillar of conducting monetary policy. Since the effectiveness of OMOs depends on the development of financial markets, RR are used to supplement other monetary policy instruments in managing liquidity in developing countries with shallow money markets.

The use of RR depends on the country specificities, particularly the financial and macroeconomic environment which should contribute to the decision on the currency to which the RR will be imposed and in which it will be maintained. Stable macroeconomic environment and limited currency substitution may support the maintenance of all RR in local currency. In that case, denoting RR on foreign currency in local currency contributes to controlling domestic liquidity, by increasing the mop up of excess liquidity in the banking sector.

For countries with no exchange controls, the share of foreign currency deposits in total deposits may increase. In that case, central banks will need to take into consideration their monetary policy implications, particularly on banking sector liquidity management. When the share of foreign currency in total deposits is substantial and RR ratios significant, denoting RR on foreign currency deposits in local currency can complicate monetary management, and can lead to financial and monetary instability, capital flight, and financial disintermediation. Under such conditions, it may be advisable to maintain foreign currency denominated RR on foreign currency deposits. This improves monetary control and discourages currency substitution (Ize 1995).

NBR adopted the RR system in August 1990 initially as a measure of protecting depositors but since early 1995, after abandoning direct monetary policy instruments and in the context of absence of open market operations, the RR system is used as a monetary policy instrument aimed at other instruments in regulating the money supply. Banks are required to constitute and maintain reserves in their current accounts opened with NBR, calculated based on their liabilities held both in Rwandan Francs and in foreign currencies.

Directive no. 01/2012 of 22/02/2012 on Reserve Requirement in Rwanda establishes that the following liabilities are subject to the reserve requirement:

1. Current accounts of (i) other financial institutions such as insurance corporations, Development Bank of Rwanda (BRD), and Business Development Fund (BDF); (ii) current accounts of other financial institutions assimilated to banks such as microfinances institutions and saving and credit cooperatives (SACCOs); (iii) current accounts of non-residents such as foreign central banks, foreign
banks, foreign governments, and other non-residents; (iv) current accounts of the government and its entities such as line ministries, projects, public enterprises, social security fund, Rwanda Utilities Regulation Authority (RURA) and Rwanda Development Board (RDB); (v) current accounts of non-financial corporations such as MTN, Brasseries et Limonaderies du Rwanda (BRALIRWA) and all other businesses; and (vi) current accounts of other resident sectors such as households and non-profit institutions.

2. Term liabilities which cover term deposits and borrowings from the same as above, but extend to (i) interbank borrowings, which constitutes a double counting, as these funds have been subjected to the reserve requirement at the initial level (the bank that lent to another bank also reports the liability (deposit or borrowing) relating to this lending and (ii) the borrowing from non-residents mostly made of long-term borrowings from foreign financial institutions in foreign currency, the proceeds of which are often used in FX SWAPS with NBR.

3. Other accounts payable including suspense accounts.

4. Subordinated debts which are unsecured debts whose contracts stipulate that in the event of liquidation, creditors will be paid only after the claims of secured creditors are paid.

The constitution of reserve requirement on deposits in foreign currencies started in 2002, as shares of those deposits were becoming significant in total deposits. Deposits in foreign currency were recorded in 1994 for the first time in Rwanda, representing 10% of total deposits in the banking system. This share increased overtime to average 22% of total deposits between 2010 and 2018 but remained stable, fluctuating between 18.9% and 27.2% with a standard deviation of 2.7. In June 2002, the NBR adjusted the reserve requirement base, by including deposits in foreign currencies to be held in USD.

To accommodate the prevailing banking liquidity conditions, and contribute to the development of the interbank market, many amendments were introduced, including changes in compliance periods, the eligibility of liabilities, and the currency of RR denomination. After the genocide against the Tutsi, there was shortage of goods and services, leading to a significant increase in prices with an inflation rate peaking to 64% in 1994. As a policy response, the NBR raised the reserve requirement ratio twice in 1995, to 12.5% and 14% of all deposits in April and August, respectively. This measure coupled with others, such as the reorganization of the productive system by the government of Rwanda, and the improvement in exchange rate policy, contributed to the reduction of inflation to a monthly average of 10.4% in 1996, and 5% in 1998.

After the establishment of the money market in 1997, and the progressive use of OMOs in a more stable macroeconomic environment characterized by stable exchange rate and low inflation, the NBR reduced progressively the RR ratio, from 12% in 1997 to 10% in 1998, and to 8% in 2000. It remained the same until it was reduced to 5% in the first quarter of 2009, as a policy response to the liquidity crisis experienced by the country at that period. The reserve requirement ratio remained unchanged at 5% up to 1 April 2020 when the rate was reduced to 4% as one of the NBR’s policy responses to the economic impact of COVID-19. The NBR maintained
a lower reserve requirement ratio as it relies more on OMOs as an efficient way of implementing monetary policy and developing the money market. In general, banks will try to hold more reserves on days they expect the market interest rate to be lower and fewer reserves on days when they expect the rate to be higher.

Owing to the flexibility offered by reserve averaging system, commercial banks’ demand for reserve balances becomes more interest-rate-sensitive and the interbank market rate is less sensitive to shocks to demand for and supply of reserves. As pointed out, the reserve averaging system not only contributed to the development of interbank market, it has also helped to reduce the tension between the day-to-day liquidity operations to stabilize short-term rates and liquidity operations to meet the targets on reserve money (Bartolini et al. 2006; Maino and Buzeneca 2007).

Moreover, for better management of liquidity by commercial banks, instruction no 06/2001 of September 2001 fixed the reserve maintenance period to one month. However, in order to eliminate distortions created by a long maintenance period of one month, and due to structural short-term excess liquidity in the Rwandan banking sector, NBR reduced the maintenance period from one month to two weeks in March 2005, to one week in 2007, and adopted an averaging system. During the maintenance period, banks are allowed to be in shortage, but must comply on average at the end of the maintenance period. Penalty fees equivalent to the discount rate plus 5% are imposed to commercial banks failing to comply with the RR. The adoption of RR averaging system aimed at supporting commercial banks to manage their short-term liquidity was one of the strategies adopted by the NBR to promote the interbank market development. Trading on the interbank market between banks with liquidity shortages and those with excess liquidity during the maintenance period helps these institutions to balance their supply and demand of liquidity. This contributed to progressively reduce volatility on overnight market rates and to the stability of the money market rates.

Owing to the high demand of foreign currency by the private sector to finance increasing import bills and the effort of the NBR to manage short-term liquidity in domestic currency, the constitution of RR in foreign currency was abandoned in May 2012 (see the NBR directive no 01/2012 of 22/05/2012). In addition, uniform reserve requirement ratio for both domestic and foreign currency deposit liabilities was adopted that enables NBR to act in a neutral manner, with respect to the currency in which the banks’ deposits are denominated. This increases the role of the RR in the NBR’s liquidity management in the banking system, regardless of the source of liquidity. The stability of the FRW facilitates the use of the same RR ratio on all kind of reserves, contrary to countries with high depreciation of domestic currencies where banks are forced to increase their reserve balances at the central bank, even if deposits in foreign currency have not increased, thus reducing liquidity in domestic currency.

**Foreign Exchange Market Operations**

By the decree-law of 3 March 1995 on the organization and management of the foreign exchange market, Rwanda adopted a market-based exchange rate regime, the exchange rate being progressively determined by the fundamentals of the economy.
According to this regulation, licensed banks are free to conserve and manage their foreign currencies, determine the exchange rates in agreement with their customers, and decide the character of transferability of all current transactions. Thus, the import or export licenses which were granted prior by the NBR were replaced by simple import or export bank statements, validated only by the licensed banks. In addition, exporters were allowed to keep all the proceeds of their exports in their foreign currency accounts in commercial banks.

The intervention of the NBR on the foreign currency market, by selling US dollars to commercial banks, is aimed at supporting banks to meet the market demand and essentially finance imports, but mostly to reduce the exchange rate volatility. However, sales of foreign currency (USD) is also a way of mopping liquidity in domestic currency from the banking system, by the amount equivalent to USD sold at the prevailing market exchange rate. To protect the country against external shocks, NBR intervention on the forex market has been guided also by the objective of keeping the country’s foreign reserves at a level covering at least 4 months of imports.

Between March 1995 and February 2001, the NBR’s reference exchange rate was determined as the average of previous day market rates of commercial banks and NBR’s operations with clients. After introducing the auction system on 6 February 2001, NBR changed its calculation of the reference rate. Different ways of averaging exchange rates were used from simple average of FX interbank exchange rates to weighted average rates from forex auction to commercial banks, and to the moving average rates of commercial banks and NBR’s operations with clients. The objective was to take into consideration the market conditions, and progressively introduce more flexibility in the exchange rate.

With effect from 25 June 2007, the forex auction to commercial banks was abandoned, and replaced by a new arrangement, whereby the NBR sells foreign exchange to commercial banks in unlimited amounts at the day’s average reference rate quoted by the NBR. In this new system, the reference rate was a simple average of the rate from sales to banks by the NBR, and the moving average rate of commercial banks and NBR’s operations with clients. In the case where the calculated reference rate was higher than the reference rate of the last working day, the reference rate was calculated as the rate of the last working day adjusted by $-0.01\%$. The adjustment on the reference rate was modified over time. In 2014, the NBR’s official rate was obtained by considering the average from the previous day’s foreign exchange, interbank market, and rate of NBR’s interventions. In case there were no interbank transactions or NBR FX interventions, the previous transacted market rate was maintained as the official rate.

Currently, the NBR’s official rate is determined by considering the average from the previous day’s foreign exchange, interbank market, and NBR’s intervention transactions. In case there is neither interbank transactions nor NBR FX interventions, NBR’s reference rate is calculated by applying the change in the commercial banks’ forex market to the previous NBR reference rate. Change in commercial banks’ forex market is obtained by computing a percentage change between the weighted average of US dollar selling transactions of all banks from the previous day, with the weighted
average of the day T-2 (day before the previous day). This is to make NBR official rate reflect the market conditions on the forex market.

As a result of NBR monetary and exchange rate policies, as well as good performance in the Rwandan external sector, the FRW exchange rate against USD, which is the most used in external trade by Rwandans, remains stable. The average depreciation of the FRW against the USD was 5.03% between 2011 and 2018, and 3.80% in the same period excluding 2015 and 2016, where the depreciation was very high (7.6–9.7%) due to external shocks.

### 2.3.2 Outcomes of NBR Monetary Policy After 1994

As pointed out earlier, Rwanda recorded low economic performance since the 1980s, with the economic growth declining from 4.4% on average in 1975–1980 to 2.5% in 1980–1985, and 2.4% in 1985–1990. In addition, the use of direct monetary policy instruments during that period led to disintermediation, and limited the development of financial sector. Growth in broad money was 8.1% on average while the growth of credit to private sector was 8.5% on average between 1980 and 1993, far below than 17.5 and 18.8% recorded between 2000 and 2019, respectively. After the 1994 genocide against the Tutsi, Rwanda has achieved high and sustainable inclusive economic growth attributable to effective leadership supported by substantial foreign aid. In the wake of the genocide, the Rwandan leadership succeeded to both choose and implement the right policies and create the political conditions necessary for them to work. These conditions include building a social consensus between Rwandans, and between the society and the government, resulting in confidence and trust of the population in their leaders’ honesty and integrity.

This is very crucial in balancing short-term sacrifices needed for long-term growth. The leaders of the country created rigorous systems for accountability and governance as well as proper mechanisms to monitor results using appropriate performance indicators and review policies were necessary to allow for feedback as to whether policies were correctly crafted and well implemented. This is important because sustained growth is often the result of persistent fine-tuning of policies. Indeed, policy review is crucial as it helps to determine (a) whether the defined policies have worked in the local context, (b) whether and how implementation and formulation could be improved, or more fundamentally, and (c) whether one should rethink the original policies considering possible changes in the operating environment.

Academic research and country experiences have shown a strong link between effective leadership and economic growth (for more details, see, e.g. Commission of Growth and Development of World Bank 2010). Specifically, strong institutions and capable leaders can arrive at the right set of pro-growth policies and adapt such policies to changing circumstances. Institutions that a country creates are important for development as they are key in policy implementation and because mature markets rely on deep institutional underpinnings, institutions that define property
rights, enforce contracts, convey prices, and bridge informational gaps between buyers and sellers, among other things.

It is in this conducive macroeconomic and political environment that NBRs implement monetary policy in coordination with other economic policies. As a result, NBRs contributed to maintain price stability in the country; it is the main mandate. This provided favourable conditions for sustainable economic growth and stable macroeconomic environment, particularly from 2000. The annual average headline inflation in Rwanda was 8.7% between 2005 and 2011, and 3.8% between 2012 and 2018. In the period under review, average core inflation was 7.6% and 3.2%, respectively. In the East African Community (EAC), Rwanda recorded the lowest average headline inflation (4.7%), followed by Uganda (7.2%), Kenya (7.6%), Tanzania (8.2%), and Burundi (8.4%). Apart from recording the lowest inflation, Rwanda’s inflation was the most stable, with a standard deviation of 2.7%, followed by Kenya (3%), Tanzania (4.2%), Uganda (4.5%), and Burundi (5.8%) (Table 2.3).

Progressive development of the money market, particularly the interbank market as well as improvement in liquidity forecasting and management helped commercial banks to better manage their liquidity, and reduce excess liquidity for precautionary purpose. The accommodative monetary policy implemented by NBR in that environment contributed to supporting the financing of the economy by the banking system, in line with the government’s objective of achieving high and inclusive economic growth. The outstanding bank loan to the private sector increased to FRW 1.8 trillion in 2019 from 70.9 billion in 2000 (Fig. 2.7).

Table 2.3 Inflation developments (annual average)

| Year | Domestic | Imported | Headline | Core |
|------|----------|----------|----------|------|
| 2005 | 10.0     | 7.6      | 9.2      | 5.5  |
| 2006 | 11.2     | 2.8      | 8.8      | 4.5  |
| 2007 | 11.8     | 2.1      | 9.1      | 9.7  |
| 2008 | 14.4     | 18.5     | 15.4     | 17.5 |
| 2009 | 11.2     | 7.4      | 10.7     | 9.0  |
| 2010 | 2.7      | 0.8      | 2.3      | 1.5  |
| 2011 | 5.2      | 7.4      | 5.7      | 5.7  |
| 2012 | 7.0      | 3.5      | 6.3      | 4.0  |
| 2013 | 4.6      | 2.6      | 4.2      | 4.0  |
| 2014 | 1.9      | 1.5      | 1.8      | 2.7  |
| 2015 | 3.0      | 1.1      | 2.5      | 2.1  |
| 2016 | 6.0      | 4.7      | 5.7      | 4.1  |
| 2017 | 4.5      | 6.0      | 4.9      | 3.9  |
| 2018 | 0.5      | 4.4      | 1.4      | 1.6  |
| 2019 | 2.1      | 3.5      | 2.4      | 2.3  |

Source National Institute of Statistic of Rwanda
The NBR’s monetary and exchange rate policy has contributed to mitigating the effects of different economic shocks on the real economy. For example, between 2008 and 2009, the banking system in Rwanda experienced a liquidity problem due to different factors, including the global financial crisis and liquidity crunch resulting from the decision of Rwanda Social Security Board (RSSB), one of the biggest institutional depositors in the banking system, to diversify its investment, including outside of Rwanda. As a policy response, the NBR decided to reduce the required reserve ratio from 8% to 5% to leave more liquidity in the banking sector, and in collaboration with MINECOFIN, it was decided to not roll over short-term T-bills maturing in 2009. The NBR also introduced a short-term refinancing facility to provide loans to the banking system for 3–12 months. Together with MINECOFIN, a long-term (5 years) facility was established, to enhance long-term liquidity and boost banks that lend to the public.

Furthermore, the NBR decided to ease monetary conditions in the economy by reducing its policy rate progressively. As a result, liquidity in the banking system was rebuilt gradually, supporting credit to private sector and economic growth, while underlying inflationary pressures were well anchored. The net total borrowing by the NBR from commercial banks to absorb short-term excess liquidity increased from zero at end March 2009 to RFW 60.0 billion by end 2009, and the new authorized loans increased by 26.4% between September and December 2009.

In 2012, Rwanda experienced shortage of foreign inflows due to cuts and delays in budget support. To limit the impact of the exchange rate depreciation to the domestic prices, the NBR deliberately increased its sales of foreign exchange to commercial banks, thanks to a comfortable level of official reserves accumulated in the previous periods (Figs. 2.8 and 2.9).

These measures, together with rapid fiscal adjustments, contributed to limiting the negative impact of the shortfalls in foreign exchange inflows on the economy. Following the resumption of donor aid, the successful Euro bond issuance end April 2013 and positive inflation outlook, the NBR cut the central bank rate to 7.0% from 7.5% and to 6.5% in June 2015, to stimulate credit to the private. All these factors...
supported the government development agenda. Against this backdrop, Rwanda has enjoyed high economic growth of 8.1% on average between 1996 and 2018, far above the average growth of 1.8% recorded between 1980 and 1993, the period of controlled economy.

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