Monetary Policy Instruments in Ethiopia

By
Gazena Erchafo

Economic Research Department
National Bank of Ethiopia

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1. Introduction

During the command economic era, monetary variables were under direct control of the monetary authorities. Interest rate was set at a level to patronize the private sector in general, direct orders were given to banks to lend to prioritized sector and there was a ceiling on credit that banks can advance. Moreover, the banking sector was totally dominated by government banks and private sector was prohibited from entering into the financial sector. As a result, there was only one commercial bank, Commercial Bank of Ethiopia, one construction and saving bank, and one agricultural bank.

However, since the start of economic reform, following the change of government, the financial sector has undergone reform and the private sector was allowed to invest in the area. Consequently private banks and insurances started to flourish soon after the enactment of a Monetary and Banking proclamation of 1994.

Following these developments, attention was shifted from direct control of monetary variables towards market based policy instruments as the government leaves the economy to private sector. Accordingly, indirect or market-based monetary policy instruments are advocated to control or influence the supply of and demand for money. Hence the first step was to setup a treasury bills auction market, which is thought to be a stepping-stone for establishing open market operation in an undeveloped financial sector and then move to a full-fledged open market operation step by step.

The theme of this study is to see what monetary policy instruments are being used in Ethiopia and assess the effectiveness as well as the problems of each instrument. In doing so emphasis is given to the open market operation and its major tool, Treasury bills market.
2. Literature Review

The ultimate policy objective of any country in general is to have sustainable economic growth and development. Policy measures are geared at achieving moderate inflation rate, keeping unemployment rate low, balancing foreign trade, stabilizing exchange and interest rates, etc and in general attaining stable and well functioning macro-economic environment.

In this process, monetary policy plays a central role. For instance, during economic recession where output falls with a fall in aggregate demand, monetary policy aims at increasing demand and hence production as well as employment will follow the same pattern of demand. In contrast, at the time of economic boom where demand exceeds production and treat to create inflation, the monetary policy instruments (described in the next section) are utilized that could offset the condition and achieve price stability by counter cyclical action upon money supply (Johnston, and Sundararajan, 1999).

However, there is a doubt whether monetary policy can reverse inflationary situation in an economy that is created due to cost-push rather than inflation of demand-pull like the one shown in the preceding paragraph. Since monetary policy is more powerful on inflation driven by money stock rather than cost-push, some economists even suggest direct control instead of conventional monetary policy (Munn, et al, 1991).

On the other hand, care should be taken in timing and speed of applying the monetary policy instruments as their effect is felt after certain time lag and untimely and wrong policy measure will be costly as it might even aggravate the situation making corrective measures difficult before any damage happened (Axilrod, et al, 1997).

Monetary policy instruments are broadly classified as Direct, to refer to the authorities direct controlling mechanism of the monetary variables, and indirect
monetary policy instruments, those that are implemented through market-based operation.

Direct monetary control is administrative control of growth of money supply in the economy and of the features that characterizes the system, there is aggregate and individual bank credit ceilings, high reserve and liquid asset requirements, direct control of interest rates, selective credit controls and preferential central bank refinance facilities to direct credit to priority sectors are the main ones (Johnston and Sandararajan, 1999).

High reserve and liquidity requirement is set to absorb liquidity from the banking sector in order to finance government deficit while direct control of interest rates is aimed for designing preferential rates for certain loan categories (Johnston and Sandararajan, 1999). Moreover, credit ceiling causes a build up of liquidity rising interest cost of the banks and fall in their profit and a prolonged ceiling might cause bankruptcy and bank failures. In these situation banks find a way to avoid deposit in order to reduce interest cost by imposing charges, fees, and by introducing beurocratic depository process to discourage depositors (Johnston and Sandararajan, 1999). This situation could be followed by a slow down in economic growth as the source of investment dries up.

Direct monetary control has the following shortcomings (Johnston and Sandararajan, 1999).

- Direct monetary control and efficient allocation of resources trade-off as competition in the sector is disrupted.
- Direct control provides room for ‘rent seeking’ and abuse in allocation of individual bank credit ceiling.
- Encourages other unregulated and parallel financial sector and instruments that compete with the legal ones weakening the effectiveness and narrowing the coverage of legal instruments in the economy.
• It is also inconsistent to use direct control in the present world economy of globalization and freedom of capital movement as it deprives the benefit that international financial institution can bring.

Despite the above problems associated with direct control, it has advantage of easily achieving targets such as ‘maintaining a particular interest rate at a certain level, or keeping banks’ overall credit expansion below a certain ceiling’ (Johnston and Sandararajan, 1999: 26).

The disadvantage of direct monetary control, as shown above, outweighs its advantage and hence currently many countries shifted to indirect monetary controlling system. The major one of this mechanism is Open market operation (OMO). It is the major policy instrument for promoting non-inflationary economic growth (Oduyemi, 1993). It is a purchase and sale of securities either in primary or secondary market in order to expand or contract excess reserve and hence the credit expansion power of the banking system (Munn, et al, 1991).

OMO, besides its direct influence on monetary base, it provides ‘orderly market for government securities and exercise effects upon foreign exchange market’ (Axilrod, 1997). The tools used to conduct OMO in undeveloped and shallow financial sector mostly are government treasury bills and/or central bank bills, which are carried out through primary market security auction (Johnston and Sandararajan, 1999). This market (bills market) is more common and widely used before the establishment of well-developed secondary market.

Open Market Operation is conducted through sales and repurchases transactions often called Repos. It is two parties transaction in which security holder sells its security to a buyer with an agreement to repurchase it back on agreed date (usually ranging from overnight to a month and sometimes more) and price, which is above the original sale price, and uses to drain or provide liquidity to money market as well as in developed financial markets for fine tuning interest rates (Mishkin, 1998).
Foreign exchange swaps, which is similar to repos, involves the purchase and subsequent sale of foreign currencies and helps to sterilize the shock resulting from heavy foreign market activity.

OMO is ‘defensive’ when the intention of the measure is to offset the movements in other factors that affect reserve and monetary base such as imbalance in money market, whereas it is ‘offensive’ if the intention is to affect reserve and monetary base, which is conducted fully at the initiative of the central bank and geared at achieving specific interest rate level (Mishkin, 1998). Moreover, based on the target chosen OMO can also be classified as Active and Passive. Active conduct of OMO is usually applied in less developed financial markets by targeting at the monetary aggregates and leaving interest rate to fluctuate while Passive OMO aims at a particular interest rate by leaving monetary aggregates to fluctuate freely. But the latter approach requires a well-developed and sensitive financial sector (Axilrod, 1997).

Well-organized Open Market Operation has several advantages over other types of instruments. On the first place, OMO occurs at the initiatives of the central banks and central banks have complete control over its volume as well as frequency making it the most flexible and useful instrument for stabilizing and fostering competition in the financial sector as well as guiding the whole economy towards efficiency (Mishkin, 1998).

OMOs are easily reversible in case the effects of the operation are stronger than the anticipation. For instance, if the open market sale of T-bills shrunk liquidity more than the needed level, it will be restored immediately by purchase (Axilrod, 1997). Moreover, OMOs are quicker than any other monetary policy instruments and involves no administrative delays making it the most aspired and widely used instrument (Johnston and Sandararajan, 1999).
3. Country Experience on Monetary Policy Instruments

The pre-reform history of monetary policy instruments of developing countries was characterized by direct control on monetary variables and prices like interest and foreign exchange rates and few public financial institutions dominated their financial sector. The smooth transition to market based instruments requires cautious and gradual measures as it needs ‘institutional arrangements for indirect market-based controls, changes in attitude in favour of market determination of interest rates and competition in financial market, and other needs for supporting measures such as improvement to the payment systems, stronger banking supervision, removal of barriers to competitiveness in the banking sector and development of techniques of monetary analysis’ (Gray, et al, 1996: 37).

Gray and Hoggath in their study of 19 developing countries changing from direct to indirect monetary instruments, found out that 90 percent of them uses rediscount facility but mainly at limited access, 42 percent of the sample countries’ reserve requirement constitute over 15 percent of the banks liability and OMO is carried out in primary market using T-bills, central bank bills or both (Gray and Hoggart, 1996)*.

On the other hand, the transition to indirect monetary policy instruments in Kenya and Zimbabwe started in mid 80s and 1991, respectively. They relied more on indirect monetary policy instruments mainly on OMO as both countries went deep in to liberalization. However, their OMO is mainly carried out through purchase and sale of government treasury bills which was targeted to finance government deficit rather than monetary policy of the central banks. This is evidenced in Kenya when a treasury bills sale once rose to such extent that it caused a higher nominal interest rate relative to international level and increased capital inflow which finally increased reserve money that the Bank targeted to put its growth under control (IMF, 1998).

* The Countries are: Burundi, Egypt, Gambia, Ghana, Kenya, Tunisia, Argentina, Chile, Hungary, Indonesia, Israel, Jamaica, Malaysia, Mexico, the Philippines, Poland, Sri Lanka, Thailand, Venezuela.
This condition created pressure on the Central Bank of Kenya (CBK) to change reserve and liquidity requirements several times in few years (IMF, 1998). The same situation has happened in India when the Reserve Bank of India forced to changed the reserve requirement as many as twenty times since 1995 to control the growth of money supply (IMF, 2000).

Despite the stated problem, the Central Bank of Kenya used the primary auctioning of government bills for determining the cut-off interest rate that uses as a benchmark for other sterilization and refinancing operation. On the other hand, the Reserve Bank of Zimbabwe (RBZ) issues its own bills and the holders are allowed to sell it in the secondary market. The RBZ also issues Special Treasury Bills for short-term liquidity management depositing proceeds in a government deposit account (IMF, 1996).

When the amount of government bills demand is less than the supply or the interest rate on the primary sale is thought to be too high, the CBK uses the OMO by negotiating the interest rate with individual banks. At the same time when the monetary aggregates deviate from the target the CBK conducts Repos (IMF, 1998). The discount window facility gives the CBK another dimension to control money supply and interest rates. Banks are allowed with out a limit to borrow up to 5 percent of their paid-up capital at a rate higher than the Treasury bills auction rate by three percentage points by collateralizing government papers. To borrow more than five percent of their paid-up capital, banks are required to pay interest rate that is 5 percentage points higher than the t-bills rate (IMF, 1998). The RBZ, on the other hand accepts Treasury bills with less than seven days to maturity, tobacco bills and export related bankers acceptances for rediscounting purpose. However, this facility is open to only discount houses that act as intermediaries between the RBZ and other financial institutions. Moreover, the Bank provides overnight loans to banks with normal and penal rate where there is no limit to access to at penal rate which is fixed at 35 percent.
The CBK intervenes in foreign exchange market when there is sharp movement in the exchange rates and to fulfill government demand for foreign exchange for debt servicing.

These market-based instruments give the central banks of the two countries flexibility in meeting their targets.

4. Monetary Policy Instruments In Ethiopia

The financial history of Ethiopian shows that following the nationalization of private banks and other financial institutions in 1974 there were only few government banks operating throughout the country till 1994/5 namely Commercial Bank of Ethiopia, Construction and Housing Bank and Agricultural and Development Bank. During this period the National Bank of Ethiopia conduct its monetary policy by directly controlling monetary variables and prices.

The NBE set the interest rate structure in such a way that it discourages private sector and favours public institutions and specially cooperatives and associations. Accordingly, the private sector was charged the highest rate in all kind of loans. For example, Agricultural loan was 7 percent for private, 6 percent for state enterprises and 5 percent for cooperatives. The borrowing rate for private sector ranges from 7 percent to 10 percent, it was 4.5 percent to 8 percent for state enterprises but for cooperatives it ranges from 4.5 percent to 6 percent. The interest rate discrimination against private sector was not only in borrowing but also in deposit. The maximum rate, for instance, paid for private was 5.5 percent for time deposit over 5 years whereas it is 7.5 percent for others. For saving deposit in excess of Birr 100 thousands, interest rate was only 2 percent.

As a result of interest rate discrimination the effect can clearly be seen on credit shares, as the share of private sector in total loans was only 22.6 percent during
1988/89 and 1990/91 (NBE, 1990). Inflation averaging 9.7 percent during the command era, the real interest rate was negative. Moreover, private sector’s investment was ceiled at Birr 500 thousands.

Therefore, investment as well as saving by private sector was discouraged and hence the illegal (background) activities were better available option to engage in. As a result the whole investment activities in the country rested on inefficient and mismanaged public enterprises.

After the change of government in 1991, the private sector was given emphasis and the government started to withdraw from the market step by step by privatizing its enterprises. This was part of the general economic liberalization process, which also touched the financial sector. Accordingly, National Bank of Ethiopia, among with the other three government banks, was restructured in a manner to conduct monetary policy independently and supervise financial institutions in the country.

The role of NBE in the financial sector grew following the establishment of private banks and insurances. The slipping away of direct control power on money supply and the unpredictability of the private sector necessitated indirect controlling mechanism of money supply.

**Reserve Requirement**

Reserve requirement in Ethiopia is computed by netting out uncleared checks paid and uncleared effect foreign from the total deposits. The requirement is currently 5 percent of the net deposit and failing to comply with this requirement will be penalized.

The NBE uses this instrument to control the liquidity of banks by varying the rate according with the targeted level. The higher Reserve Requirement contracts the
liquidity as well as credit expansion power of commercial banks and the opposite will increase liquidity and credit expansion power of banks.

Reserve requirement was 8 percent only on Commercial Bank of Ethiopia, which is the most liquid bank, during December 1995 –February 1997 in order to reduce the high lending potential of the Bank as well as the rise in inflow of foreign exchange following the coffee price boom that has pressurized the exchange rate to appreciate (Yohannes, 1996). Since most of the export proceed during that time was coming through CBE and the high liquidity of the bank could have increased lending, it was logical to require the Bank a higher rate than other banks, which was 5 percent.

However, since the banks’ asset in NBE doesn’t earn interest but their liability bears interest it is mostly regarded as a tax and a high reserve requirement is thought to create disintermediation on the banking system (Johnston and Sandararajan, 1999). Thus, some countries such as Mexico and Canada have abolished it while others reduced it to the level that couldn’t influence liquidity significantly and some central banks pay interest on banks required deposit (Henckle. et al, 1999). Today reserve requirement has little role and not frequently used in short-term money management (Gray and Hoggarth, 1996).

**Open Market Operations**

The conduct of OMO varies from country to country depending on the legal and institutional setting, the structure of financial system and the stages of development in the securities market of the country (Dasri, 1991). Hence OMO in countries, like Ethiopia, where these institutional developments is not fulfilled is regarded as ‘Open Market-type Operations’ to distinguish it from those of the developed nations' OMO (Johnston and Sandararajan, 1999).

To develop market-based monetary instruments in underdeveloped financial market the first step would be primary issues of treasury bills and central bank bills. Likewise
in Ethiopia, bi-monthly treasury bills auction market is introduced in 1994/95 with the intention of financing government budget deficit from non-bank sources, to create a base for the establishment and development of secondary market and to boost the NBE’s controlling power on money stock as well as interest rate. However, the NBE, to bring monetary stability, also used individual bank credit ceiling side by side till the Treasury bills market gets strong. Knowing that the acceptability of the market by the public will increase the efficiency of the OMO, measures were taken to hasten its development. Then the cut-off price and ceiling on some public enterprises was removed in order to allow them participate on a competitive basis. To increase the private sector participation, the minimum denomination was reduced from Birr 50 thousands to Birr 5 thousands and the interest proceed from the T-bills was exempted from income tax. Since then the market showed a slight improvement in attracting bidders, total demand for bills and volume of sale.

Despite these measures, the market failed to attract private bidders and it was, and still is, dominated by public organization both in number and volume of purchase. This phenomenon is a result of low interest rate in the treasury bills market, which on average is three-percentage point lower than the minimum deposit rate. This is due to high competition among liquid banks and other financial institutions making the treasury bills interest rate too small to attract private bidders who prefer depositing in banks rather than participate in the auction.

On the other hand, liquid commercial banks use the market as cost minimizing instrument, as they are willing to lend to the government by a lower rate than the deposit rate they are paying to their deposit liability resulting in lower interest rate.

However, except providing fund for government, the treasury bills market is not serving most of its objectives it is established for. First, in an attempt to develop secondary market, NBE has allowed inter-bank money market but still it is at rudimentary level largely and ironically because of the treasury bills market, which cast a shadow on it development. As the excessively liquid banks use treasury bills
market that provides them with maximum security and lower cost as well as higher return (in absolute term) than inter-bank lending, they give fund seeking banks lesser attention and even turndown their request.

Second, since around 60 percent of the treasury bills are purchased by commercial banks that use their excess reserve and as the government spends this fund for short term financing like paying wages, it can be said that the treasury bills market in Ethiopia is inflationary as opposed to its objective.

Third, as the government financing is rested on few public institutions that participate in the auction, it might not be sustainable and an unexpected withdrawal of one or two bidders from the auction jeopardizes government financing. This is explained best by the January 2000 phenomena when a total of bills worth Birr 1100.0 million, one of the largest supplies, was put on tender but total demand unexpectedly was only Birr 131 million. This is due to the wrong signal from preceding auctions where there is usually excess demand but a withdrawal of a single bidder revealed the extent that the market is domination by few institutions.

Fourth, unlike the countries discussed in the previous chapter, the interest rate determined in the Treasury bills auction market in Ethiopia doesn’t use to determine other rates in the economy.

NBE conduct its OMO actively through Treasury bills market to influence the variables like liquidity level and net domestic assets of the banking system and money supply in the economy and monitor whether they are in conformity with the targeted level.
5. Conclusion

Adopting indirect monetary policy instruments requires a certain level of financial market development. Specially to use open market operation as a main monetary policy instrument, well-developed secondary market is necessary to transmit the desired effect into the economy. For instance, central bank discount rate changes are transmitted easily and fast into other interest rate as long as well-developed secondary market exists. Therefore, the efficiency of indirect monetary policy is largely dependent on the development of secondary market.

The monetary policy instruments of the two reviewed countries, Kenya and Zimbabwe, shows that their central banks are relatively in better position to transmit their policy objective into the market than Ethiopia. Their financial sector seems more responsive and monetary authorities use central bank bills and government Treasury bills to regulate the stock of money in the economy. Both countries utilize the bills in two direction i.e. they sale when the liquidity level is above the targeted amount and purchase it back as the opposite happens. This is not true in Ethiopia as T-bills is always sold but never purchased showing the tight monetary policy pursued by central bank. More over the above countries used T-bills rate to some extent to guide the bank rates.

It can be said that the discount facility in both countries is well established and frequently used as compared with Ethiopia where there has never been rediscounting facility utilized by financial intermediaries.

In attempt to develop secondary market in Ethiopia, T-bills market was established in 1995. It was believed that introduction of T-bills in primary market would create a fertile ground for the development of secondary market. However, it became rather a fiscal instrument (similar to the problem that the above two countries have faced
with) and it potentially creates inflationary pressure on the economy since the excess liquidity absorbed from the financial sector is injected to the economy. Moreover, since the present T-bills market is only meant to finance government budget deficit T-bills sale that is always taking place. Therefore, it handicaps monetary authorities, since government with annual deficit averaging 7.8% of the GDP, is not interested to repurchase bills for the sake of stabilizing the demand & supply of money in the economy, as monetary authority do (NBE, various issues).

The implementations of indirect monetary policy instruments require subsequent phasing out of direct control. In line with this idea, presently, most direct controls were abandoned. But controls on interest rate partially exist and minimum deposit rate is fixed at 6% while lending rate is liberalized in 1998.

Regarding open market-type operations in Ethiopia, it can be argued that it is ineffective and always aimed at tightening the grip on money supply growth through the only open market instrument operational in Ethiopia- treasury bills. On the T-bills market National Bank of Ethiopia has limited power to affect the volume of sale since it is totally dependent on the level of government deficit. T-bills auction is continuing for fiscal rather than monetary reasons. Thus National Bank of Ethiopia, as a monetary policy maker, has limited area to influence and use it as a monetary instrument. Therefore, open market operations in Ethiopia are at rudimentary level (even by the standards of the sighted two developing nations) and there is a lot of task ahead of policy makers to develop them.
References


- Darsi, Tumnong (1991), Open Market Operations: Its Nature and Extent in the SEACEN Countries, the South East Asian Central Banks (SEACEN), Research and Training Center, Kuala Lumpur, Malaysia.


- International Monetary Fund, 2000, Recent Economic Development-India, SM/00/106


- ________________________, 1996, Recent Economic Development-Zimbabwe, SM/96/32


- National Bank of Ethiopia, Annual Bulletin (Various Issues)

- ________________________, Quarterly Bulletin (Various Issues)

