History of Monetary Development in Ukraine

Historia przemian monetarnych na Ukrainie

*Oleksandr Petryk**

Abstract

The aim of the article is to provide an impartial analysis of the monetary and economic developments that have taken place since Ukraine gained independence in 1991 and to answer the question: which monetary regime is optimal now from the point of view of ensuring sustainable economic growth and preventing possible financial crises.

The first part of the paper describes main events that took place during the last fifteen years. There was a hyperinflation period and stagnation of the economy in the early 1990s, economic and currency reforms in 1994-97, the financial crisis of 1998 and a period of real economic growth and moderate inflation in 2000-05.

The second part of the paper discusses possible exit strategies to a more flexible exchange rate regime from the current de facto peg to the US dollar. It is argued that the inflation targeting approach is best suited to the needs of the Ukrainian economy and will provide a new "nominal anchor" for the economy. It allows increase in the credibility and transparency of monetary policy and maintenance of low rate of inflation in the long run to support sustainable economic growth.

Keywords: Ukraine, monetary development, exchange rate, inflation targeting.

JEL: E31, E42, E52, E58, E61

Streszczenie

Celem artykułu jest przedstawienie analizy zmian monetarnych i ekonomicznych, które zaszły na Ukrainie po uzyskaniu przez nią niepodległości w 1991 r., oraz odpowiedź na pytanie: jaki reżim monetarny jest teraz optymalny dla zapewnienia wzrostu gospodarczego oraz zapobieżenia możliwym kryzysom finansowym.

W pierwszej części opisano główne wydarzenia, które wystąpiły w ciągu ostatnich piętnastu lat: okres hiperiflacji i stagnację gospodarczą na początku lat 90., reformy gospodarcze i walutowe w latach 1994–1997, kryzys finansowy w 1998 r., okres wzrostu gospodarczego oraz umiarkowanej stopy inflacji w latach 2000–2005.

W drugiej części omówiono strategie odejścia od wiązania kursu hrywny z dolarem amerykańskim w kierunku bardziej elastycznego reżimu walutowego. Twierdzi się, że strategia bezpośredniego celu inflacyjnego lepiej odpowiada potrzebom gospodarki ukraińskiej oraz idei „kotwicy nominalnej" dla gospodarki. Pozwoli to na zwiększenie wiarygodności i przejrzystości prowadzonej polityki pieniężnej oraz utrzymanie niskiej stopy inflacji w długim okresie celem wspierania wzrostu gospodarczego.

Słowa kluczowe: Ukraina, pieniądz, kurs walutowy, strategia bezpośredniego celu inflacyjnego.

* Director of Economic Analysis and Forecasting Department of the National Bank of Ukraine.

1. Introduction

Ukraine, like many other emerging and transition economies, has to solve the following dilemma: either to continue to support the current de facto peg to the dollar or to start to proceed to a more flexible exchange rate regime. In the case of the latter option, the monetary policy would need another "nominal anchor". In our view, inflation targeting could provide such a nominal anchor.

This article presents a brief history of monetary, banking and economic developments since Ukrainian independence in 1991 with the view of making policy recommendations about the future course of Ukrainian monetary policy.

The first part of the paper describes past developments and the main macroeconomic and monetary events since Ukraine gained independence in 1991. In particular, in this part we describe the hyperinflation period and stagnation of economy in the early 90s, as well as the main features of economic reforms in 1996, the financial crisis of 1998, cooperation with international financial institutions (IFIs) and the current economic situation.

The second part discusses possible exit strategies to a more flexible exchange rate regime from the current de facto peg to the US dollar. It is argued that inflation targeting approach is best suited to the needs of the Ukrainian economy.

Some important "pros" support this statement. Under a flexible exchange rate regime the central bank should be able carry out a more independent monetary policy, which helps mitigate the negative influence of foreign and domestic shocks on the economy. Other arguments for changing the current monetary regime are avoiding possible financial crises in the process of financial market liberalization and the maintenance of a low and stable rate of inflation in the long-run.

2. History of monetary and economic developments in Ukraine since its independence

2.1. The Soviet banking system and the start of banking reform before 1991

Without understanding the banking system history and conditions prevailing in the period before Ukraine proclaimed its independence, and the process of collapse of the Soviet economic and banking system, respectively, it is difficult to understand the processes which took place in Ukraine in the period following the official establishment of the National Bank of Ukraine, the separation of the Ukrainian banking system from the post-Soviet one and the formation of the banking system the newly independent state. The main problems of economic development, structural reforms and banking in Ukraine in the first stages of independence were discussed in Sundakov et al. (1994), IMF (1996) and Voronova, Petryk (1998).

Notwithstanding the fact that the Soviet banking system was an integral part of the planning process, banks did not act as financial intermediaries as they do in the market economies. Their main function was that of financial controllers in the planned economy. Credit flows were determined by the centralized plan of goods and services production and was handled by state administrative methods. In the absence of credit and capital markets, the banking system was the channel which allocated the money in accordance with the "real plan".

The movement of capital to enterprises was regulated by "credit plans" of the USSR State Bank. They were similar to quantitative production plans: a credit to any enterprise was based on its production output plan and its needs for long-term capital investments. A credit, given as short-term working capital, was determined under the plan for short-term credit. On the other hand, long-term investments were financed under the plan for long-term credit. Therefore, size and types of credits extended to enterprises did not depend on the factors which, under market conditions, determine credit decisions in a market economy, in particular a borrower's creditworthiness and investors' right to chose the level of risk and interest rates. Thus, the Soviet system ensured a certain indirect financing of the budget by the central bank. In addition, in order to finance budgetary capital expenditures long-term government bonds were issued.

Long-term credits were extended through a centralized long-term crediting fund formed to finance the budget. The USSR State Bank's relations with the state budget were based on the uninterrupted financing of state needs in accordance with the approved expenditure plans.

Whereas the credit plans provided for the amounts and direction of credits in the banking system, another plan, namely a plan of money emission or "the cash plan" of the USSR State Bank determined cash supply for the population. Enterprises were forbidden to have cash, except money to pay salaries. Citizens received their remuneration in cash solely and bought almost all goods and services for cash; credit possibilities for the population were strictly limited. Savings banks (later the Savings Bank) accumulated deposits and transferred this money to the central bank which placed it at the disposal of the state. Consequently,

the main task of financial policy was to attract cash from the population to the banking system, where it was turned into the resources used by the state to finance its operations.

Before the reforms of 1987–88, the USSR State Bank performed central banking functions in the Soviet financial system (except the function of international reserves management), as well as the majority of commercial bank functions. As the central bank in a planned economy, the USSR State Bank was responsible for distributing cash and credit resources (the cash and credit plans). The State Bank was also the banker of the state and the creditor of enterprises, and it executed settlements between economic entities.

During this period, the payment system served the need in refunding manufacturing costs to enterprises, i. e. in repaying the cost of all listed resources and payments, which also included salaries except taxes. Consequently, the enterprise received payments for its goods from the bank (local branch of the State Bank) after submitting documents confirming the delivery of goods. Then, those documents were sent to the State Bank branch at the buyer's location, where the latter's account was debited. However, because of mailing delays the buyer's account was often debited several months after the delivery of goods. As a result, a considerable credit position in favour of buyers arose in the payment system, since the debit was behind the credit, and thus a substantial amount of money "en route" appeared, i. e. net liabilities of the banking system with respect to the buyers.

In addition to the State Bank, there were two specialized banks, specifically the USSR BUDBANK (Building Bank) and the USSR Foreign Trade Bank, in the period before the reforms of 1987–88.

In 1987–88 the reforms and structural changes started with the purpose of establishing a two-tier banking system, in which newly established specialized banks would perform the functions of commercial banks that were previously executed by the State Bank. Three new specialized banks were established: AGROPROMBANK (Agriculture-Industry Bank), PROMBUDBANK (Industry-Building Bank) and Bank of Social Investments, or ZHYLSOTSBANK, which were to provide credits to enterprises in the respective sectors. Therefore, these banks undertook all commercial functions, previously performed by the State Bank, including acceptance of deposits from and extension of credits to enterprises. In addition, the specialized banks also acted as the government agents. Their books included a complete list of the accounts of the national, republican and local authorities. The Foreign Trade Bank (later renamed ZOVNISHEKONOMBANK) continued to perform its previous functions. The savings banks of the USSR State Bank were given the status of banks and were reorganized into the USSR Savings Bank.

At the same time, in 1988, a law on cooperatives was adopted. It permitted creation of cooperative banks for servicing the needs of cooperative enterprises which were not served by the state specialized banks. In addition, state enterprises gained the right to create their own banks. These commercial and cooperative banks differed greatly from the specialized ones. First, their activity was much less limited: they could extend both short- and long-term credits, take payments and deposits and handle foreign exchange operations. Second, their customers did not need to come from a specific economic sector. These banks enjoyed the freedom of servicing both population and enterprises in any industry.

Before the Soviet Union collapse, one more significant event occurred that had negative consequences for monetary development in almost all post-Soviet countries. An administrative increase in prices was arranged with a simultaneous change of banknotes of large denominations, more known as the "Pavlov reform" (Mr. Pavlov was the USSR's Minister of Finance at that time). Household deposits were partially indexed with a 3 year delay in payment and there was a small selective rise in wages. It was the government's attempt to remove the inflationary potential in the economy at that time, by administrative measures. From the macroeconomic point of view, such measures had a very small and short-term effect. Yet, the most negative result of this event might be the increased distrust of the authorities and rise in the inflationary expectations of the population.

2.2. The period between 1991 and 1994

After the collapse of the USSR and creation of fifteen independent states, a paradoxical situation arose when the newly established central banks of all these countries became issuing centers, i.e. had the possibility to issue non cash rubles through credits to governments or business. It was the main factor behind the increase in prices in that period. The Central Bank of Russia was the sole issuer of rubles in cash. For instance, in 1992 inflation in Ukraine was almost 2,000 per cent. High inflation was observed in all countries of the ruble area (price increase was much lower in the Baltic countries, especially in Estonia and Latvia, which were the first to leave the ruble area and to create their own currencies).

Of course, rapid growth of ruble supply with continued administrative price control forced each

Box 1. Introduction of temporary currency in Ukraine

In late 1990 and early 1991, the government attempted to prevent citizens of other countries from purchasing goods in Ukraine. This was because other countries had either moved to market economies where prices were higher or faced shortages of goods compared to Ukraine. According to the authors of this measure, it would give Ukrainian citizens, who received a certain amount of coupons in addition to their wages in rubles, the possibility to have priority when shopping in the retail trade network. In practice, this resulted in the growth of corruption and the creation of a market in coupons. Improvement of the coupon system by replacing one-time coupons with reusable ones did not improve the state of affairs. In 1991, the lack of sufficient ruble cash received from the Central Bank of Russia, as well as of information about price liberalization scheduled on January 2, 1992, forced the authorities to employ reusable coupons not as special rights, but as cash. In 1992, within a certain period, two different types of cash circulated in Ukraine, which made arbitrage possible. The events in the cash segment developed as follows. In January 1991, 25 per cent of wages were paid with coupons. It was possible to buy goods and services with coupons whereas rubles could be used only for purchases of services, transport, newspapers etc. The exchange rate of the coupon against the ruble was not officially established but *a priori* it was supposed to be 1:1 because services could be bought both types of cash. However, in view of the restricted use of cash rubles at the beginning of the introduction of coupons, the exchange rate of the coupon against the ruble fluctuated, de facto, from 3 to 4 rubles per coupon. At the same time, the exchange rate of the coupon against the dollar was set at 10:1 whereas in the black market this rate reached 100:1. It was already in the second month when 50 per cent of wages were paid in coupons, in the third month – 75 per cent and in the fourth month – 100 per cent. The coupon purchasing power, as well as the exchange rate of the coupon against the ruble and the dollar rapidly devalued. It was primarily caused by the rapid growth of the cash coupon supply. Coupons circulated as cash, whereas rubles could also be used for non-cash operations. The exchange rate of coupon against ruble also devalued quickly, since rubles could be invested in mass privatization which started at that time where as coupons could not be used for such purposes. Of course, the coupon against ruble exchange rate existed de facto. The exchange rate was 1:1 de jure since wages were calculated and paid in rubles and coupons on 1:1 basis, and used at this value in retail trade.

new country or even region to create administrative barriers against washing out of goods from this region or country. The Baltic countries made it using more economic measures, i. e. they freed prices and raised wages within the budget sector. By the contrast, Ukraine introduced a temporary currency – coupon-karbovanets without price liberalization.

This introduction was intended to solve the problem of shortage of cash in circulation, which had resulted from controlling the issue of cash by the Central Bank of Russia (CBR), and to defend the internal market of goods. With the purpose of controlling the money supply, in July 1992 the CBR changed the procedure of settlements with former USSR republics. The CBR opened accounts for each of them and respective correspondent accounts with each central bank. This considerably complicated mutual settlements of all post-Soviet countries of the ruble area with Russia.

The year between 1992 and 1993 was a unique period from the point of view of the world experience and disastrous for Ukrainian economy. Only a few countries in the world had hyperinflation; when average monthly inflation exceeded 50 per cent: Hungary after the World War II, Germany and Austria in the 1920s, Argentina, Bolivia and Brazil in the 1980s. Inflation is a monetary phenomenon over time. From December 31, 1992 to December 31, 1993 the inflation in Ukraine peaked at more than 10,000 per cent. That is to say for the calendar year 1993 prices increased more than 100 times. From November 1, 1992 to the end of 1993, the prices increased 167 times!

It is difficult to say that during that year the National Bank of Ukraine had an opportunity to pursue a monetary policy in the usual sense of its definition. One can recollect direct credits to the coal industry during the miners' strikes in Donbas, credits to the agro-industrial sector, for mutual settlements etc. Almost 100 per cent of the government budget deficit was a direct credit from the NBU. During 1993 the money supply increased almost 20 times and prices increased more than 100 times.

Table 1. *Historical review of the world hyperinflation*

Country	Period	Rise in prices for the period, number of times (1 = beginning of the period)
Hungary	08.1945 – 07.1946	10^{27}
Germany	09.1922 – 11.1923	10^{10}
Ukraine	1992 – 1993	2154
Bolivia	10.1984 – 09.1985	236
Brazil	1981 – 1985	146
Argentina	07.1983 – 06.1985	128
Austria	01.1920 – 06.1921	70
Hungary	01.1920 – 06.1921	44

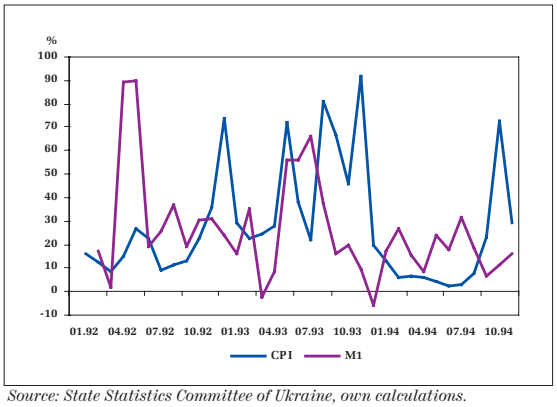
Source: Cagan (1989).

Box 2. Hyperinflation in Ukraine in 1993: Shoe-leather cost' effect

That is how one of hundreds of thousands of citizens of Kyiv, the capital of Ukraine, acted at the end of August 1993. Having received his monthly salary as a programmer at a small private enterprise developing software for commercial banks, which amounted to one million two hundred thousand coupon-karbovanets, Oleksandr Belyakov did not waste time. He understood that every day the coupon-karbovanets value decreased drastically. While his wife stockpiled food, washing powder and other household items for a month or more he used to go to the corner of Khreshchatyk and Lenin Streets where he exchanged his remaining salary for US dollars. Mr. Belyakov, like hundreds of thousands of other citizens, understood well the main rule of survival in a country whose economy was in the state of hyperinflation. Prices for goods and services changed radically: in September 1993, the official inflation index was 80 per cent. Prices for many goods increased several times. US dollars had a similar growth rate in the black market. What would happen to Mr. Belyakov's salary if he failed to exchange it for USD quickly. The day when he got his salary, one USD was worth about 17,000 coupon-karbovanets which meant that 1,200,000 coupon-karbovanets could be exchanged for USD 70. In a month, one USD was worth about 30,000 and his salary until the next indexation was worth only USD 40.

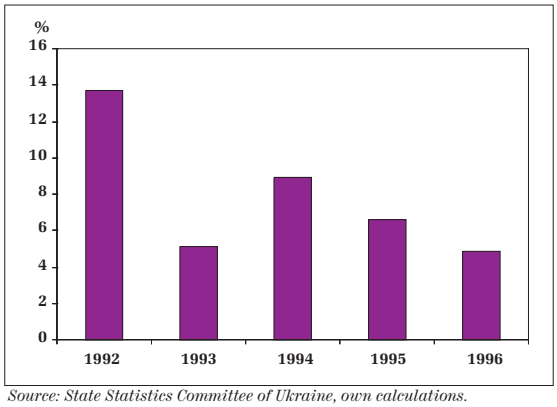
The situation was typical for all of the countries whose economies suffered from hyperinflation. Prices increased much faster than the central bank printed money (Petryk 1998). The whole society functioned under conditions of permanent inflationary expectations and that was also a determinant of inflation acceleration (coupled with "new money printing"). In fact, high inflation made it too costly to keep money. Ukrainian citizens responded rationally and kept the smallest amount of coupons possible.

Figure 1. *Money supply growth rate and inflation, 1992 - 94*



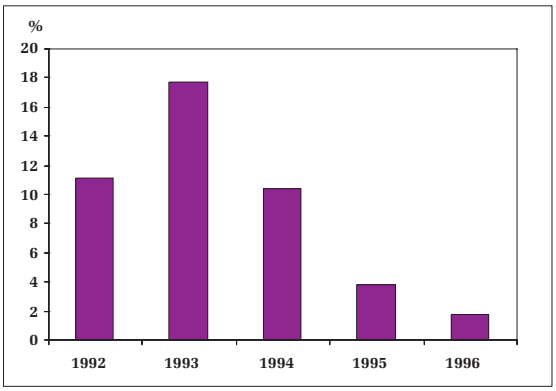
Source: State Statistics Committee of Ukraine, own calculations.

Figure 2. *Budget deficit in percentage of GDP, 1992-96*



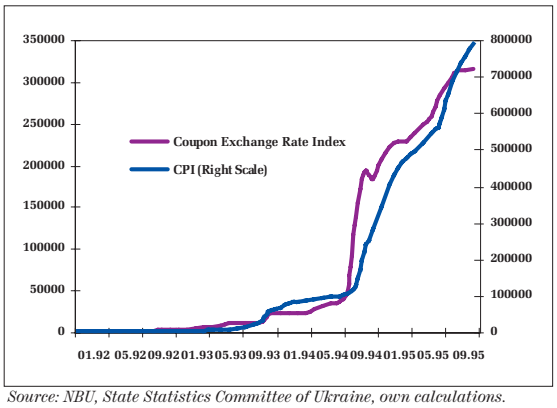
Source: State Statistics Committee of Ukraine, own calculations.

Figure 3. *Seigniorage as a share of GDP, 1992-96*



Note: the ratio of monetary base growth to GDP is used as a measure of seigniorage.
Source: State Statistics Committee of Ukraine, own calculations.

Chart 4. *Consumer Price Index and coupon devaluation, 1992-95 (01.01.1992 = 100)*



Source: NBU, State Statistics Committee of Ukraine, own calculations.

Three main interrelated factors caused the hyperinflation of 1992-94.

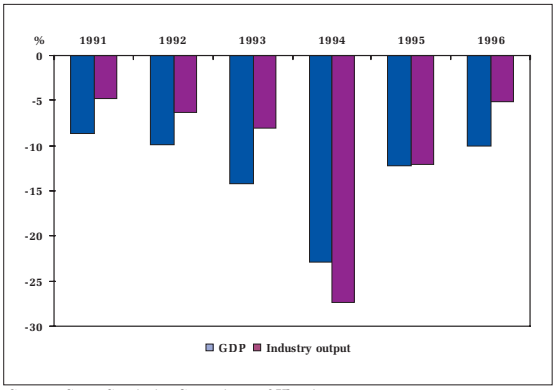
First, the existing tax system did not cover state expenditures in a situation where real GDP declined rapidly and the tax base decreased respectively. A considerable share of economy functioned in the shadow, i. e. taxes were not paid completely or partially. According to different estimates, the shadow sector of the economy made up about a half of the economy. A decrease in real tax receipts was also caused by the time lag and tax collection discretion under high inflation (Tanzi-Oliveira effect).

Second, lack of a capital market for state enterprises in need of cheap credits.

Third, and mainly as a consequence of the two first factors, reliance on seigniorage in budget deficit financing.

In fact, coupons stopped fulfilling the three functions inherent to money: a unit of account, a medium of exchange and a store of value.

Figure 5. *Real fall in GDP and industry, 1991-96*



Source: State Statistics Committee of Ukraine.

As regards the external value of the currency, in the period starting in September 1993 there were at least four exchange rates in Ukraine: the NBU official exchange rate, the auction rate, the commercial rate of cash purchase-sale and the black market exchange rate. The main negative consequences of this foreign exchange policy were worsening of the current account of the balance of payments, underestimation of the profit from exports and overestimation of the cost of imports, the development of the shadow economy, a loss in foreign exchange reserves etc. All of these factors were related, either directly or indirectly, to the effort of all economic entities to use the difference between the existing exchange rates to earn profits which, led to losses for the state. By comparison, the inflation in Russia in 1993 amounted to approximately 1,000 per cent, which was 10 times less than in Ukraine. The Ukrainian karbovanets became almost 10 times less valued then the Russian ruble during this period. This shows that the internal and external (with respect to ruble) devaluation of the Ukrainian currency was almost equal during the hyperinflation period.

This hyperinflation resulted in the biggest economic downturn in the history of Ukraine. In 1994, the real GDP decreased by 23 per cent.

2.3. The period of macroeconomic stabilization and monetary reform in Ukraine in 1994-97

Macroeconomic stabilization and inflation deceleration were seriously pursued for the first time by the government and the National Bank of Ukraine at the end of 1993.

At the end of 1993, the NBU achieved a success both in the development of the institutional fundamentals and in the fulfillment of the monetary and exchange rate policy. Steps were taken to make

the transition to a single exchange rate and a current account convertibility. Unified reserve requirements and a single refinancing rate were also introduced, the use of subsidized and target credits was reduced and credit auctions were initiated. Notwithstanding an inflationary fiscal policy, the NBU set the grounds for needed anti-inflationary measures, which pushed the economy out of hyperinflation.

The main anti-inflationary measures of the Ukrainian authorities were:

– mechanism of issuing government securities, which allowed state expenditures to be financed by borrowings in the internal market as opposed to using money creation to finance the budget deficit. Simultaneously, a new powerful instrument of monetary policy appeared at the National Bank;

– system of interbank settlements and payments, which, with its main parameters, was one of the best at that time in the Central and Eastern Europe. It allowed all settlement transactions to be carried out in real time for several hours;

– essential progress was achieved in banking supervision. Bank licensing, unified rules of controlling economic ratios, systems of inspecting banks and credit classification were introduced;

– establishment of credit ceilings was the main and, perhaps, the only possible measure of the NBU for rapid inflation slowdown, though this was a shock for the real sector of the economy.

Fiscal adjustment was the centre of the stabilizing measures of 1994-95. The general budget deficit decreased from 15 per cent in 1994 to 5 per cent in 1995, and as a result the inflation fell from 400 per cent in 1994 to 180 per cent in 1995. The domestic currency nominal exchange rate against the USD stabilized in the second half of 1995 and did not change significantly over almost 3 years remaining within the corridor of UAH 1.8 – 2.25 per USD[1]. Monetary reform in September 1996 helped to stabilize inflationary expectations and to reduce the inflation to 40 per cent in 1996 and to 10 per cent in 1997. It was also an outstanding political factor since the national currency became an essential attribute of Ukraine as an independent state.

On the eve of the monetary reform of 1996 the macroeconomic situation in Ukraine was favourable. The stabilization of the economy strengthened in 1995 and in the first half of 1996, in particular:

– the inflation slackened considerably;

– the exchange rate (of the Ukrainian coupon-karbovanets of the National Bank of Ukraine against USD) was maintained in a narrow corridor;

– the rate of decline in GDP, as well as of industrial output decelerated;

– activity of households as economic entities increased;

– incomes of households and their savings increased;

– the results of external economic activities improved.

Therefore, the analysis of the economic situation on the eve of reform testifies to the fact that the necessary conditions were created in Ukraine for the introduction of the hryvnia which, in compliance with the Constitution of Ukraine, was to become the monetary unit of the state.

Monetary reform was carried out in compliance with the Order of the President of Ukraine of August 25, 1996, No. 762/96 "On the Monetary Reform in Ukraine".

The main tasks of monetary reform were:

– replacement of the temporary monetary unit – Ukrainian karbovanets – by the national currency – hryvnia;

– the determination of the terms of the exchange (ratio of new to old currency);

– creation of a stable monetary system and transformation of money into an important stimulating factor of economic and social development.

The reform was transparent and nonconfiscatory; it also ensured the inviolability of savings belonging to the population before the reform (Petryk 1996; Oksymets 1998). The choice of such reform resulted from the need:

– to guarantee absolute confidence in the new national currency and as a result – in the policy and economic reforms of the government;

– to keep stability in the money, consumer and foreign exchange markets of Ukraine, to prevent inflation and interruption of exchange rate stability, which could have negative effects on the living standards of the population;

– to prevent speculative transactions of karbovanets – hryvnia exchange;

– to create an acceptable social climate to prevent great psychological and social tension in society in connection with the implementation of monetary reform.

Two more – rather important – factors favoured the conduction of civilized non-confiscatory monetary reform:

– the absence in the economy of Ukraine on the eve of the reform of a money overhang, when money supply considerably exceeds money demand;

– the creation of confidence between the government and the central bank as well as between all economic entities.

[1] In compliance with the international methodology, the budget deficit of Ukraine was bigger than the official data due to the inclusion of privatization incomes to the budget deficit financing rather than to the budget revenues.

The monetary reform in Ukraine was carried out from September 2 to September 16, 1996. The Ukrainian karbovanets were exchanged for hryvnia at the rate of 100,000 karbovanets against 1 hryvnia. Starting from September 17, 1996, cash circulation of karbovanets was stopped and the hryvnia with the kopeck as its coin unit became a single legal tender on the territory of Ukraine.

From September 17 to October 15, karbovanets were still exchanged for hryvnia at the cash desks of commercial banks, and after then for several more years – at regional branches of the National Bank of Ukraine.

The main achievement of monetary reform of 1996 was the maintenance of stability in the money, consumer and foreign exchange markets. The forecasts about the consequences of the reform, developed by the government and the National Bank of Ukraine, came true.

First, inflation was kept within forecasted parameters. Second, from the beginning of the reform, the National Bank of Ukraine maintained a stable exchange rate of hryvnia against foreign currencies, which was the main factor in maintaining inflationary expectations at acceptable level. Third, realization of the reform accelerated money circulation and promoted the improvement of the money and credit markets in the future. It has been proven by a gradual but durable lowering of interest rates in the banking system, which undoubtedly favoured the growth of banking credits to the economy.

The most important achievement of monetary reform was raising the confidence of the population in the new national monetary unit, which was confirmed by the growth of household deposits in the national currency.

2.4. The Russian and Ukrainian crises in 1998

The fall in real GDP continued in 1997-99, after the August crisis of 1998 in Russia. Yet, the rate of fall slowed down year by year. At the same time, in this period a considerable progress was achieved in restricting the inflation rate, mainly due to the monetary policy of the National Bank. The exchange rate was used as a nominal anchor for maintaining inflation and inflationary expectations at an acceptable level. However, the fiscal situation remained difficult and economic activity was greatly influenced by developments at the world capital markets. Foreign investors, mainly short-term capital, came to Ukraine but after the Asian crisis, they began to withdraw from emerging markets, and from Ukraine in particular.

Inflation decreased from 40 per cent in 1996 to 10 per cent in 1997 and to 7 per cent through August 1998. Faster growth of inflation in September and October of that year was caused by a drastic devaluation in September, related to the crisis in Russia.

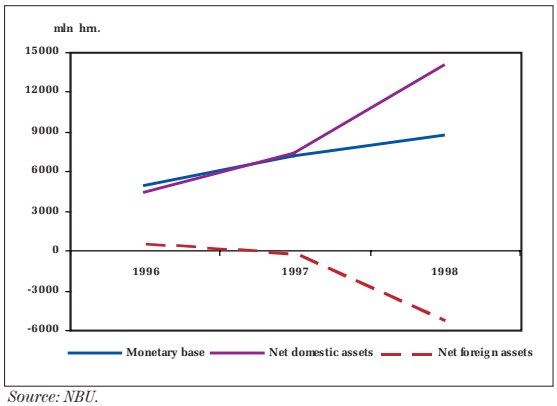
The slowdown in inflation until the financial crises of 1998 was connected with the exchange rate stabilization and the continuation of the tough monetary policy of the NBU.

After GDP fell by 3 per cent in 1997, the fall was suspended during the first 8 months of 1998 due to a large harvest and revival in construction. Still, the world financial crisis and the Russian crisis in particular, contributed to a decrease in world trade and reduced the earlier economic growth in Ukraine. As a result, GDP decreased in 1998 by another 2 per cent.

The root causes of the depreciation of the Russian ruble and Ukrainian hryvnia in the second half of 1998 were largely the same. Both countries suffered from a fiscal crisis and a slowdown in the process of structural and systemic reforms. They also resulted from large budget deficits, bureaucratic restrictions on entrepreneurial activities, and a lack of tax reforms. The fiscal crisis was aggravated by the economic decline.

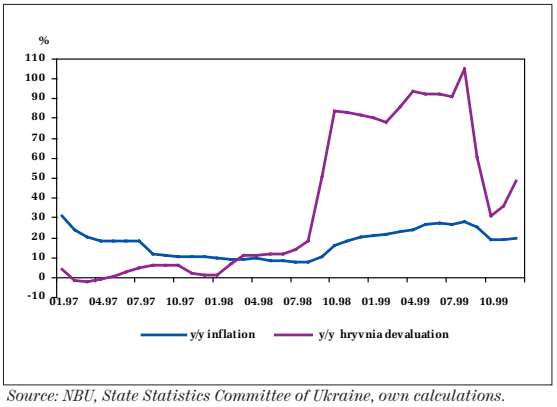
To rely on monetary policy as an instrument of influencing the situation (when there are large and persistent budget deficits) was possible for only a rather short period of time. Since 1995 Russia, and since 1996 Ukraine, have moved from financing budget deficits through central bank emissions to the issuance of government securities (GKOs) and Federal bonds in Russia and domestic government bonds in Ukraine. Those policies helped to slow down the growth of the monetary base, stabilize the exchange rates of the national currencies, and lower inflation. Both Russia and Ukraine attracted financial capital due to relatively favourable conditions and experienced large inflows of short-term capital. However, it didn't take long for investors to realize that macroeconomic conditions in both countries were unstable. A series of crises in Asian countries became an additional factor that reduced investors' confidence in emerging markets. Large scale capital flight (which intensified as a result of the contagion effect) was initiated by non-residents. Afterwards, residents also joined this process. This led to considerable problems with state budget financing and to a rapid decline in international reserves. The rapid drop in reserves further undermined investors' confidence in the ability of central banks to protect national currencies from sharp devaluation. Both central banks did not resort to sterilization of the capital inflows (and foreign reserves growth) because

Figure 6. *National Bank of Ukraine balance sheet dynamics, 1996-98*



Source: NBU.

Figure 7. *Dynamics of Consumer Price Index and hryvnia devaluation, 1997-99*



Source: NBU, State Statistics Committee of Ukraine, own calculations.

net domestic assets were decreasing. When the outflow of capital started, the levels of foreign reserves did not allow them to provide sufficient support to the national currency in the event of a speculative attack (Figure 6).

In particular, the National Bank of Ukraine resumed, in effect, large scale budget financing through purchases of domestic government bonds (OVDPs) in the primary market. Actually, the central banks could not be blamed for not pursuing tight monetary policies, as fiscal policies were not sufficiently tight and the central banks themselves did not have real independence (a new law on the National Bank of Ukraine was passed by the Supreme Council only in 1998). Monetary policy was, in effect, held hostage by the fiscal imbalances of that period.

In spite of similarities in the root causes of the devaluation crises, the situation in Ukraine was not as dramatic as in Russia. Differences in the dynamics of crises reflected the following:

– in Russia the levels of government debt and the budget deficit were higher than in Ukraine;

– the structure of foreign trade in Russia was quite different from that in Ukraine. As a result, devaluation in Russia led to much worse inflationary effects;

– in contrast to the Russian banking system, the banking system in Ukraine was less developed and as such had no large foreign loans exposure; as a result, depreciation effects in Ukraine were weaker;

– due to the underdeveloped stock market in Ukraine an additional channel for capital flight was in effect removed;

– Ukraine did not declare official default on its OVDP bonds, while the destructive consequences of the Russian default in reality helped to convince investors in Ukrainian debt that it was necessary to voluntarily restructure the debt;

– the NBU and the Ukrainian Government avoided making statements about their intention to take resolute actions in respect of commercial banks, introducing instead a number of urgent measures to reorganize the banking system and foreign exchange market. This helped to lower excessive devaluation expectations, prevent massive withdrawals of funds from deposits, and avert speculative attacks;

– the financial crisis in Russia turned rapidly into a government crisis, which in effect, added fuel to the panic in the foreign exchange and financial markets. Ukraine succeeded in avoiding serious political tension.

Starting in 1998, Ukraine cooperated with the IMF under the program of Extended Fund Facility (EFF). Key purposes of this program were the strengthening of state finance and ambitious structural transformations aimed at promoting economic growth and improving the living standards of the population. At the same time, some measures were taken to counteract the negative impacts of regional shocks.

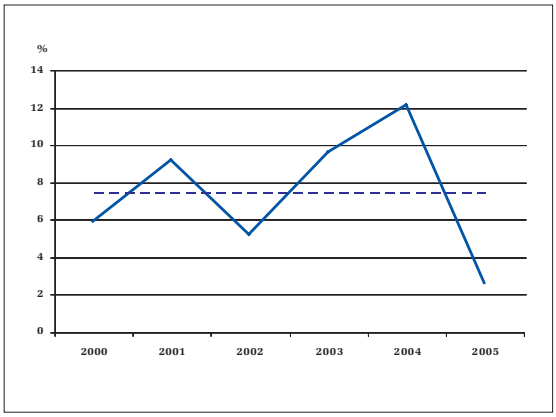
Due to regional shocks and worsening prospects for external financing, the program anticipated a more restrictive fiscal policy, restructuring of debt liabilities and the introduction of a new foreign exchange corridor for a more flexible exchange rate.

Monetary policy was pursued in a framework of meeting the performance criteria, which included a lower limit for the net international reserves change and a ceiling for net domestic assets of the NBU. The monetary base was used as a monitoring indicator.

2.5. The economic situation in 2000-04

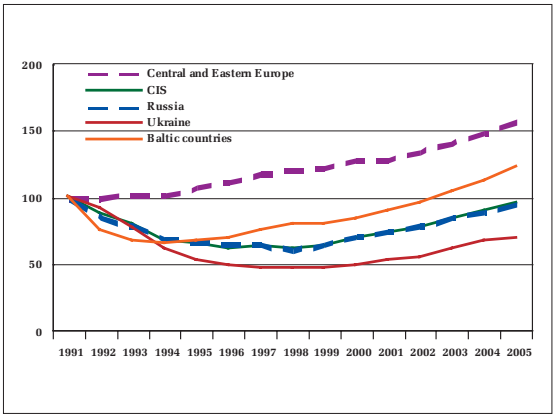
After ten years of economic stagnation, the year 2000 became the first year of real economic growth after Ukraine gained its independence in 1991. Real GDP

Figure 8. *Economic growth in Ukraine and average value, 2000-05*



Source: State Statistics Committee of Ukraine.

Figure 9. *Dynamics of GDP changes in transition economies during the period of reforms, 1991-2005 (1991 = 100)*



Source: IFS, own calculations.

growth of 6 per cent in 2000 began a large-scale recovery of the Ukrainian economy. In 2001 real GDP growth reached 9.1 per cent.

During 2000-04, the real GDP growth exceeded on average 8 per cent per year which was considerably higher than the average for Central and Eastern Europe (3.8 per cent) and the CIS countries (8 per cent). It reached a maximum value of 12.1 per cent in 2004 (Figure 8 and Table 2).

However the economic recovery took place from a very low base. As compared to the majority of other transition economies, real output in Ukraine in the 1990s decreased by more than two times.

The delay in structural reforms and an unfavourable business and investment climate hampered investments. FDI per capita in Ukraine has been very low compared with other transition economies (Figure 10). Moreover, economic growth was not accompanied by significant growth in living standards for the majority of population, because of uneven national income distribution.

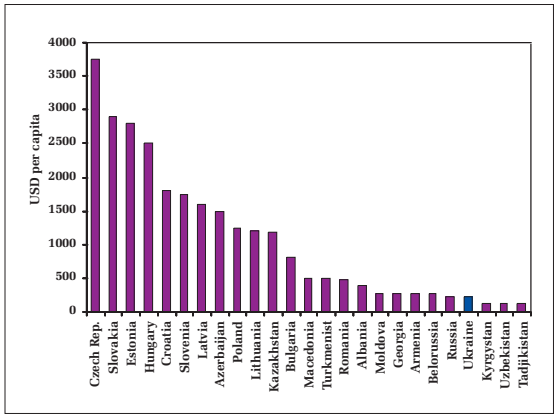
While since 1999 economic growth has been pushed by the growth in exports, domestic demand gradually started to play a bigger role. Stronger world demand stimulated value of Ukrainian steel exports

Table 2. *Economic growth in Ukraine, 2000-05*

Indicators	2000	2001	2002	2003	2004	2005
Real GDP (% change)	5.9	9.2	5.2	9.6	12.1	2.6
Consumer Price Index						
Year average	28.2	12	0.8	5.2	9	13.5
December to December	25.8	6.1	-0.6	8.2	12.3	10.3
Producer Price Index						
Year average	20.9	8.7	3	7.7	20.4	16.8
December to December	20.8	0.9	5.7	11.1	24.1	9.5
Current account balance (% of GDP)	3.9	3.7	7.5	5.8	10.5	2.7
Budget deficit (% of GDP)	-0.6	0.3	-0.7	0.2	3.2	1.9
Monetary base (% change)	40	37.4	33.6	30.1	34.1	53.9
Money supply (% change)	46.1	41.9	41.8	46.5	32.4	54.8
Exchange rate (hryvnia/USD)						
Year average	5.44	5.37	5.33	5.33	5.32	5.14
End of the year	5.43	5.3	5.33	5.33	5.31	5.05
Real effective exchange rate (December 1999=100)	118.5	124	110.7	101.1	100.3	116.3
Real wage (% change) (Worker's income)	-0.9	19.3	18.2	15.2	23.8	20.3

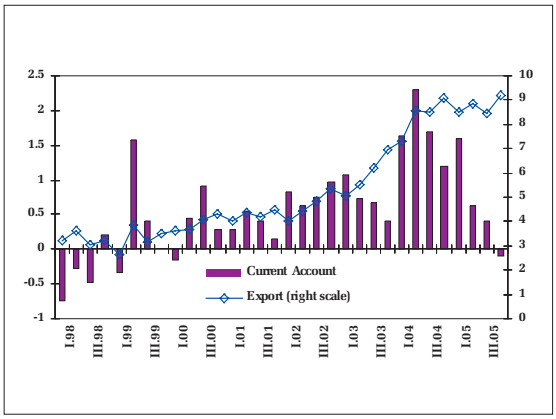
Source: NBU, State Statistics Committee of Ukraine, own calculations.

Figure 10. *Direct foreign investments in transition economies (cumulated), 1990-2003 (USD per capita)*



Source: IFS, own calculations.

Figure 11. *Exports and current account of Ukraine, 1998-2005 (USD billion)*



Source: NBU.

due both to increasing volumes and rising world prices for metal. Together with GDP growth in Russia and the growth of exports of machines and chemistry, annual export growth exceeded 25 per cent starting from the end of 2002 and resulted in a considerable positive current account and international reserve accumulation.

Profits of export industries fed investments and a construction boom. Fast growth of bank credits to the private sector and growing household incomes stimulated domestic demand.

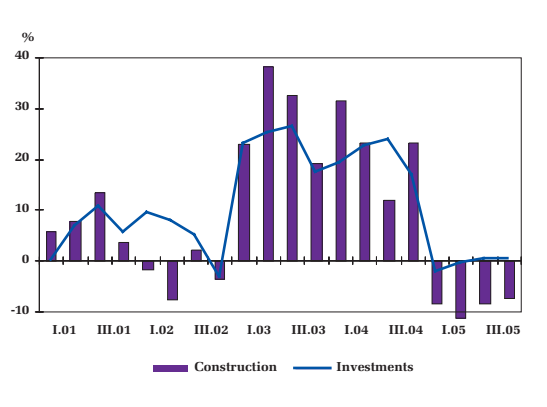
Other powerful factors of the economic upturn were the fast growth of price competitiveness after large hryvnia devaluation in the second half of 1998 and early 1999, and the use of considerable idle production capacity. Figure 13 shows a significant inverse relationship between the real effective exchange rate and the current account of the balance of payments during the 1996-2005.

Inflation was moderate, but beginning in the second half of 2002, inflationary pressures and a stable trend for increases in both consumer and producer prices emerged. Starting from the lowest point in the summer 2002, when 12-month moving inflation was negative, this index exceeded 14 per cent in the first half of 2005.

On the one hand, these price shocks resulted from very large increases in prices for certain foods due to small crops in 2003 and to administrative prices increases for housing, communal and transport services in an undeveloped market and the restructuring in industry and agriculture. On the other hand, there was also a monetary factor, in terms of rise in the growth of money supply. The rise in producers' price index exceeded 24 per cent in 2004, reflecting mainly higher world prices for energy and metals. "Wide" core inflation[2] exceeded 9 per cent which reflected the influence of the monetary factor.

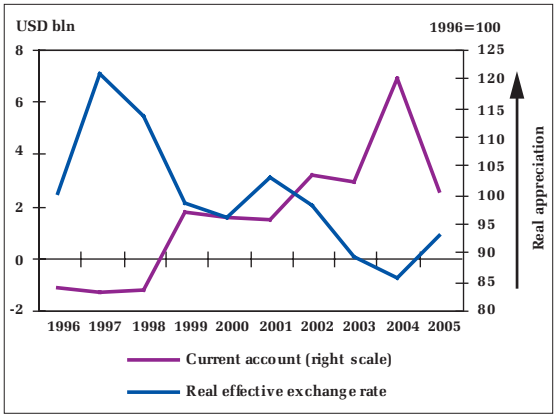
[2] "Wide" core inflation measure defined as changes in CPI excluding raw food products, fuel and services, regulated administratively. Narrow core inflation defined as changes in price of non-food goods without fuel and market services.

Figure 12. *Construction and investments, 2001-05*



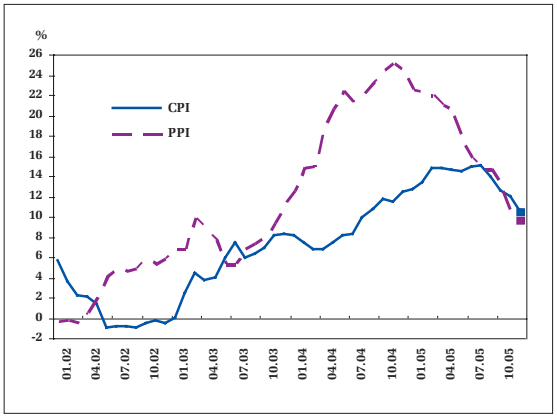
Source: State Statistics Committee of Ukraine.

Figure 13. *Real effective exchange rate and current account balance, 1996-2005*



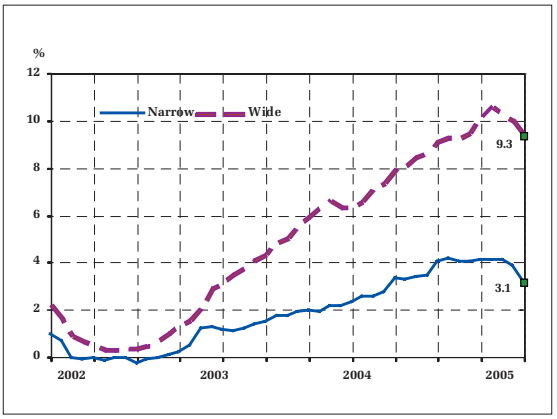
Source: NBU, own calculations.

Figure 14. *12-Month moving inflation of consumer and producer prices, 2002-05*



Source: State Statistics Committee of Ukraine, own calculations.

Figure 15. *12-Month moving narrow core inflation and wide core inflation, 2002-05*



Source: State Statistics Committee of Ukraine, own calculations.

Fiscal policy remained rather restrained until the middle of 2004. In 2003, the consolidated budget deficit, according to the IMF methodology, amounted to 0.7 per cent. However, this situation also reflected a growing indebtedness owing to VAT repayment.

Price competitiveness remained rather high whereas devaluation of the real effective exchange rate starting from 2002 reflected lower inflation in Ukraine as compared to external inflation weighted by trade partners (mainly reflecting high inflation in Russia) and the strengthening of the ruble and the Euro versus the US dollar (and consequently versus the hryvnia).

Starting from 2000, Ukraine introduced the regime of a managed floating exchange rate instead of foreign currency corridor.

In the context of an actual pegging to the US dollar, starting from 2000, the growth of monetary aggregates was nevertheless accompanied by single digit inflation that mirrored the remonetisation process of the Ukrainian economy.

During this period the monetary policy was characterized by massive and largely unsterilized currency interventions of the National Bank of Ukraine.

The NBU decision to conduct only a limited amount of sterilization operations reflected the viewpoint, according to which high growth rates of money supply corresponded to the growing money demand taking into account the real economic growth and the increasing use of bank deposits to make payments (after many years of barter domination in the Ukrainian economy and of different forms of non-money settlements) (Stelmach, Petryk 2003).

For instance, the share of industrial output, including products of the fuel and energy complex which were settled in money increased from 48 per cent in 1999 to about 72 per cent in 2000, whereas the share of industrial output which was realized under barter agreements decreased from approximately 33 per cent to about 17 per cent. In 2000, the amount of barter agreements in international trade also decreased considerably. Taking into account the annual inflation slowdown starting from October 2000, the NBU gradually decreased the refinancing rate from 27 per cent at the end of September 2000 to 8 per cent in 2004. The NBU also continued its policy of gradually lowering the level of minimum reserve requirements.

Despite the permanent NBU measures taken to improve prudential regulation and banking supervision, rapid credit expansion and the quality of the banking system credit portfolio caused concern in this period. The ratio of the bank credit to the GDP grew to 30 per cent in 2004 as compared with 12.4 per cent in 2000. Loans amounted to more than 2/3 of the total amount of banking assets, which was perhaps the highest share among transition economies.

2.6. Recent developments: 2005

The year 2005 differed significantly from the previous five years of rapid economic growth. Deterioration of trade conditions along with a considerable appreciation of the real effective exchange rate were factors which led to a decrease in the current account (from 10.5 per cent of GDP in 2004 to 3.1 per cent in 2005). GDP growth decelerated considerably from 12.1 per cent in 2004 to 2.6 per cent in 2005.

Monetary policy, in keeping the pegging of hryvnia to US dollar, was not sufficiently flexible to respond to the changing macroeconomic conditions, though NBU has taken first steps toward greater exchange rate flexibility. The first of these was relaxation of foreign exchange rate control measures, including export surrender requirements and the

provision that non-residents pre-deposit the full amount of their T-bill auction bids. In April the NBU – for the first time since the year 2000 significantly revalued the exchange rate of the hryvnia to the dollar (by approximately 4 per cent) mostly in order to slow the growth in money supply and inflation.

In August, the NBU lifted the ban that banks operate only on one side (buy or sell) of the foreign exchange market within the same day, and also allowed forward operations.

The fiscal policy of the new government continued the process of expansionary growth in current expenditures, which had started during the Yanukovych's government, redistributing general expenditures from the high-saving corporate sector to the lower saving-household sector. And, at the same time, drifting structural policies and a sharp hike in the tax burden dampened private investment demand.

Inflation has risen well into double digits in 2005. During the last six years with the monetary policy framework centered on defending the de facto peg to US dollar, inflation remained unanchored and very unstable especially in 2005. Recent inflationary pressures are mainly rooted in strong domestic demand for food items, fuelled by large increases in social spending and wages, as well as upward trends in prices of administrative services. In the second half of 2005 inflation declined (to 10 per cent from 15 per cent in the middle of the year) as a result of aggregate demand deceleration, which was expressed in a negative output gap.

Nevertheless high risks of inflation acceleration exist due to drastically increasing gas import prices and a continuous deterioration in the terms of trade.

The lack of clear and market-friendly structural policies has dampened an already difficult investment climate, restricting the growth of the economy. A protracted debate on the scope and *modus operandi* of reconsidering past privatizations in the first part of 2005 aggravated uncertainties about property rights – domestic and foreign investors responded by adopting a wait-and-see approach. But after the Tymoshenko government resigned a new government team was able to carry out the successful privatization of the biggest metallurgy plant Kriworogstal (4.8 bln USD).

Despite some successful political and economic steps towards WTO accession, a lack of political consensus and delay in structural reforms continued to hinder a fast transformation to a developed market economy.

3. Challenges of monetary and exchange rate policies: Flexible exchange rate regime and inflation targeting

3.1. Which exchange rate regime for Ukraine?

Like many other new economies, Ukraine is facing a dilemma: either to maintain a de facto peg to the US dollar (with an insignificant range of fluctuations) or to adopt a regime under which the exchange rate would fluctuate within a much broader range.

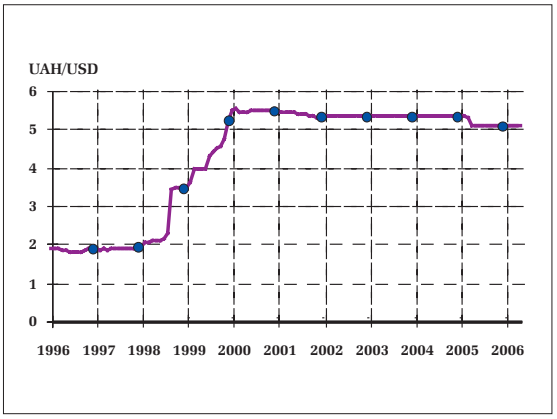
As a matter in fact during the last decade Ukraine used various types of the fixed exchange rate regimes (with a short break during period of sharp devaluation of hryvnia in 1998-99). Before the Russian crisis, the National Bank used a narrow corridor for the exchange rate of hryvnia to dollar. After the crisis, since 2000, the NBU has proclaimed a managed floating exchange rate regime. But from 2000 it has actually been using de facto peg to dollar (Figure 16).

A more flexible exchange rate would allow Ukraine to pursue a more independent monetary policy by including into its economy a stabilizer that would help to neutralize the impact of internal and external shocks. At the same time, under conditions of an expansionary fiscal policy and insufficiently sound financial system, it is not yet possible to move to capital flow liberalization – as it might create significant risks to the macroeconomic stability achieved so far (Petryk 2005a).

What makes the issue of adopting a more flexible exchange rate so important today?

First, in view of a positive balance in the current account, the National Bank is forced to purchase significant amounts of foreign currency to maintain the exchange rate. The accumulation of net international reserves (NIR) is associated with

Figure 16. *Ukrainian hryvnia - USD exchange rate, 1996-2006*



Source: NBU.

corresponding increases in the monetary base and the money supply.

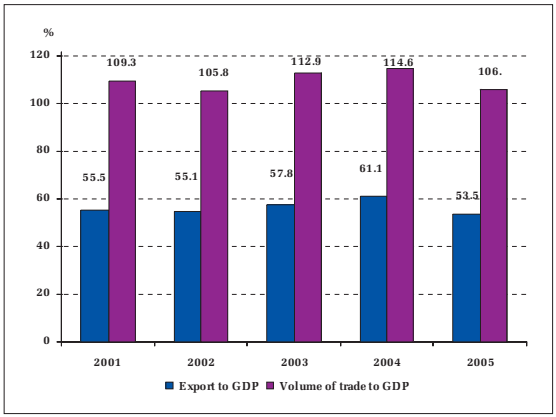
Substantial sterilization of inflows are costly for the NBU and the economy as a whole, both with regard to the contraction of the NBU's earnings and in view of higher interest rates and the crowding out effect. Therefore, sterilization measures cannot be used in the long-term. Thus, a considerable increase in money supply accompanied by a simultaneous slowdown in the rate of real economic growth and the rate of remonetization of the economy creates an inflationary overhang, which, together with easy fiscal policy, translates into a sizeable inflation rate. Inflation becomes very unstable and unpredictable and this is even more important.

Now that a new government has come to power and announced goals of achieving greater transparency in economic policies, reducing corruption, and creating a level playing field for all market participants, foreign investments – particularly foreign direct investments (FDI) – can also be expected to grow. This will become an additional factor of upward pressure on the hryvnia. Other sources of capital inflows are nonresidents' purchases of government securities and growing foreign debt of residents.

However, the main reason why a more flexible exchange rate is required is that Ukraine has a very open economy (the export to GDP ratio in 2004 was 60.6 per cent, and the average export to GDP ratio for the last 4 years exceeded 55 per cent; correspondingly the average ratio of trade turnover to GDP was about 110 per cent) (Figure 17). Therefore, the Ukrainian economy continues to be very vulnerable to both external and internal shocks.

Due to a more independent monetary policy with a more flexible exchange rate the economy may be better equipped to deal with such potential shocks.

Figure 17. *Ratio of exports and volume of trade to GDP, 2001-05*



Source: State Statistics Committee of Ukraine, own calculations.

While it is widely believed that the hryvnia real exchange rate is undervalued, what we should consider is not a mandatory or, even worse, a planned appreciation of the nominal exchange rate (as some policymakers suggest) but greater flexibility, depending on the situation in the foreign exchange market, the balance of payments, etc. This would encourage economic agents to assume a portion of foreign exchange risks, and encourage foreign exchange speculators to push market in the right direction instead of unsettling it.

3.2. Fear of floating in Ukraine

Although Ukraine has officially operated a managed floating foreign exchange regime since the foreign exchange crisis of 1998, policymakers have always regarded a more flexible exchange rate with caution and kept the foreign exchange rate almost fixed, providing all sorts of arguments and warnings against flexibility. This behavior has become known as "fear of floating".

The main arguments in support of this attitude toward the introduction of a more flexible exchange rate are:

– loss of price competitiveness by Ukrainian exporters and producers who operate for the domestic market. This would result from cheaper imports under conditions of a considerable hryvnia appreciation;

– growing foreign exchange mismatches in the banking system and businesses;

– loss of an exchange rate benchmark for economic agents.

A fixed exchange rate policy requires a restrained fiscal policy. Therefore, growing domestic borrowing would result in higher inflows of speculative capital and, consequently, a higher risk of a currency crisis.

It is known from international experience that a move to a more flexible exchange rate is facilitated by favourable macroeconomic conditions – a high rate of economic growth, financial stability, and a rising current account surplus. What are the implications of greater exchange rate flexibility under conditions of capital account non-convertibility? The implications are that the National Bank of Ukraine, as a major player in foreign exchange market, will be able to allow the exchange rate to fluctuate within a much wider corridor in response to changing demand and supply. The desire to "learn how to float" should gradually overcome the "fear of floating". By maintaining control over capital flows one can control the process of floating and, at the same time, avoid considerable instability.

After the assumption of power by the new government, it was announced that the country

would follow a strategic course toward European integration. The main steps in this process should be: recognition of Ukraine as a country with a market economy, joining the WTO, and becoming an associate member of the EU. The increasing integration of Ukraine into the world economy makes the country more vulnerable to external shocks. This creates the need for a more autonomous monetary policy and, consequently, to use market instruments such as the key interest rate set by the National Bank of Ukraine. Restrictions on the use of the interest rate as a monetary policy instrument would, first, lead to excessive liquidity in the banking system and, second, complicate money management.

In this context, there is growing recognition among a growing portion of the top leaders of Ukraine of a need to adopt a more flexible exchange rate policy; however, they seem to associate such flexibility with only an appreciation of the hryvnia against the dollar, or accept flexibility as a remote possibility.

However, the flexibility of the exchange rate does not necessarily mean free floating. Initially, Ukraine can let the hryvnia fluctuate within a broader corridor or peg it to a basket of currencies (for instance, the dollar and the euro) instead of only the dollar. Experiences with transitions from fixed to floating regimes by some transition and emerging economies and keeping a balance between flexibility and stability will be useful for Ukraine in this sense (Morande 2002; Jonas, Mishkin 2003; Schaechter et al. 2000).

3.3. Export and external competitiveness

Export growth is one of the key factors for the economic expansion of Ukraine. That is why a potential hryvnia appreciation against the dollar raises concerns about a fall in exports and the competitiveness of the Ukrainian economy.

To counter such concerns, the following arguments may be presented.

First, price competitiveness is affected by the value of the real exchange rate which, in Ukraine, results more from inflation than from the appreciation of a nominal exchange rate. Therefore, in the long run[3], the process of real exchange rate appreciation can result from a combination of nominal appreciation and low inflation rather than from high inflation. In accordance with various assessments (for example: Tiffin 2004, Petryk 2005b) the real exchange rate of the hryvnia against the dollar is considerably undervalued from the point of view of real equilibrium exchange rate in the long term for Ukraine. For example, when valued on the basis of the Purchasing Power Parity (PPP), the undervaluation of the hryvnia against the dollar is over 70 per cent (see Table 3)[4].

[3] The real appreciation of the hryvnia in long term will result from the Balassa-Samuelson effect.

[4] Clearly, the single price law is somewhat idealized economic abstraction. It is not always supported by practice. Among its reasons there are: a cost of delivery and storage, and use of trade restrictions, tariffs, quotas, subsidies, various taxes, etc. Each of these factors distorts the parity of good and service prices. Even identical goods may differ in quality or a trade mark, which also has a substantial impact on differences in prices. However, this approach may still be applied (together with other methods and subject to some judgmental corrections) to evaluate effectiveness of the exchange rate in the context of competitiveness of economy.)

Table 3. *Estimates of real exchange rate of the hryvnia against the US dollar, 1991–2005*

Year	PPP-based per capita GDP (US dollars)	Per capita GDP in current prices (US dollars)	Undervaluation of the national currency
1992	6432,21	399,27	0,94
1993	5624,26	567,62	0,90
1994	4455,36	702,85	0,84
1995	4025,06	718,89	0,82
1996	3718,31	872,74	0,77
1997	3703,47	991,09	0,73
1998	3700,81	834,50	0,77
1999	3768,46	632,64	0,83
2000	4114,61	632,45	0,85
2001	4646,56	776,90	0,83
2002	5021,70	874,85	0,83
2003	5666,97	1044,36	0,82
2004	6570,71	1365,74	0,79
2005	7156,47	1726,59	0,76

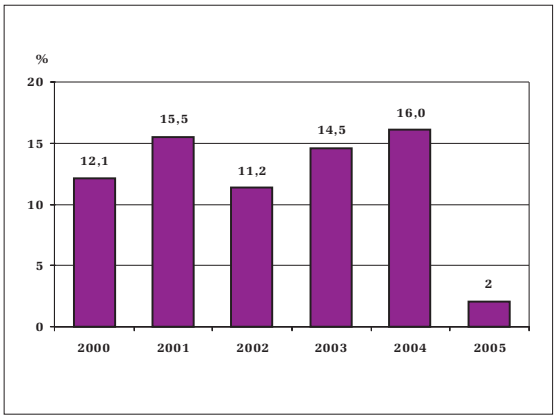
Source: IFS, own calculations.

Table 4. *Import component in intermediate consumption in 2003*

Types of economic activities	Import components in intermediate consumption (million Hrv)	Exports (million Hrv)	Ratio of import components to exports (%)
Agriculture, hunting	2941	3629	81.0
Food industry	8617	12110	71.2
Textiles and leather industry	2240	5003	44.8
Oil-refining industry	13199	7764	170.0
Chemical industry, rubber and plastic goods production	9166	13078	70.1
Metallurgy and metal working industry	18384	45356	40.5
Machine- and tool-making industry	12417	22560	55.0
Transportation	5111	17755	28.8

Source: Experimental import matrix and Input-output table for 2003, State Statistics Committee of Ukraine.

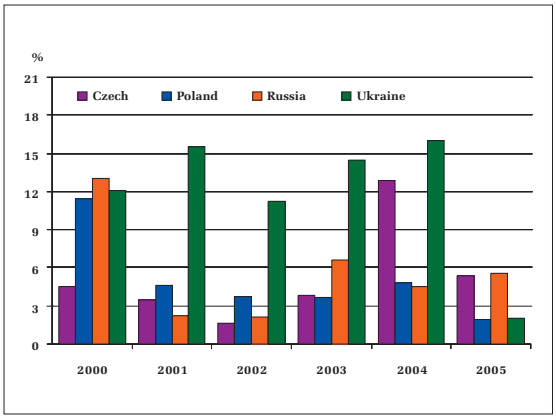
Figure 18. *Labour productivity growth in Ukraine, 2000-05**



* GDP per worker

Source: State Statistics Committee of Ukraine, own calculations.

Figure 19. *Labour productivity growth in selected countries, 2000-05*



Source: IFS, own calculations.

Second, in view of the real effective exchange rate (REER), the Ukrainian economy has considerable price competitiveness.

Today, the REER index is about the same as at the end of the post-crisis 1999 and the drastic devaluation of the hryvnia. During 2002-04, the devaluation of the REER was equal to 19 per cent. REER depreciation has largely resulted from dollar depreciation *vis-à-vis* other world currencies (the hryvnia was pegged to the dollar and lost value alongside with it) and inflation which has been lower than the weighted average inflation in major trade partners.

Third, the hryvnia appreciation will have a moderate direct impact on exports because imported input is a large component of the structure of major exports (see Table 4).

Thus, the share of costs of imported inputs in the exports of metallurgical industry – the biggest component of Ukrainian exports (approximately 40 per cent) – was 39.9 per cent.

Table 5. *Geographical structure of foreign trade in Ukraine, 2000-05 (%)*

Region	2000	2001	2002	2003	2004	2005
CIS countries	43.9	42.2	38.2	38.1	38	39,7
Europe	31.5	33.4	35.1	37.6	35.3	33,4
Asia	15	15.4	17.9	16	17.2	18,4
Africa	3	3.4	3.5	3.3	3.3	4,4
America	6.3	5.5	5.1	5	6.1	4,0
Australia and Oceania	0.2	0.2	0.2	0.1	0.1	0,2

Source: NBU.

Table 6. *Net foreign assets of the National Bank of Ukraine and commercial banks, 2001-05*

Item	2001	2002	2003	2004	2005
Net foreign assets of the National Bank of Ukraine					
In USD millions	1 176	2 571	5 146	8 259	18 619
As a share of M3 (%)	13,6	21,1	28,9	34,8	48,4
As a share of GDP (%)	3,1	6,1	10,3	12,7	22,7
Net foreign assets of commercial banks					
In USD million	123,7	43,7	-360,9	287,7	-2913
As a share of M3 (%)	1,4	0,4	-2	-1,2	-7,6
As a share of GDP (%)	0,3	0,1	-0,7	-0,4	-3,5
Exchange rate of the hryvnia against the US dollar (end of period)	5,29	5,33	5,33	5,30	5,05

Source: NBU, State Statistics Committee of Ukraine, own calculations.

The situation in Ukraine is also characterized by a sustained trend towards increasing labour productivity (although its remains at a relatively low level) and by cheap labour (Figure 18).

According to official statistics, the rate of labour productivity growth in recent years has been higher than in many countries of Eastern Europe. This will also be one of the key factors in maintaining competitiveness of the economy under conditions of a real exchange rate appreciation (Figure 19).

A general concern about greater exchange rate volatility is that it may have a negative impact on the development of foreign trade and inflows of foreign direct investments which are key elements of the long-term economic growth of Ukraine. Note that being pegged to the dollar, the hryvnia has recently experienced significant volatility against the euro. Nevertheless, the share of trade turnover with countries that are members of the Euro area or have their currencies pegged to the euro amounted to more than one third of the total volume.

International experience does not provide direct evidence of a high correlation between the flexibility of exchange rate and the level of FDI. Political and economic stability, transparency and the quality of legislation, economic growth, size of the market, and the ability to freely expatriate profits are more important.

3.4. Foreign exchange risks for the banking system and businesses

A high volatility of the exchange rate may give rise to concerns about soundness of the banking system. This problem is typical for countries where a large proportion of balances are denominated in the peg currency.

Because of considerable amounts of net foreign assets, the National Bank will incur significant losses in the event of hryvnia appreciation (see Table 6). However, the long-term positive impact that good monetary policy will have on the economy outweighs the importance of central bank's profits.

Table 7. *Net foreign exchange position of the banking system, 2001-05*

	2001	2002	2003	2004	2005
1. Net foreign exchange risk exposure of the banking system (2–3)					
In USD million	781	992	1600	1332	3 273
2. Banks' claims under foreign currency credits					
In USD million	2365	3295	5303	7044	12 306
As a share of total credits (%)	44.2	41.8	41.7	42.2	43.3
As a share of M3 (%)	27.4	27.1	29.7	29.7	32.0
As a share of GDP (%)	6.1	7.8	10.6	10.8	15.0
3. Banks' liabilities in foreign currency					
In USD million	1584	2304	3702	5712	9 033
As a share of total deposits (%)	31.9	32	32	36.4	34.3
As a share of M3 (%)	18.3	18.9	20.8	24.1	23.5
As a share of GDP (%)	4.1	5.4	7.4	8.8	11.0

Source: NBU, State Statistics Committee of Ukraine, own calculations

Tabela 8. *Net foreign exchange position of businesses, 2001-05 (USD million)*

Item	2001	2002	2003	2004	2005
1. Net amount exposed to foreign exchange risk of the banking system (p. 2 – p. 3)	-1600	-2184	-3202	-3471	-5 501
2. Foreign exchange assets of enterprises (deposits with commercial banks)	683	860	1 166	2 037	2 889
3. Foreign exchange liabilities of enterprises (domestic loans in foreign currency to enterprises)	2 283	3 044	4 368	5 508	8 390

Source: NBU.

Today, most commercial banks shift their foreign exchange risks to the National Bank which has to keep the dollar peg (even when exchange rate policy might require changes) to support the banking system. Situations like this aggravated the effects of financial crises in Mexico, Argentina, South-East Asia, and Russia.

Therefore, a gradual increase in exchange rate fluctuations will serve as a signal to the banking system that the time has come to introduce their own foreign exchange risk management and to develop forward markets. This will happen if they no longer expect that the NBU will always maintain a fixed exchange rate of the hryvnia against the dollar.

3.5. Why should Ukraine adopt a more flexible exchange rate?

Above, we discussed the possible risks of a transition from a de facto fixed exchange rate to a more flexible one. Now, let us look at the problems that may arise in the event the current regime remains unchanged.

The main reason why some countries adopted the regime of nominal pegging to one of the world currencies (currency board, hard peg, narrow corridor, crawling peg) was to establish a nominal anchor which would lower inflation expectations and enhance discipline in monetary policy. Such a discipline is particularly important for countries with poor macroeconomic management and weak legislative frameworks, which result in permanently high inflation rates; unsustainably large debts; unsound banking systems, and other elements of macroeconomic instability. Empirical studies contain some evidence that a fixed rate (or types of relatively inflexible exchange rate regimes) provide several advantages in achieving macroeconomic stability, particularly in countries with poorly developed economies and low per capita incomes or with undeveloped financial markets and complete control over capital flows (Rogoff et al. 2004). However, maintaining a fixed rate may very often cover up improper policies and institutional weaknesses and lead to accumulation of imbalances in the economy. Among other things, the foreign exchange imbalances of the government and the business tend to grow and a significant amount of short-term external debt is one of the main causes of currency crises (Gavin, Hausman 1996; Kaminsky, Reinhart 1996).

There are also significant opportunity costs associated with the sterilization of foreign exchange reserves growth. It reduces central bank earnings (and, consequently, budget revenue) and prevents resources of individual commercial banks from being used to provide credits to the real sector of economy. Moreover, fundamental determinants would push the real exchange rate appreciation in the long run. Therefore, it is better to achieve such an adjustment

Table 9. *The structure of foreign debt in Ukraine, 2003-05*

Item	2003	2004	2005
1. Total foreign debt (USD million)	23 811	30 647	38 814
1.1. Of which: short-term debt (USD million)	9 015	10 440	12 068
1.1.1. As a share of total debt (%)	37.9	34.1	31.1
1.1.2. As a share of exports (%)	31.1	26.3	27.2
1.2. Of which: debt of enterprises (USD million)	10 803	14 532	18 108
1.2.1. As a share of total debt (%)	45.4	47.4	46.7
1.2.2. As a share of exports (%)	37.3	36.6	40.8

Source: NBU.

through appreciation of the nominal exchange rate, and not through inflation.

Clearly, a different nominal anchor will be required for the economy.

The current development of Ukrainian economy indicates that inflation targeting seems more appropriate. And this is so for a number of reasons.

An effective functioning of inflation targeting framework goes well beyond simply setting a target for the inflation rate; rather, it requires many tasks for its implementation.

Box 3. Possible strategies for transition to a flexible exchange rate: Advantages and disadvantages

It is important to consider advantages and disadvantages of the two main exit strategies from a fixed to a more flexible exchange rate while maintaining the objective of monetary policy keeping inflation at a low and stable level.

Accelerated strategy. This is mostly used by countries which have fixed exchange rate regimes, significant capital inflows, and face a potential risk of inflation pressures. Under this strategy the regime allowing the exchange rate to fluctuate within a very wide range is introduced at once.

Disadvantages:

– a significant risk of loss of confidence and a higher degree of uncertainty among market participants because of the lack of sufficiently developed forward markets and risk management;

– the process of implementing of an independent monetary policy requires highly qualified and much better technically equipped personnel.

Advantages:

– provides more possibilities in the choice of monetary policy;

– facilitates exchange rate management through interventions.

Gradual strategy (a stage-by-stage abandonment of the peg). It is used when there is no urgent need to overcome crises associated with the exchange rate; however, it is also used during a relatively short period of time — a few years, as a rule.

The exchange rate fluctuates within a relatively narrow corridor with the possibility of its broadening from one year to another or a crawling peg is used.

Disadvantages:

– significantly constrains monetary policy;

– can lead to frequent speculative capital attacks.

Advantages:

– fewer risks if markets are insufficiently developed, capital movements are subject to controls, and the level of risk management is inadequate;

– requires less technical capacity for effective management;

– reduces excessive exchange rate volatility and uncertainty which is associated with it.

Currently, the main monetary policy instrument in Ukraine is the exchange rate. Introduction of a more flexible exchange rate regime will help to gradually reduce its role while other instruments are still insufficiently effective (in particular, the NBU's interest rates have a very weak impact on the economy). Therefore, until the key monetary policy instrument (which should be an interest rate, and the inflation indicator should become a strategic goal) is fully developed, the exchange rate will have to play an important role; however, it should be somewhat modified*; for instance, by pegging it to a basket of currencies or allowing a greater volatility against the dollar within a broader range.

Trajectory slope

Crawling peg may be used to support competitiveness in a situation when there is persistent differentiation between inflation in a country and the weighted inflation rates of its major trade partners. Such a strategy was used in most of the so-called new economies – Chile, Hungary, and Poland.

Trajectory width

A broader corridor may help the NBU to conduct a more independent monetary policy and make management through intervention easier.

Under a narrower corridor it will be easier to contain inflation expectations and restrict fluctuations. The corridor may be asymmetrical in view of a long-term trend towards appreciation.

The corridor width should not be revised too often.

* Russia, for example, is currently pegging the ruble to the dollar and the euro with weights 0.8 and 0.2, respectively. Therefore, 10 per cent dollar depreciation against the euro during a given period would result in 8 per cent depreciation of the local currency against the euro and its corresponding appreciation by 2 per cent against the dollar.
Today about one third of the trade flows of Ukraine is already with euro zone countries or with countries whose currencies are pegged to the euro. In the last two years the hryvnia has lost more than 30 per cent of its value against the euro; lack of forward markets and hedging instruments makes import of investment goods from these countries much less attractive, and a possible reversal of the dollar/euro exchange rate may complicate the position of exporters to Europe.

First, there should be a joint decision and public announcement by the Government and the Central Bank (usually fixed by law) of a medium- or long-term price stability strategy.

Second, there should be an institutional commitment to price stability in the form of rules and procedures for the Central Bank.

Third, a transparent procedure which defines how monetary policy, through the adjustment of an interest rate, through different channels of transmission mechanism is able to bring inflation close to target.

Fourth, a complex communication strategy between the monetary authorities and society to support confidence in monetary policy and keep inflationary expectation at a low level.

Fifth, it needs high transparency and accountability of the Central Bank.

Sixth, a forecasting and analysis system should be created to support the decision making process.

3.6. Control over capital flows

International practice provides various approaches used by countries attempting to integrate into the world economy. The issue of a more flexible exchange rate is very often considered together with the need to liberalize capital flows, though conceptually these are two different issues (Eichengreen 1999; Williamson 2000; Ariyoshi et al. 2000; Prasad et al. 2005). Some countries have initiated capital flow liberalization while maintaining fixed rates, which increases risks. Openness to inflows of short-term capital in a situation when domestic macroeconomic policy was not able to fully meet the requirements of a fixed rate regime was the main determinant of currency and financial crises in a number of countries (in 1994 in Mexico, in 1997 in Asia, and in 1998 in Russia and Brazil). Ukraine also had similar negative experience during 1996-98. Better macroeconomic results were achieved by those economies which introduced flexible exchange rate regimes prior to capital account liberalization, particularly when their own financial market was insufficiently developed.

Currently, Ukrainian officials – if they attempt to reduce upward pressure on the hryvnia while keeping the rate at its current level (or, possibly, allowing it to slightly revalue) – will be forced to remove one by one elements of control over both capital flows and current account transactions[5]. That is why, in Ukraine, one of the fundamental preventive measures against possible currency and financial crises would be to firmly adhere to the following sequencing of steps: first, to adopt a more flexible exchange rate and then to gradually liberalize capital controls. This issue has become even more relevant after a strategic course towards integration in the European Community was announced. As Ukraine becomes ever more closely linked to the EU, there will be an increase in both foreign direct investment and a short-term capital (in view of a long-term trend towards hryvnia appreciation in real terms, resulting, inter alia, from its nominal strengthening to some extent and from the spread between interest rates in Ukraine and the EU). However, in the future, membership in the EU will have to be accompanied by capital flow liberalization as the free movement of capital is one of the main principles of the unified Europe[6].

4. Conclusions

Although the Ukrainian economy has achieved substantial progress from plan to market, there is still room for considerable improvement. This relates to, *inter alia*, political and managerial arrangements and skills, as well as to deeper and more comprehensive structural reforms in the real sector. The fiscal sector also needs widespread budget and tax reform. The banking system and especially the National Bank of Ukraine also face important challenges. One of the most crucial ones concerns the choice of future monetary policy. The current monetary policy regime, based on strong peg to dollar, provided a "nominal anchor" in the first period of stabilization and later on during the period of moderate level of inflation.

International experience shows that the transition from a fixed exchange rate regime to a more flexible arrangement yields better macroeconomic results under conditions characterized by economic growth and a strong external position of the economy (Schmidt-Hebbel, Tapia 2002; Rogoff et al. 2003; Svensson 2003). Under such conditions it is possible to fully utilize all advantages while alleviating the costs of transition. There are also cases when some countries have missed this opportunity but were forced, at a later stage, to replace their foreign exchange regimes under much less favourable conditions or even under financial crises and with much higher costs for the economy during the period of adaptation to a new regime.

The current state of the development of the Ukrainian economy indicates that a gradual approach towards the adoption of inflation targeting would be the most appropriate course of action from the point

[5] It is evidenced by the cancellation of the 50 per cent mandatory surrender requirement for exporters.

[6] Liberalization of balance of payments capital account transactions is a prerequisite for membership in the EU; the plan and schedule of such liberalization is developed in the process of the entry negotiations.

of view of macroeconomic stability. A high degree of domestic economic dependency on external factors, its openness in terms of large flows of goods and services and increasing labour flows, raise its vulnerability to external risks. In this context, efforts aimed at creating domestic markets and conditions of low inflation will ensure a reduction in dependency on external factors. Of course, a prudent fiscal policy would provide additional guarantees of macroeconomic stability under any exchange rate policy, but a hard peg under conditions of an expansionary fiscal policy would introduce an additional significant risk of possible currency or financial crises.

The first steps towards inflation targeting would be to create necessary technical prerequisites, develop an analysis and forecasting system, prepare an inflation report, and improve the NBU's contacts with the public with a view to achieve greater confidence in and transparency of monetary policy. It would also be necessary to teach market participants to independently manage their foreign exchange risks.

Today, the exchange rate is the main monetary policy instrument in Ukraine. With the introduction of a more flexible regime its role will gradually diminish in an environment where other instruments are not yet sufficiently effective. Therefore, the exchange rate regime will have to play an important role for some time; however, it will also require modification, namely by allowing a greater degree of flexibility.

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