

## MONETARY INSTRUMENTS AND THE CONTROL OF LIQUIDITY IN THE PHILIPPINES: FOCUS ON OPEN MARKET OPERATIONS

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### Introduction

Monetary policy refers to actions of the Central Bank (CB) or monetary authorities which are (1) aimed at helping achieve macroeconomic goals, and (2) exercised by influencing such financial factors as the quantity of money and the level of interest rates. Monetary policy shares the general goals of macroeconomic stabilization policy such as price stability, economic growth and balance of payments equilibrium or exchange rate stability. In addition, monetary policy has some more specialized goals such as interest rate stability and a strengthening of the financial system.

In a monetary economy, an excess supply of liquidity opposed by an excess demand for goods and services could result in rising prices and/or a deterioration in the balance of payments. On the other hand, an insufficient supply of money could hamper economic growth and development. The task of monetary policy therefore is to keep the supply of money growing at an appropriate rate to ensure sufficient economic growth and to maintain internal and external stability.

For the CB to achieve the goals of monetary policy, it must be able to operate through variables which are directly under its control, called instruments, since goals are not directly controllable. Thus, monetary policy actions must be made by means of instruments. Moreover, since a change in an instrument may not affect a variable which is an ultimate goal of monetary policy, intermediate variables which are referred to as intermediate targets are identified. These intermediate targets serve as the channel through which monetary instruments act on the economy in order to attain the desired goals. Intermediate variables must be relatively controlled by the CB, and their effects on the final objective should be reasonably predictable. In the case of the Philippines, money supply is the intermediate

target of monetary policy. Meanwhile, monetary policy instruments include open market operations, the rediscount window, reserve requirement, etc.

The outline of this paper is as follows. Section I discusses the framework for analyzing how monetary instruments affect monetary targets. Section II describes the various instruments available to the Central Bank of the Philippines as well as their advantages and disadvantages. The last section summarizes the factors and conditions that are considered in the choice of instruments and why open market operations are preferred over other instruments.

### I. The Control of Domestic Liquidity

For purposes of this presentation, the supply of money is defined as the currency in circulation or the currency held by the nonbank public ( $C$ ) plus deposit liabilities of commercial banks ( $D$ ) which include demand deposits ( $dd$ ), savings ( $sd$ ) and time deposits ( $td$ ), and deposit substitutes ( $ds$ ). In the Philippines, this definition of money is called M3 or domestic liquidity. Thus,

$$M3 = C + D \quad (1)$$

$$\text{where } D = dd + sd + td + ds$$

Reserve money ( $RM$ ) comprises  $C$  and reserves of commercial banks ( $R$ ) which include cash in banks' vault and reserve balances or deposits of commercial banks with CB. In the Philippines, however, commercial banks' holdings of certain reserve eligible government securities ( $REGS$ )<sup>1</sup> are considered as reserves. Thus, base money ( $BM$ ) may be differentiated from  $RM$  as given by the following equation:

$$RM = C + R \quad (2)$$

$$BM = C + R + REGS$$

$$\text{or } BM = RM + REGS \quad (3)$$

The money multiplier ( $k$ ) is defined as the ratio between M3 and  $RM$ . Thus, from equation (1) and (2)

$$k = \frac{C + D}{C + R} \quad (4)$$

The supply of liquidity can be expressed as the product of the money multiplier and  $RM$ .

$$M3 = kRM \quad (5)$$

Equation 5 shows that the supply of liquidity is affected by changes in the stock of  $RM$  and in the money multiplier. Changes in  $RM$  and the money multiplier are in turn effected through the use of monetary policy instruments such as open market operations, reserve requirement, rediscounting, etc. To clearly understand the process by which monetary instruments affect  $RM$  and  $k$  and eventually  $M3$ , the composition of  $k$  and  $RM$  could be examined.

In the case of  $k$  as given by equation 4, each component of  $k$  may be divided by total deposits ( $D$ ) on the assumption that these components are proportional to total deposits. Thus:

$$k = \frac{\frac{C+D}{D} \frac{R}{D}}{\frac{C+R}{D} \frac{D}{D}} \quad (6)$$

$$k = -\frac{c+1}{c+r} \quad (7)$$

where  $c$  = currency to deposit ratio  
 $r$  = required reserves against deposits

Meanwhile,  $RM$  as defined in equation 2 represents the liabilities of the CB. However, CB controls its liabilities by controlling its assets. When viewed from the asset side,  $RM$  may be defined as the sum of its net foreign assets ( $NFA$ ) and net domestic assets ( $NDA$ ). Net domestic assets, on the other hand, are composed of net domestic credits to the public sector ( $NDC$  Pub.), net domestic credits to the private sector ( $NDC$  Pri.) and net other items ( $NOI$ ). Thus:

$$RM = NFA + NDA \quad (8)$$

$$RM = NFA + \underset{pub}{NDC} + \underset{pri}{NDC} + NOI$$

Substituting equations (7) and (9) in equation (5) gives

$$M3 = \frac{c + 1}{c + r} (NFA + \underset{pub}{NDC} + \underset{pri}{NDC} + NOI) \quad (10)$$

The right-hand side of equation 10 shows the determinants of M3. From this equation, it can be seen that a reduction in  $r$  which would cause  $k$  to increase would result in an increase in supply of banks' reserves available for lending and ultimately in an increase in the supply of M3. Monetary policy instruments can also affect M3 through changes in  $RM$ . For instance, when CB grants loans to banks (say in the form of rediscount credits), CB's  $NDC$  increases, and is accompanied by an increase in reserve balances<sup>*pri*</sup> of banks. The increase in reserve balances of banks in turn would enable banks to increase lendings and thus generate deposits or liquidity equal to  $k$  times the initial increase in reserves.

While equation (10) shows that the supply of M3 can be influenced by CB actions through the use of monetary instruments, it is also affected by factors which are not exactly within the control of CB. Insofar as components of CB's assets are concerned,  $NFA$  is directly related to the balance of payments (BOP) position of the country. And since the BOP is affected by external factors such as economic growth in major trading partners, foreign inflation rate, import and export prices, etc.,  $NFA$  may be said to be not directly controllable. However, in the case of the Philippines, the BOP is one of the major objectives that get translated into a target for CB's  $NFA$ . In this case, the desired level of CB's  $NFA$  which is consistent with the BOP objective is determined and becomes a target variable.

Meanwhile, CB's credit to the public sector may also be difficult to control, unless ceilings are imposed. In most less developed countries (LDCs), this variable is correspondingly adjusted to the government's budgetary requirement. In cases of a Philippine government stand-by arrangement with the International Monetary Fund (the Fund), a ceiling on CB credit to the public sector is imposed to instill fiscal discipline and to enhance the attainment of monetary goals. Moreover, the Philippine CB Charter also provides a statutory limit on the amount of borrowings that the National Government can obtain from CB for any given year which is equivalent to 20 per cent of the National Government's average earnings (or revenues) for the past three years. Hence, to a certain extent, CB credit to the public sector can be predicted if not controlled. The major determinant of M3 as shown in equation 10 that can be directly controlled by CB is its credits to the private sector (or banks) which are in turn influenced through changes in the various instruments.

Of the components of  $k$ , the currency ratio is determined by the general public's preference to hold either cash or deposits. While this decision to a certain extent may be influenced by CB through interest rates, e.g., higher interest rates may induce the public to minimize cash holdings and keep larger amounts of deposits, it is also affected by other uncontrollable factors. In the Philippines, the currency ratio was found to be largely affected by non-economic factors such as uncertainties over political and peace and order conditions. The controllable component of  $k$ , therefore, is  $r$  since it is the CB that determines and has authority to change the reserve ratio.

Operationally, monetary control may be imprecise in that it is difficult for CB to maintain M3 at precisely the level it considers appropriate and desirable because of changes in the noncontrollable factors whose impact on M3 is not entirely predictable. The degree of precision of CB's control over M3 depends on how well it can predict not only movements in the uncontrollable factors but also their impact on monetary aggregates and, consequently, on the final objectives. If the uncontrollable factors do not behave as expected, changes or adjustments are made through policy instruments to offset the impact of such factors on the intermediate target M3 and on the final objectives.

## II. Instruments of Monetary Policy in the Philippines

Monetary policy instruments in the Philippines may be classified into three types: (1) those that are used as market intervention controls in the financial markets to influence the availability and rate of return on assets such as open market operations and rediscounting; (2) those that place restrictions on the portfolios or operations of banks such as reserve requirement and direct controls; and (c) others that do not strictly fall into the first two types such as National Government (NG) deposits with CB from proceeds of T-bills sales, prior import deposits and moral suasion. These instruments of monetary policy are discussed below.

### A. *Market Intervention*

#### *Open market operations*

In the Philippines, open market operations consist of the following instruments:

*Repurchase Agreements (RPs)* – These are transactions wherein the CB buys government securities from banks with a commitment

to sell them after a specified period for a certain consideration e.g., interest rate. RPs are undertaken only when the desired effects on the level of reserve money are temporary. This is because RPs have short-term durations. In effect, RPs are interest-bearing loans given by the CB to banks on the basis of government securities as collateral. RPs may be categorized into two kinds: regular and overnight.

Regular RPs are undertakings where the CB buys government securities from these dealers with a commitment to sell back the same securities at a stipulated interest rate and after a specified period. Regular RPs are undertaken by CB for a period not exceeding 15 days. The interest rate charged by CB is market-oriented, taking into account the prevailing interest rates for T-bills and interbank rates, among others. The government securities which may be used are those (a) issued by the NG or its instruments; (b) unconditionally guaranteed by the NG; and (c) maturing within a period not exceeding 10 years. At present, CB loans under this facility are only given to government securities dealers for inventory financing.

Overnight RPs, as the name indicates, are loans of CB to banks on an overnight basis which are used to assist banks in meeting reserve deficiencies which may result from clearing losses and/or heavier fund outflows during the preceding banking day. The rate charged by CB is based on the interbank rate plus a certain penalty rate to encourage banks to tap other sources of financing before resorting to CB borrowings.

*Reverse RPs (RRPs)* — These are transactions whereby CB borrows funds from banks using its holdings or inventory of government securities in its portfolio as collateral with an agreement to repay the loan (and hence buy back the securities) at a specified rate and period of time. The rate at which CB borrows through this facility is based on the prevailing market rate and other considerations such as the yields on T-bills, the inflation rate and the peso-dollar exchange rate, among others.

Not unlike RPs, RRP are of two kinds: term and overnight. Term RRP usually cover a period of 7 to 14 days while overnight RRP are just borrowings by the CB for one day. Overnight RRP are at times used by CB to complement its borrowing under the term RRP. Considering that banks do not normally lend all their funds on a term basis since their short-term fund requirements may not warrant such an action, CB borrows these funds on overnight basis.

*Outright Contracts* — These transactions which involve the outright purchase or sale of government securities are always carried out for the account of the CB Portfolio. In addition, only market-

able securities are the subject of outright contracts. These government securities, which are traded at discounts and quoted on a yield-to-maturity basis, include T-bills, T-notes and other marketable securities issued by government corporations and financial institutions. At present, purchases of marketable securities are done only in the secondary market since the CB, as fiscal agent of the NG, is not allowed under its Charter to participate in the primary market, i.e., the Auction. It may be noted that at present CB rarely engages in outright contracts since the market situation does not permit it to undertake this type of transaction.

*CB Certificates of Indebtedness (CBCIs)* — The CB may also issue its own securities as it has done in the past although the present policy is to phase out these securities. CBCIs were first issued during the 1970s to mop up excess liquidity arising from the commodity boom and to reallocate credit from urban to rural areas in support of the country's intensified agricultural program. The features of CBCIs were redesigned through the years to improve their marketability but these changes did not prove to be attractive enough to investors.

Meanwhile, CB Bills were introduced in March 1984 as an instrument to mop up excess liquidity arising from the nonpayment of maturing foreign loans due to the debt moratorium. These securities have maturities not exceeding one year and are sold at a discount and on a negotiated basis. The rates on these securities are market-determined; as such, they are not eligible as reserve cover. CB Bills proved to be effective in attaining their objective but were phased out beginning in October 1986 to give way to the auction of T-bills. Prior to this period, CB Bills competed with T-bills, resulting in increases in interest rates.

Based on the foregoing description of the open market instruments, the use of these instruments to attain target levels of *RM* and *M3* may be inferred. RPs are utilized when the CB desires to increase the level of *RM*. On the other hand, when there is a need to reduce the level of *RM*, RRP and the issuance of CB securities may be undertaken. It may be noted that for the use of these instruments to be effective it has to be done hand in hand with interest rate policy. For example, during periods when a contractionary monetary policy is called for, RRP should be priced in such a way that banks are induced to lend to CB. Hence, through the use of open market instruments, the CB may influence not only liquidity levels but also interest rates.

The flexibility of open market operations is an advantage of this instrument. It can be carried out in small or large steps and at fre-

quent intervals so that reserves of the banking system can be adjusted on a virtually continuous basis. Finally, open market operations occur at the initiative of the CB, thereby permitting it to determine the precise volume of the transactions.

This instrument, however, has limitations. For instance, RPs and RPPs have very short maturities such that the desired effects of these transactions are automatically reversed upon maturity. Given a program of sustained credit restraint, the CB resorts to continuous rollovers of the instruments. Such an approach may be costly to the CB and injects an element of uncertainty in terms of meeting the objectives of open market operations. The size of the CB's and the banking system's holding of securities that are eligible for RPs and RPPs also put transactional limits to the use of open market operations. Moreover, the present array of securities has not been useful for outright contracts because of the securities' unattractive yields. The market for these securities has remained thin, with banks acquiring the securities primarily for the "sweeteners" attached to them such as reserve eligibility and collateral value features. Hence, the effective use of open market operations for liquidity management and control would require a fairly developed financial system where there is ample supply of marketable government securities and where the market for these securities is strong.

### *Rediscounting*

This is a transaction whereby CB purchases a bank's assets at a discount. This instrument, as used in most LDCs, plays a dual role — one as a tool to allocate credits to preferred sectors of the economy and another to influence the supply of money and credit. When rediscounting is employed, its effect becomes similar to open market operations. Rediscounting affects the reserves of banks and therefore their ability to extend credits. When the prevailing economic conditions call for a reduction in M3, CB may limit or reduce credits extended under this facility. Conversely, when the desired monetary stance is expansionary, the CB may increase the volume of rediscount credits.

Rediscounting, as practised in the Philippines, is defined as the privilege extended to banks to borrow or secure loans and advances from the CB against eligible papers of their borrowers. Ever since time rediscounting was first used in the Philippines until the end of 1985, it was utilized more as a facility for credit allocation. Preferred or priority activities were afforded low rediscount rates to ensure an attractive spread between the rediscount rate and the bank's relending rate so as to encourage fund flows to these priority activities. Because of the concessional rediscount rate, demand for rediscount

credits grew, but during periods of contractionary monetary policy, the volume of rediscount releases was controlled. The low rediscount rate caused banks to rely heavily on "cheap" CB financing for their credit operations, and this, to a certain extent, did not encourage domestic deposit mobilization.

In cognizance of the weaknesses of this rediscounting policy and the important role that this instrument could play in liquidity management, the CB rationalized its rediscount facility in November 1985. In particular, the rediscount rate was made market-determined to truly reflect the marginal cost of the funds of banks, ceilings on bank relending rates were lifted in line with the deregulation of interest rates, and the rediscount structure was simplified from about 16 windows representing different priority areas to just two categories: agricultural production credits and general purpose credits. The rediscount rate is being reviewed quarterly and adjusted if warranted to keep it attuned to market conditions. More frequent changes, while desirable, are felt to produce administrative problems and confusion in their implementation since most of the rediscountable papers are agricultural production credits of banks which farmers avail themselves of in the rural areas, and therefore they may not be in a position to keep abreast of frequent changes in the rates. Hence, it may be said that the facility's allocative feature dilutes its effectiveness as a liquidity management tool.

The present rediscount policy continues to bear some weaknesses. For one, the arrangement whereby the rediscount rate is adjusted on a quarterly basis does not provide CB with sufficient leeway to make it effective since market rates may rise and fall below the rediscount rate during a given quarter after the rediscount rate has been announced. A rediscount rate that has previously been restrictive can become expansionary if other interest rates rise. To maintain an unchanged discount rate policy, the CB would have to change the discount rate frequently. Secondly, the CB rediscount rate should always be aligned with other CB rates such as rates on RPs and RRP's if CB's action is to be consistent in pursuing the thrust of monetary policy. A rediscount rate that is lower than RRP rates could induce banks to borrow under the rediscount facility and lend it back under the RRP window, thereby making a profit out of CB operations. A rediscount rate that is above or below the prevailing RP rate may give confusing signals to the market regarding the stance of monetary policy. In the Philippines at present, it appears that it is the psychological impact of rediscount rate changes that tends to make it effective as a liquidity instrument. Quarterly changes in the rediscount rate are viewed by the banking

system as signalling a general interest rate movement which the CB desires to bring about.

Ideally, the rediscounting facility should be used to support and strengthen open market operations. For instance, when the CB wishes to complement a restrictive monetary policy, say, during a period of inflation, it uses its open market operations to clamp down on the supply of reserves in relation to a rising demand for credit. As a result, interest rates rise, and banks, finding their reserve position under pressure, tend to increase their borrowing from CB. In order to discourage the creation of additional reserves through borrowing, the CB could raise the rediscount rate as market rates of interest increase.

## B. *Portfolio Constraints*

### *Reserve requirements*

Reserve requirement is traditionally employed as a protection to depositors by ensuring liquidity or solvency and, thus, the capability of the banking system to meet the withdrawals of depositors.

In recent years, however, it has increasingly been recognized as an important tool of monetary policy. The importance of reserve requirement for liquidity/credit control stems from the fact that this variable is a very important determinant of the power of the banking system to expand credit and liquidity (on the basis of given increases or decreases in reserve ratios).

Thus, reserve requirement may be said to play a dual role in the financial system as (a) a safeguard to depositors, and (b) a liquidity/credit management tool. The frequency with which changes are made is generally related to the purpose for which reserve requirements have been intended. For instance, when reserve requirement is used as a solvency ratio designed to ensure the maintenance of sound banking practices and adequate protection for depositors, legal reserves are not changed very often. On the other hand, when used as a monetary policy tool, reserve ratios are subject to frequent changes.

As a monetary policy instrument, reserve requirement is subject to important limitations. Changes in this instrument are less flexible than open market operations. Even a small percentage change in the reserve ratio could result in a relatively substantial adjustment in banks' credit operations. The Central Bank should not resort to changing reserve requirements if such change is expected to be reversed soon. Thus, as an instrument of monetary policy the reserve requirement must be used cautiously since even a small change in it may have disruptive effects on the banking system. Changes in the

reserve ratios may have differential effects on individual banks as it is likely that banks have varying levels of liquidity. This is an important consideration in the use of this instrument particularly when the financial system is composed of very big and very small banks as in the case of the Philippines. For instance, even if on aggregate the banking system shows substantial excess reserves, it is possible that liquidity is concentrated only in a few big banks and that many other banks are already deficient in their reserves. In this case, further increases in the reserve requirement could lead to bank failures and could have a destabilizing effect on the economy.

### *Direct controls*

Direct controls involve quantitative as well as qualitative limits on the freedom of banks to undertake certain activities. The most common types of direct controls include limitations on aggregate bank lending, selective limitations on certain types of bank lending, and interest rate regulations. They are utilized whenever the Central Bank feels that market intervention instruments do not achieve the desired results.

At present, the Central Bank of the Philippines is pursuing market orientation and deregulation in its policies such that direct controls are no longer actively used. Interest rate controls were abandoned in 1983 when the last of the interest rate ceilings on loans and deposits of banks was lifted. The only remaining direct control at present is the requirement for banks to set aside a certain portion (25 percent) of their loanable funds for agricultural and agrarian reform credits. This requirement, however, is not a direct CB regulation but is in compliance with a presidential decree. Recently, the CB supported moves to abolish or amend this requirement since it was found to have raised the intermediation cost of banks and to have failed in its objective of increasing fund flows to the agricultural sector.

### *C. Other Instruments*

1. *Prior Import Deposits* – This takes the form of a requirement that importers must maintain deposits with the Central Bank or some other bank for a specified period of time as part of the funds needed for import payment. This measure tends to lock in funds for import payments as well as raise the cost of importation. In the Philippines, this instrument is not being employed by the Central Bank. While prior import deposits are required by banks from

importers, it is a requirement of the Bankers Association of the Philippines, and not of the CB.

2. *Moral Suasion* — This is an intangible yet important instrument of monetary policy that is normally employed by the Central Bank whenever it is felt that market mechanisms could not take fully the public interest into account. It is defined as the influence that the Central Bank exercises to induce or convince banks to conduct operations in a manner that would contribute to the attainment of monetary goals but which may not be supportive of, and even contradict, profit maximization objectives of banks in the short run. It may take the form of a request for voluntary restraint on overall lending or a suggested priority in lending to different sectors of the economy. In most countries including the Philippines, this instrument is utilized by the Central Bank from time to time although its effectiveness may, to a certain extent, depend on the relationship of the Governor as head of the Central Bank with the banks.

3. *Government Deposits with Central Banks* — This instrument, as used in the Philippines, may be unique to this country but has thus far been effective in meeting monetary targets and objectives. This instrument involves an arrangement between the CB and the national government whereby the latter floats Treasury Securities (largely T-bills) in amounts over and above its usual requirement for financing its deficit. Proceeds from the sale of the "excess" T-bills are placed in a fixed-term deposit account with the CB for which the CB pays market interest rates (equivalent to T-bills rate for the same maturity). This arrangement, which has a neutral effect on the government's budget deficit and which has the same effect as the issuance by CB of its own instruments, was originally intended to allow the government to offset the expansionary effect on *RM* and *M3* of the phaseout of CB Bills in favor of T-bills beginning in October 1986. Since then, the arrangement has actively been relied upon to meet monetary targets.

From the standpoint of monetary management, this instrument limits CB's flexibility in controlling monetary aggregates. The CB's ability to meet monetary targets is made largely dependent on fiscal policies and decisions. For one, the volume of the weekly sale of T-bills in the auction market, as well as the acceptable bid rates, is decided by fiscal authorities. Secondly, the government's compliance with the desired and agreed upon level of its deposit that would be maintained with the CB hinges on the government's ability to live within its targeted budget deficit. In cases where there are shortfalls in government revenue collections and increases in expenditures vis-à-vis the targeted budget deficit, it is very tempting for the govern-

ment to withdraw these deposits for budget deficit financing. When this happens, monetary management is jeopardized. Clearly, the effective implementation of this instrument hinges on a close coordination of monetary and fiscal policies.

Under the T-bill auction program, the weekly volume of flotation is announced to government securities dealers way ahead of time. Hence, any unanticipated changes in uncontrollable factors in the *RM* accounts would be difficult to offset through this arrangement since the volume of flotation for a given period of time shall have already been set and may no longer be changed. Moreover, this arrangement presents problems to CB in terms of offsetting very temporary or short-term swings in *RM* levels in-between auction dates. At present, such temporary fluctuations are being addressed through the use of RRP and RP but these operations are said to adversely affect auction rates. Notwithstanding the foregoing limitations, this arrangement has made the present conduct of open market operations in the Philippines more orderly since only Treasury issues (mainly T-bills) are being sold through auction unlike previously when both Treasury and CB securities with similar market features were simultaneously sold on a negotiated basis.

### III. The Choice of Instruments

The choice of policy instruments in implementing a monetary policy action to achieve a target for a given period would depend on a number of factors which include:

- a) the state of development and structure of the financial system (i.e., whether there is a strong government securities market) and the strength and size of individual banks comprising the systems;
- b) the nature and magnitude of the policy action; and
- c) the promptness of the response of and degree of impact on the monetary aggregate.

From the discussion of the advantages and disadvantages of each policy instrument in the previous section and considering the abovementioned factors, it appears that (a) open market operations have a distinct advantage over the other instruments because of their flexibility in the complex economic world, (b) data tend to lag behind events and are at times insufficient to fully disclose emerging conditions/developments in the financial system. Because of this, adaptations or changes in policies tend to be undertaken in a gradual or step-by-step manner so that they can be readily modified or reversed whenever necessary as real conditions/developments become clear to

policymakers. Open market operations are the best instrument suited to the step-by-step adaptation of monetary policy since they can be used to initiate small policy actions or to aggressively carry out large changes in reserves over relatively shorter periods of time. They are continuous in nature, can be undertaken quickly and are subject to ready modification and reversal. Open market operations can therefore take the lead in general monetary policy implementation, with changes in other instruments only to supplement and reinforce the initiative.

Reserve requirement as a tool can be inflexible since it could not be changed as frequently as open market operations. The effect of frequent changes in the reserve ratio may be adverse particularly when the structure of the financial system is such that there is large variation in levels of liquidity among banks. For example, frequent increases in the reserve requirement may push small and weak banks to the brink of collapse as these banks may find it difficult to adjust to these changes. Moreover, a high reserve requirement diverts a significant portion of bank funds to low or nonyielding assets and increases the cost of intermediation which tends to discourage the development of the banking system. Hence, this instrument may be used if it is felt that the need to provide or absorb reserves is long-lasting or would prevail for a long period of time.

Similarly, rediscounting may not also be as flexible as open market operations. Once a rediscount rate is announced, it must be kept for some time before revising it. The effect on the monetary target may be imprecise and not immediate since there could still be a significant demand for rediscounting loans despite upward adjustments in the rate, unless quantitative limits or quotas are set.

While the foregoing shows the relative advantages of open market operations vis-à-vis other instruments, it cannot be concluded that it is by itself sufficient to attain the targets and goals of monetary policy. What is important in the implementation of any monetary policy action is consistency and harmonization in the use of various instruments available to the CB.