Lines of monetary transmission optimization under conditions of transition economy

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Lines of Monetary Transmission Optimization under Conditions of Transition Economy

An essential condition of the effectiveness of price-stability-based monetary regime is availability of an efficient mechanism for transmission of monetary policy impulses to the real sector of economy. Characteristic of the economy of Ukraine, the same as many other transition economies is the existence of institutional and structural factors that reduce the effectiveness of monetary transmission mechanism. This paper discusses the above mentioned factors and measures aimed to strengthen the efficiency of transmission mechanism of monetary policy.

An essential condition of the effectiveness of price-stability-based monetary regime is availability of an efficient mechanism for transmission of monetary policy impulses to the real sector of economy.

It should be noted that neither academic communities nor practical economists have common outlook on the nature of transmission and lags of monetary policy makers influence on the economy. The nature and effectiveness of transmission mechanism vary depending on the size, structure and openness of the economy.

It is but natural that for developing countries the nature of monetary policy influence on the economy is characterized by greater degree of uncertainty as opposed to the developed countries due to institutional and structural changes in the economic systems and other limiting factors.

Characteristic of the economy of Ukraine, the same as many other transition economies is the existence of institutional and structural factors that reduce the effectiveness of monetary transmission mechanism due to imperfections of financial market, fiscal policy of the government and other structural factors.

This paper discusses the above mentioned factors and measures aimed to optimization of the transmission mechanism of monetary policy that shall be treated as reduction of its uncertainty and improvement of the effect of its channels.

Many eminent researchers such as F.Mishkin, B. Bernanke, L. Svensson, R. Clarida, M.Gertler, and A.Blinder report on their inquiries into both theoretic and practical aspects of the transmission mechanism of monetary policy. A survey prepared by experts of the Bank for International Settlements S. Kamin, F. Turner and J.Van't dack is the most comprehensive paper on the nature of transmission mechanism of developing countries. The work by K.Smidkova presenting the key features of monetary transmission in the developed and developing economies is also worthy of note.

The study conducted by Ganev et al. (2002) highlights that under the conditions of transitional economy certain limiting factors make the traditional instruments of monetary policy less effective than under neoclassical conditions. In the period of transition, institutional structures of importance for conducting efficient monetary policy have not yet been properly formed whereas the processes that inhibit monetary transmission (disbalanced budgetary policy, negative inflation expectations, etc.) may be fairly strong and dominant at certain stages. Under such conditions the monetary authorities may be forced to conduct inconsistent policy that would have reduced its effectiveness still further.

Despite the variety of monetary regimes and methods of conducting monetary policy in transition economies, there are certain common characteristics that may reduce the effectiveness of monetary

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transmission. In the following we discuss the most important factors for the majority of transition economies that exert primary influence on the effectiveness of monetary transmission.

State of Financial Markets

The availability of well-developed financial market is crucial for effectiveness of the transmission mechanism of monetary policy. The level of development and liquidity of the market determine the extent of central bank policy influence on market interest rates and prices on financial assets. Thus the level of financial market development determines the role and significance of both the interest rate and assets price channels of transmission mechanism.

Generally, developing economies are characterized by inferior financial markets as compared to those of developed economies in such aspects as competition, liquidity, capitalization, and involvement of a wide range of economic agents. Accordingly, the efficiency of monetary policy is reduced. It is reflected on uncertain influence of policy measures on the financial market indicators.

Let us consider the impact of financial market development level on the effectiveness of monetary transmission in terms of its key components such as bank credit market and stock market.

Bank lending

For many transition economies, including that of Ukraine, the role of banking system in the transmission mechanism is decisive. This is largely associated with the lack of other sources of borrowing than banking credit for financing investment and consumer spendings such as capital market resources.

The efficiency of monetary policy is mostly determined by the size of banking sector relative to the real sector of economy. The role of bank lending in the economy of Ukraine like in many transition economies has been dynamically growing in importance at a steady pace. Thus, for example, the ratio of bank credit to GDP in Ukraine increased from 6.7% in 1996 to 45.8% in 2006.

The majority of studies evidence that key structural characteristics stipulating the efficient role of bank lending in the transmission mechanism is competition on the market and sound banking system.

In a highly concentrated banking sector, oligopolistic pricing may be possible, thereby preventing the translation of changes in prices on the interbank market resources (which the central bank has the most influence) to bank credit and deposit rates for the real sector of economy.

Egert and MacDonald (2006) in their paper on transmission in the countries of Central and East Europe, noted that high concentration of capital is actually associated with lower efficiency of interest rate channel. Nevertheless, an entry of foreign capital into the bank market (thereby increasing concentration of capital) cause the interest rate channel to work faster and in a more efficient way. This may be explained by the fact that the entry of foreign capital involves new standards of business thereby stepping up competition in the market.

For Ukraine, the same as for many developing economies, this issue is topical because of the growing share of foreign capital in the banking sector. In recent years the share of foreign capital in the authorized capital of the Ukrainian banks increased from 9.6% as of early 2005 to 33% as of November 1, 2007.

Even the availability of competition in the banking sector cannot be a sufficient condition of interest rates flexibility relative to policy measures.

An important constraint on the effectiveness of monetary transmission is a large risk premium included into the bank interest rate under conditions of transition economy. This is stemming from

both macroeconomic instability (inflation unpredictability) and political tension as well as from the problem of collection and evaluation of economic information at a micro level (in connection with evaluation of collateral or financial position of borrower). These combined complicate the activity of banks as financial intermediaries, which is reflected in an increase of risk premium and adverse selection by banks.

Therefore, the linkage between variables controlled by central bank and interest rates may be weakened under instability.

Moreover, the effect of credit channel is most conspicuous with information asymmetry. In this case banks are not inclined to raise the interest rate in response to tightened policy since the raised interest rate would have involved a decline in demand for credit on the part of the most creditworthy borrowers, whose business is less risky. At the same time, demand on the part of borrowers with high credit risk will remain unchanged. Therefore, banks are forced to selectively approach to the matter of borrower eligibility by applying the so called "credit rationing", that is either strictly limit or completely suspend crediting.

Despite the fact that this leads to decline in consumer demand, the policy effect, however, will be asymmetric since credit rationing is likely to hit households and small businesses that have no alternative financing sources. This, in turn, increases the uncertainty of monetary policy transmission as its scope narrow considerably.

In Ukraine like many transition economies, the effect of credit channel is significant, especially in respect of consumer credits. Banks are inclined to respond by a cutback in lending to a tightening of monetary policy rather than an increase in interest rates.
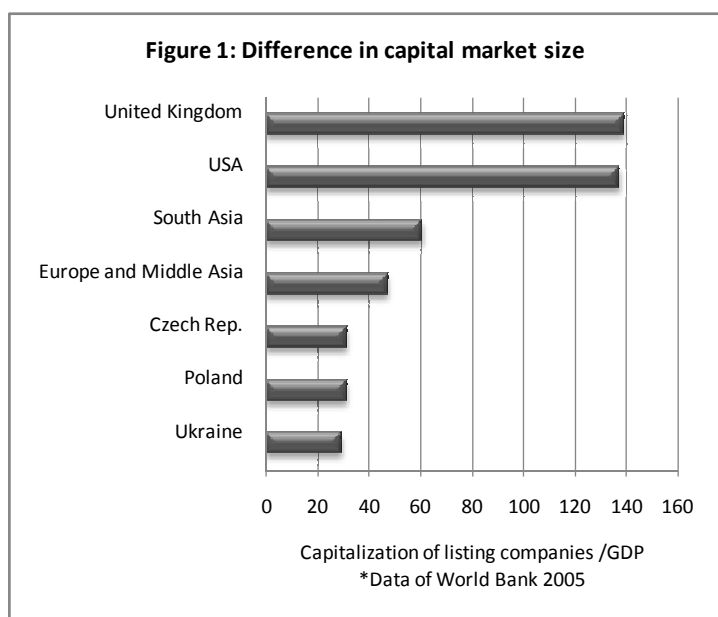
Stock Market

Another factor that leads to reduction in the effectiveness of monetary transmission in developing countries is the lack of established and well-functioning stock market.

In developing countries where capitalization of companies relative to GDP exceeds 100%, the effectiveness of monetary policy is greatly magnified under the influence of the developed capital market due to strong effect of the assets price channel (Tobin's Q, wealth channel, household liquidity channel).

In the developing economies, capital markets are restricted, shallow and low liquid as compared to those in the developed economies. Scantiness of financial markets leads to high transaction expenditures and significant difference between ask and bid prices thereby considerably increasing the costs of financing by issuing securities and bonds. Moreover, even small groups of players may exert a pronounced effect on the market.

Under conditions of underdeveloped stock market, financing of investment expenditures of most companies is not dependent on the capital market situation. Moreover, participation of households in this market is restricted, i.e. lack of securities in their portfolio prevents the monetary authorities from influencing the aggregate consumption by changing prices of their assets.

It should be noted that the absence of efficient securities market complicates both the activity of central banks in conducting monetary policy (efficient open market operations are impossible) and the activity of commercial banks as financial intermediaries (collateral estimation problems). As a result, as reported in BIS (1998), transmission of monetary policy measures may be especially uncertain at the early stages of capital market development.

Figure 1: Difference in capital market size

United Kingdom
USA
South Asia
Europe and Middle Asia
Czech Rep.
Poland
Ukraine

0   20   40   60   80   100 120 140 160

Capitalization of listing companies /GDP
*Data of World Bank 2005

The above-listed problems are to a certain extent pressing for Ukraine. In spite of fairly dynamic growth of capital market (capitalization of GDP listed enterprises increased from 6% in 2000 to 40.4% in 2006), its figures look moderate enough as compared to those of developed countries *(Fig. 1)*.

The process of pricing in this market is sluggish due to low liquidity. Investors can respond to a monetary policy action with a significant lag that is attributed to high transaction costs and impossibility to rapidly leave the market without high financial loss.

Lines of monetary transmission optimization

The effectiveness of monetary transmission may be greatly improved by the development of financial market. Among the measures on the financial market development are the following: support of competitive environment in the market of banking services and financial market as a whole, the development of stock market by protection of investor rights, creation of an adequate infrastructure, etc.

The policy of government securities issue may stimulate the development of stock market. By issuing securities of different maturities and attractive yield, the government can provide the market with the required yield targets and maintain its liquidity to a large extent.

Inflation Expectations

The majority of transition economies experienced the periods of high and instable inflation at the early stage of transformation, and many of them chose exchange rate peg as a nominal anchor to stabilize inflation expectations. In the process of macroeconomic stabilization, inflation rates remain fairly volatile despite their decline thereby preventing the central bank from stabilizing inflation expectations at a proper level and efficiently influencing the aggregate demand.

Softening of monetary policy under these conditions may lead to decline rather than rise in business activity. Softer monetary policy may engender negative inflation expectations with economic agents. At the same time, disinflation measures may foster an increase in business activity in the hope that macroeconomic stability will be restored.

Therefore, in the short run the Phillips curve may be either vertical or wrongly inclined — higher inflation levels lead to decline in economic activity (BIS, 1998). The Phillips curve verticality may be due to hypersensitivity of inflation expectations to changes in monetary conditions caused by recent episodes of hyperinflation and instability.

The effectiveness of monetary transmission can be considerably decreased due to inflation volatility. Firstly, it is difficult to discriminate which part of nominal interest rate is associated with real interest rate and inflation risk premium. Secondly, inflation unpredictability leads to reduction in maturity terms of financial instruments thereby reducing the efficiency of the asset price channel.

Central banks in the developed and developing countries that are setting inflation targets and have succeeded in stabilization of inflation expectations by conducting transparent policy, have an additional signal instrument at their disposal as an inflation target itself. Then by setting the value of targeted inflation level, the central bank can use the inflation expectations channel thereby strengthening the effectiveness of monetary policy.

Lines of monetary transmission optimization

A central bank can significantly contribute to optimization of the effect of monetary transmission primarily by counteracting negative inflation expectations, which is related with the problem of confidence in the central bank actions.

As noted by K.Smidkova (Smidkova, 2001), if inflation expectations are unstable there may be two possible reactions of central bank: either "import" credibility by setting a rigid currency peg or establish credibility from internal sources by announcing an explicit target of monetary policy (mostly inflation target) by gradually increasing the transparency of their decision-making. Though the first type of decision brings faster results, it cannot last long. The second way of resolution works slower but it helps to fix inflation expectations more efficiently than by using various types of exchange rate fixing.

Therefore mutually reinforcing effect is manifested. Announcement and achievement of price stability by central bank exerts a stabilizing effect on inflation expectations. At the same time, with inflation expectations stabilized at a requisite level, the monetary policy can more efficiently attain its objectives due to improvement of transmission mechanism efficiency.

Exchange rate, dollarization and capital mobility

We can identify three "dimensions" of an exchange rate channel. Firstly, a change in exchange rate affects import prices and, hence, consumer prices. Secondly, competitiveness of the economy will change in the world markets. A change in the exchange rate leads to a change in prices of domestic goods as compared to foreign ones thereby influencing the volume of net export. And thirdly, the said actions will affect the balance positions of all economic players that have assets or liabilities denominated in foreign currency and are exposed to currency risk.

The effect of monetary policy through the exchange rate channel may be versatile. Where the country is net debtor to the rest of world (as in many developing economies), a tightening of monetary policy followed by an appreciation of the national currency may lead to improved balance-sheet positions of definite sectors thereby nullifying or outbalancing the effect of reduction in demand for domestic goods, which become relatively expensive.
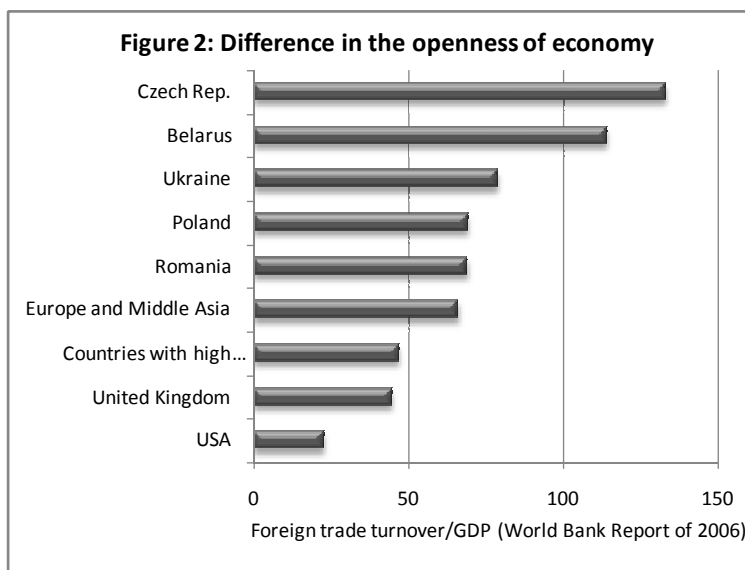
Thus the effect of exchange rate to economy will be conditioned by openness of the economy, dollarization of assets and liabilities of its sectors, currency market development, and external debt level.

Openness of the economy

The difference in the extent of openness between developing and developed economies is evident (Fig.2). This should be considered when analyzing the effect of transmission mechanism since with the openness being high, most of the economic variables are under great influence of the exchange rate, and the pace of influence is faster than the effect of traditional exchange rate channel in developed economy.
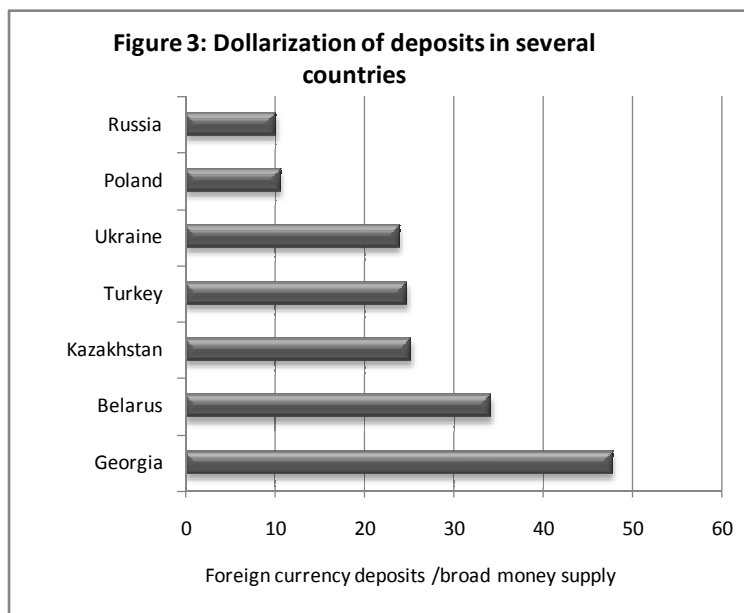
Dollarization

It is traditionally considered that to a large extent dollarization is a response to economic instability, sharp devaluation of the national currency and high rates of inflation that arise at he early stages of transformation of transitional economies. However, as noted by A. Berg and E.Borensztein (2000) the increase in dollarization in many developing countries has continued and even accelerated following successful restrained hyperinflation and relative macroeconomic stabilization (Fig. 3).

Figure 2: Difference in the openness of economy

Czech Rep.
Belarus
Ukraine
Poland
Romania
Europe and Middle Asia
Countries with high...
United Kingdom
USA

Foreign trade turnover/GDP (World Bank Report of 2006)

It is useful to define the term of «dollarization» in more detail. While in the period of hyperinflation foreign currency is used as means of payment (the so called "currency substitution"), with the macroeconomic stability achieved it would be more reasonable to treat dollarization as "asset substitution", that is economic agents prefer to hold a certain portion of their savings in foreign currency.

Naturally, high degree of dollarization introduces uncertainty into the action of transmission mechanism of policy due to the effect of exchange rate channel.

With a high level of dollarization of both deposits and credits, the effect of monetary transmission will be followed by greater uncertainty and asymmetry because exchange rate fluctuations exert different effect on the financial positions of different groups of economic agents depending on whether they are net creditors or net debtors in foreign currency. At the same time the market of currency risk hedging instruments is in inchoate state in many developing countries taking into account the lack of motivation for its development under long-time experience of using the exchange rate peg.

Figure 3: Dollarization of deposits in several countries

Russia
Poland
Ukraine
Turkey
Kazakhstan
Belarus
Georgia

Foreign currency deposits /broad money supply

Lines of optimization of monetary transmission

R.Piontkovsky (2003) has derived a conclusion from his inquiries into the causes of dollarization in the countries of Central and Eastern Europe (inclusive Ukraine) that "the rise of relative returns on domestic assets does not lead to a reduction in dollarization if it is accompanied with an increase in inflation volatility". Hence volatile (not necessarily high) inflation may be the major reason of stable dollarization.

It is worthy to notice that many of countries have recently succeeded in dedollarization by shifting to direct inflation targeting (Turkey, Peru). These results have favored the view that by shifting to more flexible exchange rate regime and lower inflation volatility it is possible to promote dedollarization and thereby improve the effectiveness of monetary transmission.

Other Structural Factors

Determination to implement structural reforms, their quality and speed are decisive factors that characterize the economic environment and to a greater extent the relations between the effects of monetary policy and macroeconomic variables.

From the point of view of monetary policy and its transmission mechanism, structural factors governing most of the restrictions that economic agents have to face in their activity and hence their behavior in different circumstances, including their response to monetary policy actions.

Among the structural factors that affect the effectiveness of monetary transmission is the degree of government involvement in the control of individual commodity markets and market prices, share of public ownership in corporate sector, protection of proprietary rights, etc.

Thus, for example, in Ukraine 48 per cent of capital assets is in the ownership of the government or territorial communities, another 10-11% is in mixed private and public ownership. The Government has an opportunity to back its firms by subsidizing them and thereby extending their inefficient business and preventing more efficient new firms from entry into the market. This significantly distorts market rivalry and therefore affects the productivity of output factors and investment decisions at macro level. It is but natural that under the above conditions the effects of monetary policy will be characterized by higher uncertainty and irregularity in impact on the real sector of economy than under normal market conditions.

Similarly, in the context of structural reforms, we can consider protection of proprietary rights. Inadequate protection of proprietary rights significantly narrows the time horizons of planning due to high uncertainty in the results of its activity and lowers the opportunities of financial system to cope with its key functions. Decisions made by economic agents in choosing of their line of activity and time horizons of planning generally determine investment activities, GDP dynamics, performance and effectiveness of financial system.

Lines of monetary transmission optimization

Actions that would have favored the effectiveness of monetary transmission (in the context of structural reforms) coincide with the objectives of economic policy of the government and to a large extent lie outside the control of central bank.

Among the structural policy measures aimed to improvement of the effectiveness of the economic system as a whole, we can mark out the following: protection of proprietary rights, support of fair competition environment, reduction in the share of inefficient public sector, reduction in the share of controlled prices and tariffs, etc.

Once these measures have been implemented, it would be possible to create more transparent conditions for economic agents and lower uncertainty level in the economy thereby allowing adopting long-term investment decisions and reducing the share of shadow economy.

At the same time, reorientation of the economy to domestic market needs will make it possible to significantly reduce its vulnerability to external economic shocks and lower the dominant role of the exchange rate transmission channel.

Conclusion

The process of monetary transmission in transitional economy is characterized by significant uncertainty stemming from such factors as low level of financial market development, fairly high degree of dollarization and openness of the economy, instability of inflation expectations as well as other institutional and structural factors that tend to reduce the effectiveness of economic system as a whole.

Due to dynamic changes in transitional economy parameters, the influence of monetary policy channels also changes, the same as their weight and importance that should be considered in conducting monetary policy. Hence monetary transmission and factors affecting its effectiveness shall be constantly explored.

As the transitional economy evolves and the above-mentioned structural and institutional reforms have been successfully implemented, the degree of uncertainty in the effect of monetary transmission will reduce and its effectiveness increase.

Actions that would have favored the effectiveness of monetary transmission for the most part coincide with economic policy objectives of the government and lie out of control of the central bank.

Central bank actions towards optimization of monetary transmission mostly consist in stabilization of inflation expectations, and lessening uncertainty in the functioning of exchange rate channel. These objectives may be achieved by establishing a regime based on price stability and increasing credibility to the policy of central bank.

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