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Monetary Instruments and Their Use During the Transition
from a Centrally Planned to a Market Economy

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Abstract

This paper discusses different instruments of monetary policy, and in particular the choice between direct and indirect instruments. It identifies the main characteristics of a country's financial system that should be considered in selecting monetary instruments, and analyzes how these characteristics should influence that selection in countries that are progressing from a state-controlled to a market economy. The characteristics of the financial system during the initial stage of the transition sometimes favor relatively direct instruments. At this stage market-based variants of direct instruments may combine the necessary effectiveness in reducing monetary expansion with the need to introduce and stimulate competition in the financial markets. During this stage indirect instruments can be developed and tested ("belt and braces" approach). In later stages, as experience is gained, these indirect instruments can gradually replace the more direct controls.

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Summary

There is a consensus among economists that industrial countries with well-developed financial markets should rely on indirect, market-based instruments of monetary control rather than on direct instruments. The basic argument is that indirect measures, which allow the markets to distribute and allocate credit, promote a more efficient allocation of financial resources. For the same reason, developing countries that aim at establishing a more market-oriented economy tend to substitute indirect instruments for direct controls as part of a financial sector reform process.

Although formerly centrally planned economies share many characteristics with traditional developing countries, there are also a number of clear differences, in particular with regard to the functioning of the financial system. Some financial characteristics that are typical of the former are a segmented, two-tier banking sector; separate financial circuits for the household sector and enterprises; fluctuating inter-enterprise credits and arrears; soft budget constraints for state enterprises; and a lack of commercial banking and liquidity management skills in the banking sector. In the conditions prevailing in these economies, indirect instruments may been unable to operate properly. Therefore, the value of immediately introducing indirect monetary controls into such economies is questionable.

This paper examines the choice of monetary instruments for countries that are moving from a centrally planned to a market economy. The main features of their financial systems are analyzed, and the different arguments in favor of indirect instruments are tested. The paper argues that in some cases the advantages of direct instruments in controlling overall monetary developments during the earlier transitional stages seem to surpass their drawbacks in other areas, especially because direct instruments can be modified to allow a greater role for markets.

Monetary instruments in emerging market economies must be effective in controlling overall monetary developments and must promote, or at least allow, the establishment of a more market-oriented financial system. In general, the instruments should be compatible with the financial system within which they will operate. During the typically gradual transition from a state-controlled to a market economy, a correspondingly gradual replacement of relatively direct by more indirect instruments seems the best way to support the development of a market-oriented financial sector while maintaining overall monetary control.

I. Introduction

In the 1970s and 1980s two important interrelated developments have
exerted a strong influence on monetary policy implementation in industrial
countries. First, most countries have liberalized their financial markets
in two respects: the domestic financial markets have been deregulated,
e.g., by liberalizing interest rates, by allowing new forms of financial
instruments (commercial paper, etc.) and financial institutions, and
limitations on international financial transactions have been abolished or
reduced significantly. Second, countries have replaced direct monetary
control with more indirect and market-oriented forms. 1/ The basis for
these two developments has been the conception that market forces are
conducive to stable and efficient progress and that any government
intervention should generally be market-oriented. The arguments in favor of
and against direct instruments are discussed in more detail in Section II.

However, it does not follow automatically that an immediate transition
to indirect instruments is also the best approach in formerly centrally
planned economies (CPEs). There are at least three basic differences
between these countries and the industrial countries: their markets are
less developed, their financial institutions often are more prone to
failure, and their economies often suffer from more serious macroeconomic
imbalances. There are also important differences between the banking
systems in traditional developing countries and former CPEs. In section III
the main characteristics of the financial sector in former CPEs are
discussed.

Economies that are making the transition from central control to
market-oriented policies need instruments that have at least two
characteristics: they must be effective in promoting economic stability,
and their use should support, or at least not obstruct, the process of
structural improvement of the financial system. In section IV the
transition to a market-based financial system is divided into four different
stages, and for each stage it is indicated which mix of monetary instruments
seems to represent the best combination of these two characteristics.
Section V contains some concluding remarks.

1/ See Kneeshaw and Van den Bergh (1989), Batten et al. (1990), and
Kasman (1992). As Bingham (1985) has pointed out, the increased use of more
market-oriented instruments was both aimed at, as well as the unavoidable
result of, financial innovations in the banking sector: in most
industrialized countries in the 1970s and 1980s rigid direct controls had
gradually become less effective due to these financial innovations. In many
of these countries this process was related to a shift from targeting
quantities (money, credit) to targeting price variables (interest rates and
exchange rates), at least at the operating level.

II. Instruments of Monetary Policy: Direct vs. Indirect

1. Definitions

The distinction between direct and indirect monetary instruments is frequently made, but not always clearly defined. In fact there are a number of definitions of these two concepts:

- direct instruments act directly on credits granted by banks, while indirect instruments work indirectly by influencing the banks' liquidity and thereby their potential to provide credit;

- direct instruments set or limit either prices (interest rates) or quantities (credit), while indirect instruments operate by influencing demand and supply conditions;

- direct instruments take the form of regulations, while indirect instruments work through markets;

- direct instruments are applied to the balance sheet of the commercial banks, while indirect instruments are applied to the balance sheet of the central bank.

These definitions look more different than they actually are; in fact, they all reflect the same principle. A central bank can act on monetary conditions basically in two ways: through its influence on money market conditions as the issuer of central bank money (currency in circulation and balances with the central bank), and through its regulatory powers. In this paper we will consider direct monetary control to influence the behavior of banks and nonbanks in ways other than through changes in money market conditions. This generally takes the form of imposing limits on interest rates and/or the quantity of credit. The term "direct" refers to the fact that these instruments directly control monetary conditions in the nonbank sector, viz., interest rates or credit to the economy. The aim of indirect instruments is to influence the behavior of banks and non-banks exclusively through the operation of market forces. To achieve this, the central bank uses its power to determine the amount of central bank money and lets corresponding changes in the money market interest rate be freely transmitted to the economy.

2. Direct monetary control

The main examples of direct controls are limits on interest rates and credit ceilings. Interest rate controls can take different forms. Lending rates can be administered directly through regulations, but they can also be controlled by a combination of administered refinance rates and fixed margins (spreads) for the banks. Deposit and savings rates, which apply to financial relationships between commercial banks and their nonbank customers, can only be controlled directly by the central bank through regulations.

There exists a wide variety of credit ceilings. First, there are
systems that only limit credit to certain sectors (selective credit
controls). 1/ These controls can be divided into positive selective
credit controls, based on upper limits for specific credits (e.g., for
consumer loans or mortgages), and negative selective credit controls, which
include lower limits for credits to certain priority sectors (e.g.,
agriculture). Positive selective credit controls can be based on prudential
considerations (limiting bank loans to a certain sector in order to
stimulate diversification and thereby reduce credit risks), or can be aimed
at macroeconomic stability by restricting credit to a sector that shows
clear signs of overheating. Negative selective credit controls do not aim
at macroeconomic stabilization but have the microeconomic purpose of
supporting a sector that is ailing and/or is considered vital for the
economic development of a country.

Second, there are across-the-board credit ceilings (gross ceilings)
that apply to total credit granted by the banking sector. 2/ These
ceilings are generally broken down into ceilings for individual banks on the
basis, in most cases, of a bank's volume of outstanding credit. 3/ This
implies that each bank faces the same restriction in terms of the maximum
credit growth rate allowed. Thus, while some banks may hit the ceiling,
others may not be restricted by it at all, thereby creating unused room for
credit expansion under the general ceiling. This undershooting of the
target can be reduced by including the option of trading in unused margins
under the ceiling. Another market-based option is to install a system of
(progressive) taxation for exceeding the target, thereby giving the banks
the choice between reducing their credit growth and paying a tax (penalty).
In both cases, competitive banks have the opportunity to expand their credit
base at a higher pace than their less competitive colleagues, while the
growth of credit granted by the commercial banking industry as a whole is
still controlled by the central bank, assuming in the case of penalties that
these can be set at levels that result in the projected overall credit
growth. 4/

Third, there are credit ceilings that take into account the fact that
the inflationary impact of credit creation depends on its funding: when
banks finance their credit by issuing long-term paper or attracting long-
term savings deposits, the inflationary impact may be less than when credits
are funded by current accounts. Credit ceilings can be corrected for this

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1/ See Johnson (1974) for a survey.

2/ This may include credits provided by the central bank directly to the
nonbank sector; interbank credits are excluded.

3/ Also the capital base of banks can be used as a criterion for breaking
down the ceilings.

4/ Cf. Sensenbrenner (1992).

difference, by allowing banks to extend credit over and above the ceilings when this credit is financed with long-term means. Such so-called *net* credit ceilings have been imposed in France and the Netherlands. 1/

A number of conditions have to be fulfilled for direct instruments to be effective. 2/ First, a sufficient legal framework must be in place: central banks must have the right to impose credit ceilings and interest rate controls on the banking sector, and to impose sanctions in case of noncompliance. Related to this is the need for reliable bank reporting systems. Credit ceilings are generally based on monthly reporting by commercial banks of their balance sheets. This reporting system should not involve long lags; if they are to control the course of the monetary aggregates, central banks must be able to determine quickly any significant violations of the credit ceilings.

The main advantage of direct controls is their effectiveness in controlling credit growth or interest rates. However, direct instruments have a number of important inter-related drawbacks. First and foremost, as with all non market-based methods, direct controls risk a misallocation of resources. Second, by "freezing" market shares they hamper competition in and thereby development of the banking sector and require special treatment for new and small (fast-growing) banks, form an incentive for disintermediation, and cannot be applied in a flexible way. Furthermore, it may not be feasible for the monetary authorities to prevent circumvention or evasion by banks and borrowers. These can occur through foreign borrowing (e.g., from foreign branches of domestic banks), through borrowing from nonbank financial institutions, and--in the case of selective credit controls--through financial transactions with sectors for which the controls do not apply. Imposing a credit ceiling on the domestic banking sector contains, in a sense, a discriminatory element in that it does not apply to the nonbank financial sector.

Evasion and circumvention tend to increase when direct controls are effected for long periods. Also the freezing of market shares due to credit ceilings becomes more and more of a problem. In addition, credit ceilings

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1/ Quintyn (1991) and Hilbers (1989).
2/ The effectiveness here refers to the ability of the instruments to reach certain targets in terms of credit growth (in the case of ceilings) or interest rates (in the case of interest rate controls). The effectiveness in terms of the final targets of monetary policy (inflation, balance of payments etc.) depends, of course, on the envisaged transmission process and institutional circumstances (see section II.5). The conditions for the use of direct and indirect instruments and their pros and cons are summarized in Box I at the end of this chapter.

may lead to or increase excess liquidity in the banking sector. 1/
Therefore, as time passes credit controls become less effective or more
harmful to the financial system. On the other hand, abolishing direct
controls without adequate alternative indirect instruments in place may
result in a loss of monetary control and force the authorities to reinstall
them soon thereafter. 2/

Sometimes direct instruments are considered less complicated for
central banks to implement than indirect instruments. However, instruments
that are easy for the central bank to implement may be complicated for the
commercial banks in their daily practice and vice versa, depending on the
skills and experience of the parties involved. Whatever instrument is
chosen, a good understanding by the banking sector is essential.

3.   Indirect monetary instruments

There are three rather different types of indirect monetary
instruments: reserve requirements, open market operations and direct
central bank lending. A reserve requirement requires banks to hold a
certain amount of their assets in the form of deposits with the central bank
and/or in the form of other eligible assets, such as cash in vault; the
required amount is often related to a bank's deposit base. 3/ Reserve
requirements are generally considered indirect instruments, since they have
an impact on a bank's liquidity position; they limit a bank's free reserves
and thereby its potential to grant credit. However, reserve requirements
also carry a characteristic normally associated with direct instruments,
viz., they take the form of a regulation. 4/ It should be noted that
unremunerated reserve requirements amount to a tax on the banking system.
On the other hand, introduction of a system of remunerated liquidity reserve
requirements may entail sizeable costs for the central banks. If imposed at
high levels in unremunerated form, they may result in an increase in the

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1/ When excess funds held at the central bank are not remunerated and
there is no government or central bank paper available to invest in, banks
will start to discourage depositors by offering no or very low interest on
deposits. This again may give rise to disintermediation. The excess
liquidity caused by the prolonged use of direct controls may even complicate
the shift to indirect instruments at a later stage (see below).
2/ This happened both in France and in the United Kingdom in the early
1970s, see Quintyn (1991).
3/ For details, see Hardy (1993).
4/ Furthermore, when a central bank introduces or increases reserve
requirements without providing additional liquidity, the banks will have to
reduce credit or step up their deposit taking activities (by attracting
cash), which implies a restructuring of their balance sheet. When direct
instruments are defined as those instruments that affect primarily the
commercial banks' balance sheet as opposed to the central bank's balance
sheet, reserve requirements could also be considered relatively direct.

spread between banks' lending and deposit rates, thereby stimulating
disintermediation. Furthermore, reserve requirements are not well suited
for fine-tuning and may lead to sharply fluctuating interest rates when
adjusted frequently.

Open market operations involve the purchase or sale of securities by
the central bank. 1/ Purchases, both from the banking and the nonbanking
sector, inject liquidity into the system, while sales withdraw liquidity.
Sales to the nonbank sector may have the additional aspect of encouraging
competition in the financial system as the general public can purchase
marketable securities instead of holding bank deposits, thus arbitraging the
possibly wide spread between the deposit rate and the paper rate. This may
also create an incentive for banks to compete amongst themselves to earn low
risk returns by attracting deposits and investing in marketable securities.
Central banks tend to prefer or are legally restricted to deal in government
paper. 2/ Furthermore, they can issue their own paper for monetary policy
purposes.

Bank borrowing from the central bank can take different forms: the
central bank can rediscount paper; it can lend against collateral; it can
refinance certain (acceptable) commercial bank credits; and it can lend
without requiring (or being able to require) any security. The cost and
size of central bank lending can be determined by the central bank on the
basis of monetary policy considerations. If the banking system as a whole
finds itself in a deficit position vis-à-vis the central bank, at least some
of the banks are forced to borrow. 3/ Central bank lending can be

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1/ These may be in the form of outright sales and purchases, or may
involve a temporary transfer of securities, as in a sale and repurchase
agreement.
2/ Transactions can take place in the secondary market, if it exists,
which avoids direct central bank lending to government. In many countries
direct lending is restricted to temporary, short-term financing of
incidental or seasonal budgetary shortfalls. However, even when the central
bank purchases government paper in the secondary market, this represents
credit to government. Therefore, if open market operations are not included
under any limit on central bank financing of the government, it should be
certain that these transactions are solely driven by monetary policy
considerations, or--to a limited extent--by the need to smooth the market
for government paper. This, of course, requires an independent position of
the central bank.
3/ The position of the banking system vis-à-vis the central bank is
determined by such factors as reserve requirements, the currency
circulation, the foreign reserve policy of the central bank, and the
government's position with the central bank. These factors can hardly be
influenced by the banks, and therefore the central bank, as the lender of
last resort is obliged to finance a deficit arising from changes in such
factors. However, by determining the price and fine-tuning the size of its
support, it can steer interest rates in the money market.

allocated in a market determined way by establishing auctions, or rationed by limiting access to auctions. However, when banks are very dependent on central bank refinancing of their credits, or in the case where bank credit is provided mainly in cash, refinancing policies--although in principle an indirect instrument--have more of a direct character in that limiting the amount of refinancing directly also restricts bank lending. In that case, refinancing ceilings have an impact on credit that is similar to credit ceilings. 1/

For indirect policies to be fully effective in terms of controlling monetary expansion, a number of conditions should be fulfilled. First, prevailing excess reserves--i.e., reserves that are involuntarily held by the banking sector, because of a lack of acceptable or permissible investment opportunities--would have to be mopped up by central bank sales of its own or government paper, or by introducing or increasing reserve requirements. Otherwise the impact of the indirect instruments on interest rates and credit supply would be diluted. Given that high unremunerated reserve requirements form a burden on the existing banks and an impediment for the entry of new banks, and that highly remunerated required reserves may form a burden on the central bank which may weaken its position vis-à-vis the government, the availability of government paper is important for the success of a transition to indirect systems of monetary control. 2/

Second, when indirect instruments are primarily aimed at influencing interest rates, these rates must be allowed to fluctuate. The interest rate liberalization process in the industrial countries in the 1960s and 1970s has made the transition from direct to more indirect instruments relatively easy in these countries. Liberalization of interest rates may imperil the financial system unless the macroeconomic environment is fairly stable, with a competitive and healthy banking system and well-functioning money markets (Leite and Sundararajan (1990)). Under those favorable circumstances, the central bank will be able to influence the banks' marginal cost of funds, and thereby steer money market rates and--indirectly--the supply and price of bank credit using indirect instruments. However, if there are only a few players in the market, and they collude, the decontrol of interest rates may lead to higher profit margins for the banks--through a lowering of deposit rates and/or an increase in lending rates--instead of deposit and loan rates that reflect competitive supply and demand conditions. Under these circumstances it is vital that the authorities encourage the establishment

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1/ Banks can, of course, also fund themselves in the money market, if such a market exists, and some banks are willing to invest their excess reserves in a liquidity-short bank. In that case the refinancing ceilings resemble credit ceilings with the option to trade in unused margins.

2/ Replacing unremunerated excess reserves by interest-bearing central bank paper creates more flexibility for the banks' liquidity management and thereby stimulates the development of a money market, but does not solve the problem of the costs for the central bank.

of new banks to increase competition. In addition, the sale of paper to the nonbank sector may encourage more competitive behavior among banks, since investors would have an alternative to bank deposits in which to place their funds.

Third, and related to the second argument, when indirect controls are supposed to work through interest rates, money and/or credit demand must be sufficiently interest sensitive. If the interest elasticity is low or unstable, indirect operations, even when resulting in--politically unattractive--sharply higher interest rates, will not lead to the intended reduction in credit and monetary expansion. Credit may be relatively interest insensitive in cases where (state) enterprises are not used to react to price signals and tend to continue borrowing at high rates under the assumption that the government will provide compensating subsidies and/or eventually bail them out ("soft budget constraint"). In that case, limiting central bank financing will only restrain credit growth insofar as credits are demanded in the form of cash and through reserve requirements.

Fourth, and related to the previous observation, the financial institutions should be generally sound. The health of the financial sector is related directly to the health of its customers. A large share of nonperforming loans will weaken the capital base of any bank. In that case, banks will be inclined to roll over nonperforming loans in a gamble to avoid or postpone the bankruptcy of clients and subsequently of themselves. Such banks will not shift resources to the most profitable investment projects. Attracting deposits also becomes difficult if confidence in the banking sector diminishes, leading the imperiled banks to offer higher deposit rates that further undermine their profitability. In such an environment all monetary policies, but in particular those working through the interest rate, will tend to be compromised. Thus, a restructuring of the banking sector and improvements in supervision should precede or at least accompany the introduction of indirect instruments. 1/

Fifth, when indirect instruments are used to control monetary or credit aggregates--as is usually the case within IMF supported adjustment programs--their proper use requires indirect monetary programming skills, as well as timely and accurate monetary statistics. Indirect monetary programming, or--more precisely--reserve money programming, implies the analytical breakdown of the aggregate balance sheet of the banking sector (the monetary survey) into separate balance sheets for the central bank and the commercial banks collectively (deposit money banks). 2/ Use of this breakdown for programming requires estimation of money demand and money supply factors, including the money multiplier (the relation between the monetary base and the money supply).

1/ Bisat, Johnston, and Sundararajan (1992, p. 79).
2/ For details, see Davis (1992).

The conditions mentioned above for the effective use of indirect instruments do not imply that these instruments cannot or should not be introduced without these conditions being fulfilled. It is, for instance, very useful to start auctioning government paper and to introduce reserve requirements at an early stage. However, these actions cannot be expected to ensure effective monetary control without the contemporaneous use of more direct controls on monetary expansion.

4.   The market conformity of monetary instruments

There is a tendency to consider all direct monetary control systems as rigid administrative rules, and all indirect systems as fully market-oriented instruments. This view is extreme (Table 1). 1/ In fact, there are rigid indirect instruments (reserve requirements, bank-by-bank refinance ceilings), as well as market-based direct controls (e.g., tradable credit ceilings). A distinction is often made between statutory indirect instruments (e.g., reserve requirements) on the one hand, and market-based indirect instruments (open market operations, refinance auctions, foreign currency swaps) on the other hand. 2/ Although, generally, indirect instruments are more market-oriented than direct instruments, the degree of market conformity achieved with indirect instruments depends to a large extent on the character of the banking sector. As indicated above, in the case of a monopolistic or oligopolistic market, replacing direct by indirect instruments will not by itself introduce more competition into these markets.

Table 1.   The Degree of Market Conformity of Monetary Instruments

	Low	High
Direct instruments	- interest rate regulations - selective credit controls - general credit ceilings	- net credit ceilings - tradable credit ceilings - credit ceilings with the option to exceed the ceiling at a price/penalty
Indirect instruments	- reserve requirements - (preferential) refinance policies on a bank-by-bank basis	- open market operations - refinance auctions - foreign currency swaps

1/ Market conformity of an instrument can be defined as the degree to which market forces are relied upon to carry out the influence of the instrument.
2/ Cf. Lindgren (1991, p. 324).

Furthermore, some of the rigidity of direct instruments can be reduced by modifying them to allow a greater role for markets. For instance, a system in which credit expansion ceilings are linked to a bank's deposit base could encourage deposit competition among banks. 1/ A system of net credit ceilings allows a bank to expand credit above its ceiling if it is able to attract corresponding long-term funding. Net credit ceilings may also stimulate the market for medium and long-term financial instruments. Furthermore, systems that allow interbank trading of credit margins and/or allow for exceeding the ceilings at a price (penalty) leave even more room for market forces and competition.

5. Instruments and targets

An important factor in selecting monetary instruments, which has not been mentioned explicitly so far, is of course the envisaged transmission process. The ultimate targets of macroeconomic policy are growth, full employment, price stability, and a viable balance of payments position. Because it is not possible usually to establish a direct link between the instruments and the ultimate objectives of monetary policy, intermediate targets often can be used to provide such a link. These intermediate targets should on the one hand be closely influenced by monetary policies, while on the other hand bear a highly predictable relation to the ultimate targets; there may be (partly unknown) lags involved in this transmission process.

The two main categories of intermediate targets are the price of money (interest rates and exchange rates) and the quantity of money. Which category to prefer has been the subject of much debate. 2/ Since Poole (1970), it has been generally accepted that the choice should inter alia depend on the slopes and stability of the IS and LM curves. If the IS function is randomly shocked and money demand (or the LM curve) is stable, the money supply is the preferred choice for targeting and the interest rate should be let free, while if the IS curve is stable and the money demand curve is randomly shocked, the interest rate is the proper target. Since Poole's pathbreaking article the discussion has continued, and more emphasis has been put on the money supply process, the role of expectations and the aggregate supply side (for surveys see Blanchard and Fischer (1989) and Papademos and Modigliani (1990)). We do not attempt to cover or summarize this discussion here, but we will take a different, more institutional

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1/ A drawback of this alternative is that banks that rely heavily on the interbank market for funding may be affected disproportionately by credit/deposit ratios.

2/ It is, of course, only necessary to choose between these two intermediate targets within a stochastic environment, since otherwise there would be a stable one-to-one relation between interest rates and money supply.

approach by indicating for each instrument its transmission channel and, in particular, its impact on monetary aggregates and interest rates.

Although all instruments limiting credit expansion will have an impact on both interest rates and financial aggregates, there are clear differences in the effectiveness of the different instruments in reaching certain (intermediate) targets. It is self-evident that direct interest controls will be relatively effective in determining the level of interest rates at which they are aimed. 1/ Their impact on quantities, however, is far more indirect, depending inter alia on the interest elasticity of credit and money demand.

Credit ceilings, on the other hand, will be effective in controlling credit--at least for some time, when the ceiling can be adequately enforced. Their impact on the money supply, however, depends on the structure of the economy. In an open economy with a fixed exchange rate and perfect capital mobility, the monetary authorities cannot control the external source of money supply with either direct or indirect instruments, and money becomes fully demand-determined. Under such circumstances, the authorities can only control that part of the money supply that is created through domestic credit. Although controlling the domestic source does not result in a corresponding control over the money supply, it does influence the balance of payments outcome and as a consequence the net foreign assets of the banking system. For similar reasons, within the framework of adjustment programs aimed at a viable balance of payments position, domestic credit plays an important role as a control variable (Guitián (1977)).

Reserve requirements have a somewhat mixed character. Although they are generally linked to deposits and therefore to a money supply concept, their impact works through the money markets and thus through interest rates. Ceteris paribus, they can be considered an automatic brake on monetary expansion. However, it is difficult to develop effective systems of reserve requirements that fully take into consideration incidental or seasonal fluctuations in the banks' liquidity position, e.g., by averaging the requirement over a certain period or by regularly adjusting the rates. Therefore, reserve requirements need to be accompanied by other instruments of monetary control, either aimed at quantities or at prices.

Indirect instruments such as open market operations and central bank refinance and credit policies will have a relatively direct impact on short-term money market rates. This also implies a strong impact on exchange rates and/or capital flows in economies where capital transactions have been liberalized. In addition to the advantages of indirect instruments already

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1/ The market can, to a certain extent, circumvent direct controls on interest rates by raising or lowering commissions, commitment fees, minimum deposit requirements, etc., in order to influence the effective interest rates on loans. Oftentimes, too, controls encourage the development of parallel or unofficial markets where interest rates are free to vary.

mentioned earlier, open market operations and central bank credit policies are relatively effective in reaching intermediate targets for interest and/or exchange rates, which forms an important factor behind the increasing preference among industrial countries for indirect controls. 1/ It should be noted, however, that the impact of open market operations on some interest rates in the economy (deposit rates, savings rates, longer-term bond rates) is far more indirect and inexact.

Indirect instruments can be used also to attain quantitative targets. When the money multiplier is predictable, open market transactions and/or central bank credit policies can in principle be used to control monetary base, and thus, to steer the money supply. This is the role that indirect instruments play within the IMF monetary programming framework. 2/ It should be noted that in this case the monetary authorities control the supply of money, while when indirect instruments are used to affect interest rates, it is usually in an attempt to control the demand for money, or to reach a particular level of this interest rate or exchange rate.

This brief discussion indicates that the effectiveness of the various monetary instruments depends on the nature of the transmission process. As indicated above, in industrial countries, direct controls have gradually been replaced by indirect ones because, in large part due to innovation and deregulation as well as the subsequent deterioration in the stability of money demand functions, direct controls have become ineffective.

Developing countries have typically relied on direct instruments of monetary control. Recently, however, in many of these countries a similar shift toward the use of indirect instruments has taken place. 3/ The main reason to switch to indirect instruments in these countries has been to avoid the rigidity of non market-based direct controls which threatened the development of a competitive financial sector.

In former CPEs the situation is again different. Due to the nature of the banking system (a monopoly or, at best, an oligopoly) and to soft budget constraints, interest rates do not yet perform an effective allocative

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1/ The importance of interest rates and exchanges rates as intermediate targets in industrialized countries increased in the 1980s, while the importance of credit and money supply targets declined. This process was caused largely by financial innovation and deregulation, which have had four major implications for monetary policy implementation (BIS (1986)). First, increasing international capital mobility has made the exchange rate a more important element in the transmission of monetary policy. Second, it has become more difficult to control the availability of credit. Third, the lags in the transmission process have become more difficult to predict, and, fourth, the demand for money has become more unstable.
    2/ IMF (1987) and IMF (1992).
    3/ See Coats and Khatkhate (1980) and Johnston and Brekk (1990) for surveys on monetary policy issues in developing countries.

function within these economies (see also below). Therefore, targeting interest rates--at least during the initial stages of the transition--does not seem a very fruitful approach. 1/ In addition, due to the lack of reliable data, estimating the stability of IS or LM curves seems difficult at this stage, and therefore it would be difficult anyway to decide between interest rates and quantities as intermediate targets on an empirical basis. These considerations in combination with prevailing high levels of excess reserves, weak financial institutions, the likely erratic behavior of the (reserve) money multiplier, and the seriousness of the macroeconomic problems in most former CPEs (high credit and money growth, and high rates of inflation), support the use of relatively directly controlled quantitative targets within a monetary programming framework, at least during the initial stages of the transition toward a market economy (see Section IV). 2/

III. Characteristics of the Financial System in CPEs

1. General

Although the financial systems in CPEs are not identical, there are many common elements. Some of these elements can also be found in developing countries with less central control, such as:

- controlled, and often artificially low interest rates;
- directed credit;
- a government-controlled central bank with limited monetary know-how;
- macroeconomic instability.

In addition, a number of other characteristics are typical of CPEs, such as:

- a one-tier or segmented two-tier banking system;
- separate financial circuits for the household sector and (state-owned) enterprises;
- large inter-enterprise credits and arrears;
- a lack of commercial banking and liquidity management skills in the banking sector;
- a soft budget constraint for state-owned industries;
- an unfavorable image of the banking sector and the central bank;
- controlled wages and prices, and excess liquidity (monetary overhang);

1/ Nevertheless, inasfar as interest rates are administered, they should be brought to positive levels in real terms.
2/ Cf. Bredenkamp (1993).

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│                                                                          │
│        Box 1.   Direct and Indirect Instruments of Monetary Policy       │
│                                                                          │
│ Credit ceilings, interest rate regulations (direct)                      │
│ conditions:  -  sufficient legal framework, including possibility of     │
│                 sanctions in the case of noncompliance                   │
│              -  reliable bank reporting systems                          │
│              -  monetary programming skills                              │
│ pros:        -  effective in controlling credit/interest rates           │
│ cons:        -  distort optimal allocation of financial resources        │
│              -  hamper competition in the banking sector, partly by      │
│                 limiting entry of new banks to the market, and thereby   │
│                 form an obstacle to financial sector development         │
│              -  may, in the longer run, encourage disintermediation      │
│                 (such as inter-enterprise transactions) and borrowing    │
│                 abroad, since they only apply to the domestic banking    │
│                 sector                                                   │
│              -  in the case of credit ceilings:  difficult to apply in   │
│                 a flexible way                                           │
│              -  induce evasion and fraud                                 │
│              -  may result in or increase excess liquidity in the        │
│                 banking sector                                           │
│                                                                          │
│ Open market policies (indirect)                                          │
│ conditions:  -  little or no excess liquidity in the banking sector      │
│              -  availability of government/central bank paper            │
│              -  liberalized interest rates                               │
│              -  advanced monetary programming skills and reliable economic│
│                 information (when aimed at quantity targets)             │
│ pros:        -  foster efficient use of financial resources             │
│              -  promote competition in the banking sector, and thereby   │
│                 foster market development                                │
│ cons:        -  result in terms of credit growth difficult to project,  │
│                              and may involve (unknown) variable lags     │
│                                                                          │
│              -  may not restrict credit readily if interest elasticity   │
│                 of credit demand is low                                  │
│                                                                          │
│ Central bank lending/refinancing including auctions (indirect)           │
│ conditions:  -  must be consistent with open market operations (and could│
│                 substitute for them in absence of a securities market)   │
│              -  rates should be sufficiently penal to discourage         │
│                 excessive borrowing                                      │
│ pros:        -  may avoid excessive fluctuations in interest rates       │
│              -  in line with "lender of last resort" function of the     │
│                 central bank                                             │
│ cons:        -  may discourage interbank transactions                    │
│                                                                          │
│ Reserve requirements (indirect)                                          │
│ conditions:  -  sufficient liquidity in the banking system               │
│ pros:        -  easy to introduce                                        │
│              -  low-cost solution to reduce the banks' liquidity (if     │
│                 unremunerated)                                           │
│              -  also somewhat useful for prudential purposes, especially │
│                 in the area of clearing and settlement                   │
│ cons:        -  may form a burden on the banks, and thereby lead to      │
│                 higher bank spreads and disintermediation, hampering     │
│                 the flow of funds from savers to investors               │
│              -  not suited for fine-tuning; additional instruments needed │
└────────────────────────────────────────────────────────────────────────┘
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-     a lack of well-defined property rights which complicates or even
inhibits the execution of collateral, generally limits the ability to
enforce loan contracts, and thereby threatens the health of the financial
system;
-     weak or nonexistent prudential regulations and supervision.

These aspects can be classified into three categories. First, some
aspects extend across many sectors of the economy (controlled wages and
prices, inter-enterprise arrears, soft budget constraints, excess liquidity,
and macroeconomic instability). Second, there are specific characteristics
of the banking system (segmentation, lack of competition and commercial
banking skills, absence of prudential regulations, regulated interest rates
and directed credits). A third category refers to the central bank (role in
the planning process, policy instruments, image and independence).

It is outside the scope of this paper to analyze in detail the ins and
outs of the financial system in command economies. 1/ However, the main
characteristics relevant to the functioning of the central bank and the
banking sector, as well as to the implementation of monetary policy, are
discussed below (see Box 3 for a summary).

2.   The role of the central bank

The principal role of the central bank (state bank) within a CPE is to
execute the financial plan that is derived from the production plan. This
financial plan contains a cash and a credit plan. The central bank has very
little autonomy; its main functions are to finance or refinance loans to
enterprises included in the credit plan and to provide cash in return for
checks for the payment of wages as projected under the cash plan. In a
broader sense the central bank is also responsible for monitoring the
observance of the credit plan by checking whether loans and enterprise
deposits are used for the transactions accounted for under the plan. As a
result, the central bank is very much perceived as an agency whose primary
task is to control economic transactions on behalf of the government.

Interest rates in CPEs are set administratively, generally at low
levels. Lending rates are either controlled directly or determined by
administratively fixed refinance rates in combination with regulations that
put a cap on the banks' spreads. Loans to priority sectors can often be
refinanced at preferential refinance rates. Also the rates on savings
deposits are administered, while no or little interest is remunerated over
deposits. The interest rates have no allocative role, the levels, which are
determined administratively, merely reflect the government's priorities with
respect to the activities of different sectors, and are not aimed at
containing aggregate demand. There is no need to restrain demand, since
the volumes that can be borrowed are also determined by the financial

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1/ Cf. Duchatczek and Schubert (1992), Kemme and Rudka (1992), and
Op de Beke (1990).

plan. 1/ In any case, the interest rate elasticity of credit demand is low, because most enterprises operate under a soft budget constraint, i.e., on the basis that higher (interest) costs will be offset by state subsidies. 2/ Another, related factor undermining the effectiveness of monetary policy is the cushioning function of inter-enterprise credits and arrears. A tightening of credit policies tends to result in increases in these credits and arrears, thereby limiting effects on demand.

3. The banking sector

The banking sector in CPEs can be of two varieties. In a one-tier or monobank system, one bank acts both as a central bank (issuer of currency) and provider of credit directly to the economy. In a two-tier system, the central banking functions are conducted by the central bank, and the "commercial" banking functions by a number of state-owned specialized banks. The essence of a two-tier banking system is that the central bank no longer directly channels funds to borrowers, but that the specialized banks grant credits and to a large extent refinance these credits at the central bank, which itself receives funds from the national savings bank. Thus, a two-tier banking system generally consists of a central bank, a bank for foreign trade which carries out foreign exchange transactions, a number of specialized banks (agricultural bank, industry bank, etc.), and a savings bank which deals with the general public and often has a large number of branches. All banks are directly state owned, or, as joint stock companies, fully owned by state-owned or state-controlled entities.

Each of the different specialized banks grants credit to a certain sector of the economy, often at favorable interest rates based on preferential refinancing rates offered by the central bank. Just as most of their clients, the banks operate under a soft budget constraint. Credits are extended according to the financial plan, without taking repayment risks into consideration, and therefore not only demand but also supply of credit is interest-inelastic. In addition to the refinance credits received from the central bank, most specialized banks collect deposits from the sectors they serve.

Thus, although at first sight it seems as if there are a number of different large banks competing in the lending market, in fact each bank dominates a segment of the market while being absent from other segments. Therefore, even in CPEs with a two-tier banking system, the financial market should be considered a set of monopolies; in such cases it is better to speak of a segmented two-tier banking system, as opposed to the full-fledged two-tier systems common in market economies.

1/ Sundararajan (1991).
2/ For the impact of a soft budget constraint on enterprise behavior, see Hardy (1991).

4. <u>Monetary policy</u>

Although monetary and credit policies are not used as instruments of macroeconomic control in CPEs, they are an integral part of the planning process. Detailed decisions on the quantity, the allocation and the price of credit are part of the financial plan. These decisions bear a resemblance to the selective credit controls that were imposed after World War II in many industrialized countries, aimed at shifting resources to sectors that were deemed important in rebuilding the post-war economies. In fact, the monetary control system in CPEs can be looked upon as a combination of direct interest rate controls and a variety of selective credit controls.

However, these controls are not aimed at macroeconomic stabilization-- which is instead approached through full wage and price controls, fully controlled foreign trade, guaranteed employment and inconvertible currencies--but rather at microeconomic targets. Consequently, there is a tendency--especially in times of low growth--to accept rates of monetary expansion that exceed increases in production. In a market economy, this would lead to internal or external disequilibria (inflation or external deficits). However, due to rigid price controls and administrative controls on the availability of foreign exchange, in many former CPEs it mainly resulted in long waiting periods for purchases of consumer goods and the development of black markets, as well as a large monetary overhang at the beginning of their transition to a market economy.

IV. <u>The Choice of Instruments During the Transition to a Market Economy</u>

Although there is no uniform framework or time path for the transition from a command economy to a market economy--different countries may select different schemes depending on their initial position, their economic and social characteristics, and their political preferences--it is nevertheless possible to broadly distinguish a number of stages. 1/ Below, we will identify four stages of the transition process; each new stage is reached after an important characteristic of the centrally planned economy has been abolished. Stage one is reached after the establishment of a two-tier banking system, stage two after major price liberalization and the abolition of central planning, stage three after the introduction of a market-based financial sector, and the final stage with the introduction of a full-fledged market economy. In terms of this order, the former Soviet Union and

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1/ For a discussion of the sequencing of general economic reform in Eastern Europe, see Genberg (1991). There is no consensus on the exact timing of financial sector reform within the broader transition process. Genberg mentions that on the one hand it should come early, given the vital importance of a market-determined allocation of resources in the economy, while on the other hand experience in developing countries has shown that adequate supervision and macroeconomic stability are essential preconditions for successful financial liberalization (Villanueva and Mirakhor (1990)).

Albania have at this writing reached stage two, while most of the other Eastern European countries are somewhere between stages two and four. 1/ This classification, of course, is not very refined; a more detailed breakdown would be possible. However, it proves to be useful since it can be applied, without exception, to all former CPEs, and because it corresponds with significant changes in the functioning of the financial sector and the conduct of monetary policies.

1.   From a one-tier to a two-tier banking system

The typical first step in the transition process is the shift from a one-tier to a two-tier banking system. 2/ This step is often taken even before central planning is officially rejected: two-tier banking systems were introduced in Hungary in 1987, in the former Soviet Union in 1988, in Poland in 1989, in Bulgaria, Romania, and former Czechoslovakia in 1990, and in Albania in 1991. As indicated above, however, at the time of their introduction these two-tier systems were still very segmented. Also, the central bank often continued collecting deposits from state enterprises and extending short-term loans to the nonbank sector. 3/

Nevertheless, the shift to a (segmented) two-tier banking system represents an important step in the direction of a more market-oriented financial sector. In most countries this step was accompanied by the establishment of small commercial banks which had more autonomy in their lending policies than the large specialized banks. However, these commercial banks could not very well attract deposits from the public, due to a lack of branches and, in some cases, to the lack of deposit insurance except for deposits with the state savings bank, and therefore remained very dependent on central bank funding. On the lending side they had difficulties in competing with the large specialized banks which had access to preferential refinance credit and had established ties with the large state-owned companies, which dominate the credit market.

Establishing a two-tier banking system has two important implications for monetary policy implementation (Box 2). First, it makes direct controls slightly more complicated to operate, since the central bank no longer has a monopoly in granting credit to the economy. Instead of implementing these controls itself, the central bank now has to base them on regulations for the banking sector. However, since both the central bank and the specialized banks are still fully state-owned and state-controlled, this change has hardly any practical implications.

1/ In this paper we will not deal with the additional complication of the introduction of new currencies in some of the former Soviet republics. We also abstract from developments in China, where a relatively gradual transition path is being followed.

2/ Sundararajan (1991), Kemme and Rudka (1992).

3/ This was, e.g., the case in Romania before late 1990, when there was a two-tier system, but the central bank was involved in substantial commercial operations (Demekas and Khan (1991)).

Second, although the establishment of a two-tier system in itself does not imply more decentralized financial planning--it mainly concerns a disaggregation of the balance sheet of the monobank--it opens, at least in theory, the possibility for the central bank to introduce indirect instruments of control, since the liquidity position of the specialized banks becomes explicit. As a result, in many CPEs the establishment of a two-tier banking system coincided with the introduction of reserve requirements, although in most cases motivated by redistributional rather than monetary considerations. 1/

Box 2.   From a One-tier to a Two-tier Banking System

Characteristics of the financial system

- financial transactions still based on the financial plan
- segmented two-tier banking system
- very limited independence of the central bank

Monetary policy implications

- imposing direct controls involves the banking sector
- possibility of introducing non-market-based indirect instruments
  (reserve or liquidity requirements)

In practice, in the late 1980s monetary policy in CPEs with segmented two-tier banking systems continued to be based on interest rate regulations and directed credits at preferential refinance rates. The financial activities of the specialized banks were determined by the financial plan and, to allow a check on their compliance, they were obliged to report frequently and in detail to the central bank. The main significance of the establishment of two-tier banking systems for monetary policy implementation was that it created a framework suitable for the use of more indirect controls at a later stage.

2.   The abolition of central planning and price liberalization

This step is the most dramatic one in the transition process. The official farewell to central planning was announced in most Eastern European countries in the late 1980s and in the former Soviet Union in 1991. The decision to abolish central planning, including the cash and credit plans, reduces the role of the government in monetary matters and has far-reaching

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1/ The initial idea was to channel funds from the specialized banks to the central bank, and for the central bank to redistribute these funds through the refinancing of approved bank credits. Prudential motives did not play a major role in introducing reserve requirements in CPEs.

consequences for the banking sector. This sector can no longer consider itself a passive instrument in performing the financial plan, but must accept a far more active role in credit decisions. This holds true both for the specialized banks and for the central bank. In fact, the central bank should accept a completely new role; its main task should be to maintain stability in the value of the national currency in an increasingly liberalized financial environment. Thus, the central bank has to find a balance between on the one hand effectively controlling monetary developments, while on the other hand establishing a financial system that is--as much as possible--driven by market forces. However, the financial system prevailing at the start of stage 2 of the transition is still the one that was in place during the years of the plan economy; the monetary policy implications of this system are summarized in Box 3.

The central bank not only has to abandon old activities and gain experience in new ones, but also has to change its image. In a market economy, a central bank no longer examines whether individual transactions are carried out in accordance with government policies, but is responsible for stability in the value of the currency. Therefore, its association with the government and government policies has to diminish in order for it to develop into an independent central bank. 1/ This completely new set of tasks often has to be adopted under far from ideal circumstances, such as the following:

- strong inflationary pressures, due to liberalized prices in an environment of monopolies and liquidity overhang built up during years of central planning;
- highly negative real interest rates, since price liberalization generally precedes interest rate liberalization; 2/
- no clear directives for credit allocation;
- a segmented and rigid two-tier banking sector, with no interbank or securities markets;
- no adequate legal framework for the activities of the central bank;
- pressures to finance large government (including state enterprise) deficits at below market rates;
- a lack of well-trained central bank staff, since most of the existing staff have no experience with western style economics and financial markets;
- a recession in real output, stemming from sharp changes in relative prices (such as for energy), diminished trade with other former CPEs, and other shocks;

1/ For a discussion of the desirable degree of independence of the central bank, see Castello-Branco and Swinburne (1991). A particular problem in many former CPEs is the close relationship between the central bank and the parliament.

2/ Also the market framework may prevent rates from reaching positive levels in real terms.

Box 3. Monetary Policy Implications of the Two-tier Financial System
        Prevailing in Former CPEs at the Start of the Transition

Characteristic	Monetary Policy Implications
Central bank	
1. limited monetary programming skills	need for straightforward monetary measures aimed at clearly defined targets
2. dependent central bank with image problem	no reliance on moral suasion; clear policies that do not need much explanation or frequent adjustments
3. interest rate controls	indirect instruments relatively ineffective; credit controls combined with interest controls violate market forces by fixing both prices and volumes, but can be effective in limiting monetary expansion
4. strong reporting tradition	administrative regulations relatively easy to introduce and control
Banking Sector	
5. limited competition in the banking sector	monetary instruments should be conducive to the entry of newcomers
6. limited liquidity management skills within commercial banks	open market operations relatively ineffective
7. absence of securities markets	open market policies not feasible
8. possible excess liquidity	introduce/increase reserve requirements
Economy	
9. severe macroeconomic imbalances	quickly working and effective instruments required
10. soft budget constraint for enterprises	credit demand of enterprises relatively insensitive to interest rate changes
11. no benchmark interest rate	introduce auctions of financial paper by government/central bank
12. inter-enterprise credits and arrears	hamper the effectiveness of any monetary policy

-       possible excess liquidity in the banking sector and an unstable
reserve money multiplier, due inter alia to weaknesses in the payments
system and unstable cash to deposits and deposits to reserves ratios.

It is clear that in such a situation at least some of the conditions
for the effective use of indirect instruments (apart from reserve
requirements) for monetary control purposes are not fulfilled. This,
however, does not preclude the introduction of indirect instruments. In
particular, the introduction of government securities through auctions both
serves as a means to establish a benchmark interest rate and may decrease
the government's dependence on central bank funding at below-market interest
rates. 1/ Furthermore, reserve requirements--if not already established--
can be introduced. However, strong inflationary pressures may require a
more forceful monetary policy reaction. A temporary system of credit
ceilings, supported by the often solid reporting tradition, may under such
circumstances prove necessary. Alternatively, strict refinancing policies
may under certain circumstances have a similar restraining effect on credit
expansion (see Section II.3 above). This seems, e.g., the case in Russia.

At the same time, monetary programming skills should be built up. The
ability of central banks to control money, credit, and ultimately inflation
through direct instruments will add to their credibility and thereby
facilitate the use of alternative instruments at a later stage. The
establishment of new banks, and the further development of relatively small
banks, could be stimulated by exempting these banks from the credit ceilings
for a specified period or up to a certain amount.

However, an important nontechnical complication faces central banks at
this stage of the transition. The decision in former CPEs to move to a
market-based economy has created a reluctance within the banking sector and
the economy at large to accept any control over the financial sector, not
only in the area of monetary policy but also, e.g., in relation to
prudential supervision. Such controls are considered out of place in a
market-based setting. Furthermore, among financial institutions some
suspicion lingers that the central bank is still trying to control single
transactions or is taking monetary measures mainly out of profit
motives. 2/ These perceptions weaken the position of the central bank and
form an impediment to good working relations between the central bank and
the banking sector which almost completely eliminates the possibility for

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1/ Alternatively, if the government is not willing to pay a market rate
on (part of) its debt, the central bank, if it is sufficiently independent,
may issue its own paper to establish a benchmark risk-free rate of return.
Such a benchmark rate may help to "unify" interest rates (comparable rates
on comparable risk/return combinations), which, as in the case of a unified
exchange rate, serves the purpose of an optimal allocation of resources
within the economy.
2/ This problem is also relevant in the context of defining the new role
of the central bank in the area of supervision and prudential control.

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the central bank to use moral suasion. While moral suasion is not normally
compatible with a market-oriented monetary policy in the long run, in the
short run its absence may inhibit the willingness of central banks to
experiment with and progressively rely upon indirect instruments, since the
use of moral suasion can provide a means of mitigating undesirable outcomes
while the central bank gains experience with the impact of such policies on
monetary developments.

3.   Liberalizing the financial system

This is the stage of transition that has presently been reached by most
Eastern European countries. Interest rates have to a large extent been
liberalized and privatization plans are being implemented, while the
government has started to finance its deficit at market rates. In some
cases Treasury bills have been issued. Competition in the credit market is
taking off, partly due to the gradual abolition of preferential refinancing
rates and the establishment of new commercial banks. Banking supervision is
improving, facilitating in particular the efforts of small commercial banks
to attract deposits and thereby creating a more competitive deposit market.
Laws regulating the financial sector have been adopted, confirming the
independence of the central bank. However, large macroeconomic imbalances
persist.

Under these circumstances regaining macroeconomic stability should
remain the top priority, but it becomes more important that monetary policy
measures do not obstruct the process of increasing competition or improving
credit allocation in the financial markets. This may be reflected in the
choice of instruments (Box 4). As mentioned earlier, the use of rigid
direct instruments may form an important impediment to competition between
existing players and to the entry of newcomers in the financial markets.
Therefore, this may be the time to develop more market-oriented forms of
direct controls, such as credit ceilings with the option to trade unused
margins, or to exceed the ceilings at a price. In fact, many CPEs at this
stage of transition (e.g., the former Czech and Slovak Federal Republic,
Hungary, Bulgaria) still opt for direct instruments. 1/ Poland has used a
combination of direct and indirect instruments (Olechowski (1991)).
Although Romania abandoned direct controls in late 1991, technical and
institutional obstacles to the full use of indirect instruments have led to
problems in limiting credit growth.

One complication of using both direct and indirect instruments needs
mentioning here. The direct credit controls (ceilings) may create excess
liquidity which needs to be sterilized, either by imposing or increasing
reserve requirements or by mopping up through the sales of paper. Only when
this has been completed, will the (additional) use of indirect instruments

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1/ See Aghevli, Borensztein and Van der Willigen (1992), Boote and
Somogyi (1991), Demekas and Khan (1991).

be effective in restraining credit growth. 1/ When the option of introducing government securities is not feasible, the central bank can auction its own paper (or deposits with the central bank) or--in the case of a liquidity shortage--it can auction central bank credit.

Box 4.   Liberalizing the Financial System

Characteristics of the financial system

- increasing role of small commercial banks
- interest rates largely liberalized
- government has started to issue paper
- macroeconomic imbalances persist

Monetary policy implications

- development of more market-oriented direct controls
- gain experience with the use of indirect instruments for monetary control purposes and, depending on the envisaged transmission process, indirect monetary programming techniques

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4.   The establishment of a market economy

At this final stage of the transition, large scale privatization of state-owned industries has been completed, and the outcome of the economic process is determined largely by market forces. Furthermore, the authorities have demonstrated their ability to reduce macroeconomic imbalances by fiscal and a combination of direct and indirect monetary policies. The important characteristics of the financial system during this final stage of the transition are (Box 5):

- the segmentation of the financial markets has disappeared, and they are driven by competition;
- interest rates are fully liberalized;
- government or central bank paper is available for open market operations;
- excess liquidity in the banking system has been mopped up;

1/ Sales of paper to mop up (unremunerated) excess liquidity of the banking system will not result in a relevant market rate of interest as long as the amount of remaining liquidity exceeds what banks would hold for precautionary motives. In that case any positive rate will in principle be acceptable to the banks.

-    on the basis of reliable data, long enough time series, and stable relationships, the central bank is able to make adequate projections for liquidity of the banking sector in relation to macroeconomic developments.

Under these circumstances the central bank can fully rely on market-based indirect instruments, either for targeting quantities or interest rates and/or exchange rates. Direct controls can be abolished, but should be kept ready for emergencies.

Box 5.   The Establishment of a Market Economy

Characteristics of the financial system

-    competitive financial markets
-    independent central bank
-    fully liberalized interest rates
-    financial behavior of banks and enterprises determined by market forces
-    central bank has gained control over monetary developments and macroeconomic imbalances have been sufficiently reduced

Monetary policy implications

-    full reliance on indirect instruments
-    direct instruments kept at hand for emergencies

V.   Concluding Remarks

Many former CPEs in Eastern Europe and the FSU are confronted with serious macroeconomic imbalances, due at least in part to the lack of control over credit growth. This, of course, results in high rates of monetary expansion and high rates of inflation. A return to macroeconomic stability depends on the ability to stem credit expansion. An important part of the problem is of a budgetary nature; thus, a reduction in budgetary deficits is vital to the success of policies to control monetary expansion.

In addition, however, it is important to limit credit to the rest of the economy, which in most former CPEs consists mainly of credit to large (state-owned) enterprises. Ideally, this should be accomplished by the use of indirect and market-oriented instruments of monetary control, as in industrialized countries. In some cases, however, this may cause problems during the initial stages of the transition to a market economy. Firstly, in order for indirect instruments to function properly, it is necessary to mop up existing excess liquidity. Although this is not a complicated

process, it may take some time to introduce properly functioning reserve requirements and develop primary markets in government or central bank paper.

Even more important, in emerging market economies it is unlikely that the money multiplier is stable, inter alia because of the vagaries in the payment system and the unpredictable demand for cash. In other words, it is hard to determine the banks' regular demand for reserves and therefore the possible size of excess liquidity. The uncertainties in this area both complicate the life of individual banks in terms of their liquidity management, and the life of the central bank in terms of its ability to determine the amount of liquidity in the banking sector that corresponds to a targeted monetary aggregate within the framework of a reserve money programming exercise. Furthermore, when indirect policies in former CPEs are supposed to work primarily through their impact on interest rates--which is the transmission channel preferred by most industrialized countries--the prevailing soft budget constraints may cause a similar problem in that the interest elasticity of credit demand is likely to be low (and hard to establish) in an environment dominated by soft budget constraints.

These arguments may favor the temporary use of relatively direct instruments during the initial stage of the transition, as has been the case in a number of Eastern European countries (former Czechoslovakia, Hungary, Poland, and Romania). However, the drawbacks of these instruments in terms of the freezing of market shares, the problems of evasion, the encouragement of disintermediation, etc., should be realized. These drawbacks tend to intensify when the ceilings are imposed for long periods. On the other hand, some of these drawbacks can be reduced by using relatively market oriented versions: the development of such instruments would merit a separate and more detailed study.

It needs to be emphasized that this paper does not advocate the use of direct instruments in any case, but it does so in some cases and for relatively short periods. Furthermore, the arguments presented above do not argue against the early introduction of indirect instruments, which can help to reduce excess liquidity in the banking system, develop a benchmark interest rate, and stimulate financial sector development. An early introduction of indirect instruments can also be useful to gain experience with the use of these instruments for monetary control purposes. This brings us to a second issue for further thinking; the different aspects of applying direct and indirect instruments of monetary control ("belt and braces") at the same time. Although the system seems overdetermined in that case, by using one set of instruments as binding for monetary control purposes, and the other as a safety net, such a combination may serve the dual purpose of limiting monetary expansion and creating a market determined financial system, which can be considered the two main criteria for selecting monetary instruments in emerging market economies.

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