Artur Radziwiłł, Octavian Scerbatchi
Constantin Zaman

Financial Crisis in Moldova
– Causes and Consequences

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CASE – Center for Social and Economic Research
ul. Sienkiewicza 12, 00-944 Warsaw, Poland
tel.: (4822) 622 66 27, 828 61 33, fax (4822) 828 60 69
e-mail: case@case.com.pl
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APPENDIX: Moldova — Basic Facts 70
Artur Radziwill (born 1974) is a researcher at the Center for Social and Economic Research (CASE) and a junior expert at the International Economic Advisory Group in Moldova. He obtained his undergraduate education within the Columbia University Program. He received his MA in Economics at Sussex University, UK and at Warsaw University (summa cum laude).

Octavian Scerbachi (born 1971) is an expert in finance and banking at the Center for Strategic Studies and Reforms (CISR) - an independent, non-governmental research center, founded in Moldova by the UNDP and the World Bank. He graduated from the Academy of Economic Studies of Moldova in 1993. In years 1993-1997 he worked for the National Bank of Moldova at the Foreign Relations Department (last position - chief expert).

Constantin Zaman (born 1959) is a senior expert at the Center for Social and Economic Research (CASE) and he is a head of the International Economic Advisory Group in Moldova. He received his PhD at Université de Paris, Panthéon - Sorbonne. He worked as a researcher for several international institutions and as a senior expert in many advisory projects across Central-Eastern Europe (including World Bank, International Labor Organization and European Bank for Reconstruction and Development). He was a lecturer at Université de Paris, Panthéon - Sorbonne in Paris.
Abstract

The introduction of Moldovan leu has been accompanied by a monetary stabilisation policy that until 1998 proved to be one of the most successful among FSU countries. The leu showed a remarkable stability and the rate of inflation was brought down to around 10% in 1997. However, fiscal policy was driven by inertia and pressure groups, reflecting the slow path of structural reforms and the general weakness of the state. Loose fiscal policy in turn reduced the determination in reforming state structures. Arrears and netting-out operations led to the development of the non-payment culture. At macroeconomic level, expansionary fiscal policy led to high absorption in the economy that was not met by the supply side response due to the impeded restructuring process, which fuelled imports and deteriorated trade balance. The ultimate result of the policy mix was the rapid accumulation of external debt and expenditure arrears. The unsustainability of both internal and external position of the state led to the inevitable financial crisis. The turmoil that followed in 1998 the crisis in Russia was a catalyst that speeded up the collapse of monetary stabilization. The capital account losses (capital flight) immediately brought the country to the verge of default. The abrupt and probably persistent loss of major export markets will affect the real economic activity over a longer period. Moreover, the crisis may create a window opportunity for accelerating Moldovan reforms. A critical situation makes the public and policy makers more likely to accept the painful measures that are necessary to revert the negative tendencies accumulated in recent years, while the large external debt makes the country fully dependent on the co-operation with international organizations, especially the IMF. Indeed, the new cabinet of young and liberal reformers voted in March 1999 initiated a more energetic program of reforms. Likewise, the decline of exports to Russia forced Moldovan enterprises to search new export possibilities for many producers trying to enter non-traditional western markets.

The remainder of this paper is organised in the following way. The first chapter describes the introduction of the national currency and monetary stabilisation observed in Moldova in years 1993–1997. The second chapter discusses the impact of erroneous fiscal policy on the Moldovan economy in the same period. The third chapter depicts the developments of the crises of 1998 and draws conclusions about possible scenarios for next years. Background information about Moldova is reported in the appendix.

1. Introduction

Moldova, like other post-communist economies, joined the transition process having a high rate of inflation and massively decreasing production. After the surge in administered prices in early 1992, sharp price increases followed, leading to hyperinflation (in 1992 — 1280%). In such environment, the so needed budget deficit reduction, along with reforms in real sector, has not been started. Moreover, the deficit was financed by extensive money printing, as well as preferential centralized loans, which ultimately generated a non-productive consumption, since the loans were frequently absorbed by inefficient state enterprises which should have been either restructured or bankrupted.

The Government did not have the needed resolution (and experience) to perform the radical reforms, combining the transition to a market economy and the hyperinflationary environment. In these circumstances the country needed a stable monetary system, as well as a sound banking system. The currency stabilization environment had to be built up from scratch since in 1991, when Moldova became an independent state, the foreign exchange and gold reserves were zero, and there was neither a foreign exchange market, nor even a central bank of the state.

As in all other former Soviet republics, in Moldova the Soviet rouble banknote was in circulation. There was a republican central bank (branch of the former USSR Gosbank), plus several state specialized banks for savings accumulation, budget servicing, agriculture and industry financing. They were receiving financing from the central bank for granting directed credits. Hard currency flows were subject to a strict control and the circulation of hard currencies was banned.

2. Building-Up Institutional Framework

2.1. Banking Environment

In June 1991 the Parliament of Moldova approved the laws "On the National (State) Bank of Moldova" and "On Banks and Banking Activity", which established the basis of the new banking system of the country. Later, in July 1995 Parliament adopted the new banking laws "On National Bank of Moldova" and "On Financial Institutions", elaborated by NBM in accordance with international standards. The laws set the legal basis for the
2-tier banking system in Moldova: the central bank — the National Bank of Moldova (NBM) — and commercial banks. The NBM is independent from the Government and reports only to the Parliament. It is the sole money issuance authority of the state, drawing up and implementing monetary, credit, and foreign exchange policies, setting the regulatory framework for commercial banks and supervising their activity.

When the inflation in neighbouring republics exceeded the inflation in Moldova, and some of them started issuing local currencies it became clear that in order to avoid the total chaos and invasion of Soviet roubles from the entire rouble zone, the domestic market must be somehow protected. Thus, in June 1992 the NBM put into circulation the Moldovan coupons, which were equivalent to Soviet type roubles, and circulated in parallel. After one year the coupons accounted for 80% of cash in circulation. At the beginning of August 1993 the NBM started an independent weekly quotation of the Moldovan rouble against main currencies, including other roubles of the FSU area, using the cross-rate through the Russian rouble. This greatly contributed to shrinkage of the currency black market. In the period January-November 1993, the exchange rate of Moldovan coupon against US dollar depreciated by more than nine times. The NBM supported this depreciation policy due to the negative trade balance between Moldova and Russia and import of inflation from the rouble zone.

In October 1993 the Moldovan Interbank Currency Exchange was founded by seven commercial banks as a closed joint stock company. The NBM had only a supervision role. Weekly trading auctions were held at this Bourse, and the exchange rate was set at the equilibrium between supply and demand, afterwards automatically becoming the NBM's reference rate for the next day. During the first several weeks of the Bourse's activity, the NBM was the only seller of hard currency in the market, but afterwards the situation became more balanced.

2.2. Introduction of the National Currency

Moldova introduced its national currency, the Moldovan leu, on November 29, 1993. The conversion rate was set to 1 leu for 1000 Moldovan roubles or coupons. The initial exchange rate of the leu was set at 3.85 lei per 1 US dollar. A floating currency regime was adopted, or more exactly — a managed floating regime, since the country had no gold or significant hard currency reserves and a fixed exchange rate or a pegged regime could at a larger extent expose the economy to shocks.

The program of financial stabilization and structural reforms, adopted along with the introduction of the leu, was supported by the IMF through stand-by arrangements (in fact
if no IMF financial support followed, than it would have been impossible for Moldova to introduce its national currency, given the existing circumstances). The IMF program, which covered the period through March 1995, was designed to secure a stable leu through the adoption of tight financial policies. The program also sought to advance economic restructuring through the liberalization of domestic and international trade and payments systems and the introduction of key structural reforms. In addition to IMF support, the program was supported by other bilateral and multilateral donors, including the World Bank.

Thus, the long-term financial assistance received from the IMF and World Bank during 1993−1997 had a particular importance for Moldova. In total, IMF made available $242m, through CCFF, STF, Stand-by and EFF facilities – for balance of payments support, national currency support, and structural adjustment. The World Bank provided $265m, for financing critical imports, export promotion, financing budget deficit, private sector development and structural adjustment. Moldova also received considerable loans from donor countries, European Community, and private banks.

### 2.3. The Development of Commercial Banking System

At the end of 1991 fifteen commercial banks were operating in Moldova, and their number reached 22 by the end of 1993. Since then this figure did not vary significantly. As of April 1999 out of the existing 23 commercial banks, 5 originated from the reorganization of the former state specialized banks, and 18 are new banks, including branches of some foreign banks.

There are 3 types of licenses granted by the NBM to commercial banks, subject to different capital requirements and granting different operating possibilities:

- type A license allows to perform basic banking operations, as well as cash foreign exchange transactions on the domestic market (minimal capital requirement, from 1 July 1999 set at 12 million lei – approximately 1 million US dollars);

- type B license alongside the above mentioned operations enables banks to perform international banking operations (capital requirement is 2 times minimal);

- type C license allows banks to perform all types of domestic and international banking operations, including dealing in foreign exchange and investment activities (capital requirement is 3 times minimal).

Aimed at regulating banking activity and insurance of banks' stable financial standing, as well as for protecting banking creditors and depositors, starting with 1992 the NBM put in place prudential regulations for all banks, subsequently revised in March 1995,
which set standards for the Moldovan banking system compatible with Basle provisions. Among the most important norms there are: capital adequacy — raised from 4% in 1996 to 6 per cent in 1997, gradually moving to a level of 12 per cent by year 2000; classification of commercial banks' loan portfolio and compulsory risk provisions for covering losses in case of non-repayment of granted loans; monitoring of "big" loans, i.e. loans higher than 10% of total capital; daily monitoring of liquidity in the banking system, ultimately relying upon NBM as lender of last resort; limitation of loans to affiliated persons, as well as loans granted to one single client.

In May 1996 the banking system moved to an electronic settlement system which now covers most of current transactions. In addition to other significant operational advantages for the commercial banks and their customers, this system allows NBM to monitor more efficiently banks' liquidity and their financial standing. More than half of commercial banks became members of SWIFT, and the most advanced are connected to REUTERS Dealing. Some banks have issued VISA and other types of cards. In May 1997, Victoriabank became member of VISA International, and through its processing centre all VISA cards are now serviced in Moldova. However, so far this instrument has not gained a wide access in Moldova.

At the same time, commercial banking system has faced a number of difficulties, such as: insufficiency of qualified personnel with experience in modern banking operations, and capable of dealing with international counterparts, lack of experience of local bankers, as well as weak technical and material base. Significant efforts are made by most banks to overcome these constraints. Of course, proper training of a sufficient number of staff is a long process. The areas that appear to suffer most from this shortage are those of credit allocation, loan supervision and legal settlement of issues related to debt reimbursement.

Western bankers are unwilling to invest their capital in Moldova, and this proves the persistence of major factors that keep them away from the country. These are, apart from regulatory issues, the small size of the country's capital market, along with its underdeveloped productive sector — reasons discouraging investment decisions on the part of foreigners.

Overall, the situation in banking system of Moldova has been stable during 1993—1997 and did not suffer from any major shocks similar to those that occurred in Romania, Russia, Latvia or other European countries in transition. However, from the financial prospective, banking system cannot be considered a strong one because of lack of funds, prudential regulations and competence. As a result, banks risk to go bankrupt, as it already happened with several commercial banks of Moldova. As in most cases of bankruptcy in transition countries, the main cause of this phenomenon is banks'
mismanagement, as well as fraud and abuse in personal interest, that generated an unjustified concentration of risks in specific branches or economic entities, at the same time banks' management allowing crediting of insolvent clients.

3. Monetary Policy

3.1. Credit Allocation

Before 1993 the central bank was providing directed and centralized loans in the amounts requested by the Government. Since August 1993, when the first refinancing auction took place and till mid-June 1998, the main type of credit allocation was credit auctions held at the NBM. The approved policy guidelines for 1994 specified that 80% of the central bank's credit (and for 1995 – 90%) must go through credit auctions. And these conditions were fulfilled, though few believed back in 1992 that the economy could work without preferential loans. Market based method of granting loans to banks at the auctions proved to be substantially more efficient. The refinancing rate was equal to the interest rate set at the auctions according to the supply and demand.

In 1994 NBM's preferential credits (direct loans at low interest rate granted to some economic agents, mainly state enterprises) have been phased out. However, the Government itself continued to provide state guarantees for commercial banks' loans to some economic agents. Starting with the issuance of state T-Bills in 1995, NBM's direct credits for financing state budget were granted by the NBM against state's T-Bills. However, so far servicing of these loans by the Government has been continuously rescheduled.

The refinancing rate set at the credit auctions has been the key reference rate of NBM. However, since August 1997 a new instrument started to be applied – the Lombard facility. The Lombard rate was determined at the level of interest rate on 28-day state securities plus a constant margin (5% or higher). Lombard facility is granted up to a maximum limit established for each bank, which can be: 3% of the total normative capital, or 8% of the attracted sources (deposits). Assets eligible for purchase and sale under Lombard facility are dematerialized treasury securities issued by the Ministry of Finance on the internal market and denominated in national currency.

In September 1997 NBM approved the regulations on open market operations – Repo agreements, i.e. selling of state securities with their further repurchase at a specific date at an agreed price. Commercial banks act as primary dealers in these operations. Open market operations take place at the actions held at the NBM.
3.2. Interest Rates

The annual refinancing rate established at credit auctions increased significantly through late 1993 reaching a peak of 377% in February 1994. Then, as inflation declined, the auction rate began to drop. The decrease of inflation rate has had a positive effect on NBM refinancing rate which became positive in real terms starting with January 1994. Real refinancing rate rose significantly in 1994 and peaked by mid-1994 (which brought the first symptoms of suffocating economy and urged NBM to start a decrease in interest rates).

Figure 1. NBM’s refinancing auctions

![Graph showing refinancing rate and auctioned loans]

Source: National Bank of Moldova

By the end of 1997 the refinancing rate reached its lowest level of 16%. Average interest rates in the banking system have declined continuously during 1997. Moreover, the movement in interest rates shows that there has been a widening of spreads between rates on deposits and loans, indicating lack of a real competition between banks, as well as the fact that some banks tried to increase their profits granting risky loans.

Real interest rates in the banking system always remained quite high as high borrowing requirements of the Government combined with low supply of domestic savings led to the high interest equilibrating the financial market. At the same time, international savings could be attracted only at the interest rate inclusive of significant
risk premium (due to the high country risk rating of Moldova) so that domestic real interest rate remained high above the world level. High rates on T-bills caused an increase in the opportunity cost of lending, thus crowding out credit investments to the private sector and leading to a situation when a portfolio of banks consisted mainly of profitable and relatively risk-free government securities. On the other hand, high systemic risk, driven by the weakness of court and legal environment especially lack of legal basis for land collateral and mortgage loans) further reduced the incentives for search for profitable lending opportunities. As a result, the lack of serious competition between banks, as well as their undercapitalisation implied that private lenders had to bear the excessive cost of credits, at the same time not being allowed to borrow from foreign banks, due to a capital account restriction imposed by the central bank.

Because of big risks (economic instability and imperfection of collateral mechanisms), commercial banks refuse to make long term investments in national economy (that in fact could ensure the economic growth). And, on the other hand, they obviously can not provide long-term loans having a mainly short-term deposit base. At the same time, one of the main causes of insufficient crediting of production sector is not just the acute lack of financial resources, but lack of efficient investment projects and small number of solvent economic entities, that could efficiently use the credits and reimburse them in due time.
3.3. State Securities

Starting with 1995, the budget deficit is covered mainly by issuance of state securities (Treasury bills and bonds) and not only by direct lending from the central bank. Thus, the needed budget funds are attracted from the financial market, avoiding additional money issuance by NBM. The volume of T-Bills to be issued annually is forecasted in the Budget Law which is approved by the Parliament. The NBM is the state's fiscal agent that puts state securities in circulation by organizing auctions and negotiating directly with commercial banks, which act as dealers in the primary market. Foreign investors may participate at auctions without any restrictions.

On March 14 1995, the NBM organized the first T-Bill auction (3-month maturity), where banks acted as buyers. Since August 1995, auctions started to be held once in two weeks according to the pre-published schedule. Initially the supply of state T-Bills was bigger than the demand, mainly due to the fact that the Ministry of Finance was trying to sell big amounts of securities, while these bills were not known in the financial market yet.

The volume of issued state securities had a continuous and fast increase until 1998 when the Government realized that this "pyramidal" practice can not continue any longer, since the budget deficit has not been reduced, and moreover, the proceeds from newly issued bills and bonds did not even cover the amounts needed for securities redemption.

Figure 3. State securities market

Source: MET
During 1995–1997 interest rates on state securities gradually decreased following the reduction of inflation, but they were often high enough (also comparing with deposit rates) to allow commercial banks to use available funds for buying T-Bills and getting easy and guaranteed profits instead of crediting the economy.

3.4. First Anchor – Control Over Monetary Supply

With the introduction of the Moldovan leu, a tight monetary policy was implemented, which proved to be one of the most successful (along with the one of the Baltic States) in the FSU. The following monetary instruments were used: reserve requirements, refinancing auctions, interventions in the foreign exchange market, and open market operations with securities. The last one is certainly most recommended, but it started to be utilized only after August 1997, when the securities market was sufficiently developed.

Referring to the reserve requirement, it should be noted that a more aggressive utilization of this instrument took place in 1994 and in 1998. Till February 1, 1994 mandatory reserves for sight deposits were equal to 20% of the total attracted funds, while for the time deposits the requirement was lower (15% and less). Then, in order to limit the money in circulation, NBM raised the reserve requirement up to 28%. And from June 1, 1994, seeing that the level of inflation has decreased, NBM lowered the reserve requirement back to 20%. From December 16, 1994 NBM set an unique reserve requirement for all deposits equal to 12%. From October 1, 1995 it was lowered to 8%. Then the situation changed dramatically in the last quarter of 1998.

Evolution of main monetary aggregates – cash in circulation, broad money and reserve money are shown in the table below.

Table 1. Monetary aggregates

<table>
<thead>
<tr>
<th>End-year</th>
<th>Inflation</th>
<th>M0 growth</th>
<th>M3 growth</th>
<th>RM growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>1994</td>
<td>104.5%</td>
<td>191.9%</td>
<td>87.6%</td>
<td>136.1%</td>
</tr>
<tr>
<td>1995</td>
<td>23.8%</td>
<td>84.9%</td>
<td>65.1%</td>
<td>41.8%</td>
</tr>
<tr>
<td>1996</td>
<td>15.1%</td>
<td>14.5%</td>
<td>12.8%</td>
<td>8.4%</td>
</tr>
<tr>
<td>1997</td>
<td>11.2%</td>
<td>33.0%</td>
<td>37.0%</td>
<td>35.9%</td>
</tr>
<tr>
<td>1998</td>
<td>18.3%</td>
<td>-12.0%</td>
<td>-8.7%</td>
<td>-5.5%</td>
</tr>
</tbody>
</table>

Source: National Bank of Moldova
However, even having an adequate volume of broad money, or an adequate monetary policy of the central bank, does not implicitly mean the total control over the inflation, since the inflation rate could go up influenced by indirect, non-monetary factors, such as

Figure 4. Money growth vs. inflation

![Money growth vs. inflation graph]

Source: National Bank of Moldova

Figure 5. Composition of broad money

![Composition of broad money graph]

Source: National Bank of Moldova
administrative increases in prices and tariffs (housing services, transport, energy etc.), or some seasonal tendencies.

Looking at the structure of broad money, one can notice that the volume of deposits in the banking system was increasing continuously (the biggest share being of those in lei), clearly showing the increase in confidence in the leu (supported by the stable exchange rate and the rapid decline in inflation) and the increasing reliance on foreign currency deposits to finance current transactions rather than as a store of value.

During 1996 and 1997 the confidence of the population in banking system has grown, and this is reflected by the continuous increase of households' deposits with commercial banks.

### 3.5. Second Anchor – Exchange Rate

The official rate was fixed at the sessions of the Moldovan Interbank Currency Exchange. Due to the fact that the lag between exchange rates in the cash and non-cash markets was expanding, in December 1993 the NBM made several interventions at the exchange bureaus, buying US dollars and after a while selling them back. Thus, the nominal exchange rate was at first even appreciating, reaching 3.665 lei per USD during 20–25 January 1994. Afterwards the rate started to slowly depreciate. Relatively high interventions were made by the NBM in 1994, mainly in the cash market.
In 1994 the Moldovan leu depreciated against the US dollar only by 14% while during 1993 the coupon depreciated by 900%. Further on, leu showed a remarkable stability, and the yearly nominal depreciation index (USD/MDL) was: 5.1% in 1995, 3.2% in 1996, and 0.2% in 1997. The stable exchange rate was used as a second anchor (apart from control over money supply) for keeping the inflation in place. Although, over a medium and long-term period, only one anchor, i.e. monetary policy, should be sufficient.

Along with the reduction of depreciation the Moldovan leu started to appreciate in real terms against the Russian rouble, Ukrainian karbovanets, US dollar and other currencies.

Source: National Bank of Moldova

Figure 7. Exchange rate of the Moldovan leu

In 1994 the Moldovan leu depreciated against the US dollar only by 14% while during 1993 the coupon depreciated by 900%. Further on, leu showed a remarkable stability, and the yearly nominal depreciation index (USD/MDL) was: 5.1% in 1995, 3.2% in 1996, and 0.2% in 1997. The stable exchange rate was used as a second anchor (apart from control over money supply) for keeping the inflation in place. Although, over a medium and long-term period, only one anchor, i.e. monetary policy, should be sufficient.

Along with the reduction of depreciation the Moldovan leu started to appreciate in real terms against the Russian rouble, Ukrainian karbovanets, US dollar and other currencies.

Source: National Bank of Moldova

Figure 8. Moldovan leu: exchange rate indexes (December 1993 = 100%)

Source: CISR calculations based on data from National Bank of Moldova
Thus, the real exchange rate index indicated an appreciation of leu against US dollar by about 74% in 1994, by 17.5% in 1995, 11.4% in 1996, and 10.9% in 1997. This continuous appreciation of the leu, in the presence of huge and rising balance of payments disequilibrium (current account to GDP ratio was 15.8% in 1997), has generated many objections from the exporters’, which claimed that an overvalued leu made Moldovan exported goods too expensive, thus deteriorating their competitiveness. At the same time, a devaluation of leu would cut the massive imports, especially of commodity goods devaluation but would not solve the problem, since almost one third of imports were energy resources. Besides, a depreciation would have caused problems to the Government in terms of external debt service, and also would cause the reduction of households' real incomes.

Analysing the path of the exchange rate during 1994–1997, it may be seen that there were some characteristic fluctuations of the supply and demand for hard currency in the forex market. They are explained by the seasonal character of Moldova’s economy, which is strongly relying on the agriculture sector. During 1994–1997 NBM has been intervening on the foreign exchange market for attenuating sharp exchange rate fluctuations, according to the goals of the monetary policy.

### 3.6. Foreign Exchange Regime

The NBM has been gradually implementing a policy of foreign exchange market liberalization. Since 1992 positive changes in currency regulations emerged: till May 1992 mandatory sale of hard currency constituted 50% of the proceeds from

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**Figure 9. NBM’s net transactions at the Bourse vs. exchange rate fluctuations**

![Graph showing NBM’s net transactions at the Bourse vs. exchange rate fluctuations](image-url)

Source: National Bank of Moldova
production activity and 60% in case of intermediaries. Thereafter the surrender requirement has been gradually unified, accounting for 35% by end-1993. Moreover, while in 1993 exports proceeds have been sold to the NBM, starting January 1994 they are sold to commercial banks. On January 17, 1994 NBM approved the new Regulation on Currency Control, which authorized buying of hard currency for current account operations. From November 15, 1994 the surrender requirement was cancelled, thus economic agents being able to freely dispose of their export earnings, kept with banks. This was a strong evidence of leu's stability.

NBM's foreign exchange reserves at the end of 1993 stood at $77m. The building up of reserves evolved further. Thus, at the end of 1994 gross reserves already reached $180m, 1995 − $256m, 1996 − $314m. At end-1997 gross reserves reached − $366m (covering 3.1 months of imports of goods and services), out of which $132m represented net reserves. Increase in net reserves was mainly due to NBM’s interventions in the foreign exchange market (where there was a higher supply of foreign exchange, resulted from exports, foreign investments, and foreign loans), and also due to a successful management of the reserve portfolio done by central bank's dealers.

Rules of export-import of hard currency in Moldova have been simplified, while quite liberal regulations have been set regarding keeping hard currency on deposits with Moldovan banks. These actions led to a growing confidence in leu from population and economic entities. Consequently, the exchange rate of leu has stabilized, the volume of

Figure 10. NBM foreign exchange reserves

![Graph of NBM foreign exchange reserves](image)

Source: National Bank of Moldova
lei deposits with banks increased, while the "street" activities and black currency market phenomena have practically wiped out.

The above mentioned measures and results obtained served as a good reason for the NBM to accept on June 30, 1995 the Article VIII, sections 2, 3, 4 of the IMF Articles of Agreement. This represented *de jure* the convertibility of Moldovan leu for current account operations, and for some capital account operations. As a result, any resident or non-resident individual or legal entity have been allowed to exchange with no limits lei into hard currencies (and some non-convertible currencies, for instance of FSU countries) and *vice-versa*. Foreign investors were granted the right to freely repatriate capital to their country of origin. Any economic agent of Moldova can buy hard currency amounts for import operations, without limitations, through Moldovan commercial banks. Economic entities have been allowed, in cases when they received loans from abroad, registered at the NBM, to buy hard currency in the local market for servicing these loans. Residents, working abroad, can freely transfer their earnings to relatives in Moldova. However, individuals residents of Moldova are not allowed to transfer abroad the money from their hard currency accounts with local banks, with a few exceptions such as for medical care, studies and other.

4. Concluding Remarks

With the introduction of the Moldovan leu a tight monetary policy was implemented, which proved to be one of the most successful (along with the one of the Baltic States) in the FSU. But without the strong IMF financial support it would have been impossible for Moldova to introduce its national currency, given the existing circumstances. The leu showed a remarkable stability, and the yearly nominal depreciation index was: 14.8% in 1994, 5.1% in 1995, 3.2% in 1996, and 0.2% in 1997. As a strong evidence of leu's stability from November 15, 1994 the hard currency surrender requirement was cancelled. After acceptance by NBM (30 June 1995) of the Article VIII of the IMF Articles of Agreement, Moldovan leu became *de jure* convertible for current account operations, and for some capital account operations. Gross foreign exchange reserves of the NBM were increasing continuously: from almost zero at end-1992, they reached $366m at end-1997 (covering 3.1 months of imports of goods and services).

The rate of inflation decreased sharply in 1994. While in 1993 annual inflation was higher than 2000%, then at the end of in 1994 it came down to 105%, in 1995 it was already 23.8%, in 1996 – 15.1%, and in 1997 – 11.2%. The annual refinancing rate
established at credit auctions decreased from 377% in February 1994 to 16% by end-1997. Beginning with January 1994 real refinancing rate became positive in real terms. In 1994 NBM’s preferential credits to state enterprises have been phased out. Starting from 1995 the budget deficit is being covered mainly by issuance of state securities, sold at auctions. The volume of issued state securities had a continuous and fast increase, but at the same time the budget deficit has not been reduced. Thus, in 1998 the Government realized that this practice can not continue any longer without budget adjustments — the proceeds from newly issued bills and bonds did not even cover the amounts needed for securities redemption.

Generally speaking, the situation in banking system of Moldova is stable and did not suffer from any major shocks, however, from the financial prospective, banking system is still weak and underequipped. Starting with 1992 the NBM put in place prudential regulations for all banks, subsequently revised in March 1995, which set standards for the Moldovan banking system compatible with Basle provisions. Real interest rates in the banking system always remained quite high. Among reasons for this are: on one hand — high borrowing requirements of the Government, low supply of domestic savings, and on other hand — high systemic risk, driven by the weakness of court and legal environment, lack of serious competition between banks, their undercapitalisation. Volume of deposits in the banking system was increasing continuously (the biggest share being of those in lei), clearly showing the increase in confidence in the leu (supported by the stable exchange rate and the rapid decline in inflation).

Figure 11. Monthly inflation rate

Source: Department of Statistics
II. UNSUSTAINABLE FISCAL POLICY (1993–1997)

Moldovan fiscal policy in recent years was driven by inertia and pressure from groups of interest what reflected by the slow path of structural reforms and the general weakness of the state. Loose fiscal policy in turn reduced the determination in reforming the state structures. Arrears and netting-out operations led to the development of a non-payment culture. At macroeconomic level, expansionary fiscal policy led to high absorption in the economy that was not met by the supply side response due to the impeded restructuring process. It fuelled imports and the trade balance steadily deteriorated. At the same time, capital inflows necessary to finance the budget deficit, combined with domestic restrictive monetary policy, prevented the depreciation of the currency. The ultimate result of the policy mix was the rapid accumulation of external debt and expenditure arrears. The unsustainability of both internal and external position of the state led to the inevitable financial crisis.

I. Introduction: Fiscal Policy and Macroeconomic Stabilisation

It is well established that transition countries that implemented tight fiscal policy resumed the growth sooner and it was both more stable and higher in comparison to countries with large and unsustainable budget deficits and associated high levels of government spending. This paper argues that the reduction of state budget deficit is the most important condition for medium-term stabilization and growth of Moldovan economy. It also proves that the fiscal policy could not sufficiently be disciplined by a restrictive monetary policy.

Macroeconomic developments in Moldova in last years exhibits striking contrast between consequent tight monetary policy and loose, arguably unsustainable fiscal policy. While inflation and monetary aggregates showed low dynamics, not yet achieved even by the most advanced transition economies, budget deficit share in GDP exhibited almost double digit values. This outcome can be somehow surprising as "it is generally established that fiscal adjustment plays a key role in both exchange rate-based and money-based disinflation efforts" [Ter-Minassian, Schwartz, 1997]. It is also widely recognised that efficient pursuit of macroeconomic policy requires a close degree of coordination of financial policies [Laurens, de la Piedra, 1998].
It seems that these conditions have been violated in Moldova and apparently the reduction of budget deficit was not a sine qua non condition for a successful price stabilisation since 1993 until the autumn of 1998. This paper argues that this impression results mainly from the different time schedules of fiscal and monetary policy actions. Fiscal policy can be changed only with significant time lags and also it takes years until its full impact on economic development is observed. Monetary policy, on the other hand, can be adjusted more rapidly and the response of the economy is prompter. Namely, even under fiscal policy that is unsustainable in the longer run, the short-term monetary stabilisation can be achieved. Effects of inflation and exchange rate pressures, combined with high interest rates will accumulate slowly, with the adverse influence not only on the price stabilisation but also on the economic growth in the medium term horizon [Rosati, 1996]. As Ter-Minassian, and Schwartz (1997) show, the long lasting stabilisation in Latin American countries were brought only by programs that combined both fiscal and monetary tightening. Programs that ignored the fiscal component yielded only temporary results at best. Non-inflationary sources of budget deficit financing cannot substitute for real fiscal adjustment. These conclusions can be drawn from analysis of crisis situation in transition countries presented in Markiewicz (1998). The literature on the Russian and Ukrainian crisis usually shows that the main cause of crisis is the accumulating effects of bad fiscal policy. Dąbrowski (1999) points out that although most of the countries that reduced significantly the budget deficit financing from money emission achieved short-lived price stability, the scale of fiscal adjustment being the factor that differentiated recent macroeconomic developments in CIS countries and other countries of Central and Eastern Europe. In Moldova, internal imbalances have been persistently converted into external problems. The domination of demand over supply of goods, has not produced inflation, as it was settled through imports. Similarly, the budget deficit was financed without monetisation through foreign capital inflows. Financing twin deficits through external borrowings, was relatively easy since Moldova started its independent economic life in 1992 without foreign debt.

By analysing the policy-mix in Moldova in recent years, this paper will concentrate on two issues in which the co-ordination of fiscal and monetary policy is particularly important: financing of budget deficit and debt management. However, the problem is more general. Unsustainable fiscal policy put all the responsibility of maintaining stabilisation on the monetary policy, which leads directly to the necessity for further monetary tightening. Monetary policy could not, however, compensate for the weakness of fiscal budget in a longer time period. Moreover, the fiscal policy in Moldova was constantly undermining the credibility of the stabilisation, making required monetary policy still harsher. Possible results of such policy mix are listed below:
i) high real interest rates held by the deficit borrowing requirements, with reduction of the capital available to the growth-generating private investments;
ii) high costs of financing the budget deficit (high interest rates, tight credit control, low inflation, hence low inflation tax), emergence of expenditure arrears, raising costs of public debt service;
iii) falling competitiveness with large trade deficit and the accumulation of external debt;
iv) deterioration of liquidity in the economy, leading to the emergence of inter-enterprise arrears, and barter and netting-out operations.

All the above effects have deeply marked the Moldovan economy. As the government relied excessively on foreign borrowings, in the presence of money scarcity the third effect proved to be probably the most disastrous. The absence of hard budget constraint should be viewed as a component of loose fiscal policy that prevented restructuring, which led to non-cash transactions (fourth effect).

2. Fiscal Policy and the Structural Reforms in Moldova

2.1. Determinants of Fiscal Policy

The first requirement for an efficient policy mix is that both fiscal and monetary policies are each on a sustainable path. The size of budget deficit and its financing remain crucial for the future fiscal position of the state. Therefore, the government should adopt explicit strategy for the development of amount, timing and maturity structure of the resulting debt burden. Proper policy has to be focused on solvency and liquidity questions. The solvency means that expected economic growth or increase in the efficiency of the budget execution will generally allow the state to fulfil its total debt payment (positive net present value of the government). In other words, its budget deficit is sustainable. The liquidity can be defined as the ability to service timely current state obligations and it can stem either from the balanced budget or an easy access to the external financing sources. The policy should be therefore oriented towards monitoring, early warning and contracting actions against the following situations:

a) Budget deficit is unsustainable, although it can be financed in short-term. There are no signs of liquidity crisis, yet the currently conducted policy makes the country insolvent in longer run. The burden of debt rises as long as it reaches the level that will result either in default or in the deep economic policy change. This situation was common to most of
CIS countries, including Moldova in recent years, as the favourable external borrowing conditions combined with high budget deficits lead to rapid increase in the indebtedness.

b) Sustainable fiscal policy is under serious threat due to improper liquidity management. There is no a real solvency problem but the country faces a liquidity crisis, as it is not capable to meet its current payment obligations (this describes the scenarios of financial crises in Czech Republic and Slovakia in 1997).

The sustainability considerations should constitute the basis for proper fiscal policy and the medium-term debt strategy. The liquidity constraints imply an optimal short-term debt management, especially the recommended structure of deficit financing. The development of a proper framework is therefore the prerequisite for good policy making. It was clearly not the case in Moldova where the sustainability question was not considered and liquidity considerations were limited to a search for necessary funds to finance current expenditure needs. In fact it is impossible to speak of fiscal policy in Moldova in the sense of any established strategic goals and policy instruments. As Dabrowski et all (1999) pointed it out, the fiscal policy is the reflection of the quality of reforms undertaken in the economy. The fiscal problems of Moldova reflected the weakness of state structures, the political climate favourable for populism and rent seeking, low pace of privatisation and restructuring and delayed reform in the social sphere. The opposition of strong vested interest also put pressures on Moldovan fragmented policy-making. The link between structural changes and fiscal system is however mutual. Fiscal policy should provide the incentives for market adjustment and not create a system with explicit and mainly implicit subsidies, tax exemptions granted at the discretion of government officials, which generates incentives for intensive rent-seeking.

In such a situation, the fiscal policy of successive Moldovan governments were driven on the expenditure side by the inertia of spending commitments and on the revenue side by the inability to actually collect taxes. The former came from the lack of a political group that would try to gather the general support for explicit social spending constraints and to eliminate support for the inefficient sectors of the economy. The latter was the result of widespread corruption and fiscal evasion.

2.1.1. Tax Revenues: A Malfunctioning Tax System

Like many other CIS countries, Moldova suffered a significant drop in tax revenues in the years following the independence. This negative development was the result of both steady decline in GDP and the disruption of the tax collection system. The comparison of tax collection in with other transition countries shows that the tax burden in Moldova was relatively small (Table 2).
The evolution of revenue collection by main items is shown in Table 3.

<table>
<thead>
<tr>
<th>Year</th>
<th>Income</th>
<th>Profit</th>
<th>VAT</th>
<th>Excise</th>
<th>Duty</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1994</td>
<td>2.7</td>
<td>8.8</td>
<td>6.0</td>
<td>3.2</td>
<td>0.6</td>
<td>23.9</td>
</tr>
<tr>
<td>1995</td>
<td>3.1</td>
<td>6.1</td>
<td>8.9</td>
<td>2.9</td>
<td>0.8</td>
<td>23.5</td>
</tr>
<tr>
<td>1996</td>
<td>2.8</td>
<td>4.7</td>
<td>8.0</td>
<td>2.6</td>
<td>1.2</td>
<td>21.1</td>
</tr>
<tr>
<td>1997</td>
<td>3.2</td>
<td>2.7</td>
<td>10.6</td>
<td>4.5</td>
<td>1.4</td>
<td>24.9</td>
</tr>
<tr>
<td>1998*</td>
<td>2.5</td>
<td>2.0</td>
<td>12.8</td>
<td>4.3</td>
<td>1.2</td>
<td>24.1</td>
</tr>
</tbody>
</table>

Source: Ministry of Finance of Moldova
income taxes stems primarily from the widespread reluctance to report properly income and earnings. The share of shadow economy is quite frequently evaluated at above 40% or even 60% of the formal sector. In 1997, about 82% of taxes due were collected (Fitch IBCA 1998), including revenues settled through the netting-out operations. Still tax arrears constituted 7% of GDP in 1997. According to the CISR (1998), not evaluated cases of evasion detected by tax officers, the fiscal evasion amounted to 25% of total budget revenue in 1997, while in 1995 it was only 4%. The strongest negative impact on tax compliance can be attributed to the events of "tax forgiveness". By the decisions taken by the Parliament at the end of each year, some economic agents are ex-post exempted from taxes and their liabilities towards state budget are simply cancelled out. Such practices, characteristic especially for the period 1993−1997, provide absolutely wrong incentives to economic agents and undermine the credibility of the tax enforcement system. Moreover, municipalities do not have incentives to raise higher volumes of local tax revenue since it results in reduced money transfers from central budget. However, the highest losses stem from the fact that the state controls less than 40% of total length of its border. The unprotected border with Transnistria that conducts independent economic policy exerts a big cost on Moldovan tax collection. Smuggling via Transnistria into Moldova of big amounts of excised goods as spirits, tobacco and oil products incurs Moldova with costs estimated sometimes even at 9% of GDP through the diminished revenues from external trade, VAT and excise taxes.

Several attempts were made in order to raise the tax revenues of the consolidated budget, some of them having a character of "quick fixes". Special attention has to be attached to the positive results of 1997 that are reported in Table 3. The visible improvement was only partly the result of increased tax rates, moderate economic growth or better tax collection. The relative improvement was mainly the effect of some measures that raised artificially the tax collections. The most important is represented by the netting out operations, which resulted in high tax revenues in December 1997 (21% of total revenues in comparison with 15% in previous years). During the last years, only 30% of revenues from VAT were paid in cash, with the ratio declining even to 10% in December, when netting out operations were conducted.

Netting out operations proved to be a persistent and harmful element of economic life in Moldova. In-kind operations and tax arrears contradict the hard-budget constraints. The non-payment culture emerged as the government first allowed to run up the tax arrears, budget expenditure arrears and then decided to offset these two non-payment flows. It further reduced the compliance rate and increased the difficulties of tax collection. Barter operations allow enterprises to underreport their earnings, what means increased tax evasion. In addition, non-cash transactions allow enterprises to avoid
placing their financial means within the banking system, where they can be seized against tax liabilities. Instantaneously, the financial intermediation role of banks is reduced with negative impact on state revenues, the demand for state treasuries and investment possibilities. Barter transactions, coupled with netting-out operations, increased significantly the administrative costs of tax collection and opened a wide scope for tax evasion. Enterprises are now ready to supply public entities with goods at artificially high prices. At the end of year they swap these receivables for the accrued tax liabilities. Such operations are also profitable for the officials from public entities, because they can extend the financial means at their disposal through these implicit borrowings, (besides the significant opportunity for bribery). Non-cash tax revenues cannot be efficiently distributed according to spending priorities.

Netting-out operations aggravated also the general non-payment culture in the Moldovan economy, which has a negative impact on the general economic situation. Due to non-cash operations it is still possible to take production decisions without the evaluation of market demand and without undertaking marketing activities. The enterprises do not match their supply (both the structure and volume) with the effective needs of the market, expressed by the demand side. Instead, the production activities are driven by inertia. The economy is therefore confronted with a specific category of commodities – non-marketable goods. The low market value of inventories of these goods forces enterprises to trade them on a non-market basis – for tax liabilities, or to transfer them to workers as a substitute for wages. Effectively, the enterprises force a third party (the state or the workers) to take over marketing tasks by settling its obligations through in-kind payments. This is especially characteristic for state-owned enterprises, which therefore have non-purely economic relations with the state structures. Barter and in-kind operations preserve therefore the inadequate composition of production and impede restructuring, while adjustment to the market demand is the very first requirement for the rebound of production in the economy. Barter transactions hamper price adjustment between demanded and non-demanded products and therefore they effectively transfer money from good enterprises to bad ones and therefore represent a part of the income redistribution system: netting-out operations can be viewed as the subsidy to inefficient enterprises.

2.1.2. Expenditures: Policy Inertia

The last stages of existence of centrally planned economies were characterised by the build-up of extensive social expenditure programs. Moldovan economy shrank by 65% between 1991 and 1997; however the policy-makers were reluctant to reduce
expenditures accordingly. As a result the social spending bill constitutes a very large share of GDP, compared to the standard levels in case of transitional economies or middle income countries (Table 4).

### Table 4. Selected Expenditures (% of GDP)

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Education</td>
<td>7.5</td>
<td>7.5</td>
<td>9.0</td>
<td>8.8</td>
<td>6.3</td>
<td>4.9</td>
<td>3.8</td>
</tr>
<tr>
<td>Health</td>
<td>5.3</td>
<td>4.9</td>
<td>5.9</td>
<td>5.3</td>
<td>4.4</td>
<td>3.7</td>
<td>2.0</td>
</tr>
<tr>
<td>Social Security and Welfare</td>
<td>12.8</td>
<td>11.0</td>
<td>11.2</td>
<td>12.7</td>
<td>12</td>
<td>8.4</td>
<td>5.7</td>
</tr>
</tbody>
</table>

Transition countries include: Kyrgyz Republic, Mongolia, Romania, Turkmenistan, Ukraine – 1995/1996
Middle Income Countries include: Barbados, Botswana, Chile, Columbia, Costa Rica, Cyprus, Dominican Republic, Egypt, El Salvador, Fiji, Hungary, Iran, Jordan, Malta, Mauritius, Morocco, Panama, Paraguay, Peru, Romania, Swaziland, Thailand, Tunisia, Turkey, Uruguay, and Zimbabwe
Source: IMF (1998a)

The inability to openly reduce expenditure commitments is the major weakness of Moldovan policy-makers. It especially concerns the expenditures on health and education that constitute together about one-third of government expenditures. The social expenditure commitments became the rigid part of the subsequent budget bills, although some of these commitments were not executed later on due to the scarcity of financial resources. Since the creditors are reluctant to finance unexpected increase in government imbalances, the budget is forced to withhold its due expenditures. The expenditure adjustment that should have taken place in the budgeting process is postponed to a later date, therefore one may argue that the problem of unrealistic forecast is minor. There is, however, a big difference between planned reduction in expenditure commitments and ad hoc withholding of budget expenses (especially the emergence of expenditure arrears). Ad hoc cuts in expenditures, although favourable for the budget in short term, aggravate the fundamental problem of Moldovan public finance: the absence of prioritisation of budget expenses. During the budgeting process it became a common practice to increase planned revenues to meet the expenditure commitments. On the contrary, there is hardly any other effort to adjust expenditure commitments ex ante in line with forecasted revenues. As long as policy-makers tend to neglect realistic tax revenue forecasting, the chances for sustainable and efficient fiscal policy are very low.

Ad hoc cuts are usually made according to the political sensitiveness of expenditures; therefore, the allocation of scarce public resources is increasingly based on the relative
strength of groups of interests and extrapolation of existing spending patterns. The reduction of expenditures is also often short-lived: after the period of wage increase freeze, an offsetting rapid growth of wages may be expected. Sustainable reductions and distribution of expenditures based on economic or equity considerations would only be possible if the government starts to realistically assess its spending capabilities in the budgeting process. The general inefficiency of the expenditure stems also from the widespread use of in-kind payments and tax offsets that further decreases the flexibility of expenditure patterns.

As a result, the structure of spending is characteristic for a communist country rather than for a market oriented economy. The social assistance is not focused on the most vulnerable groups but rather to a wide share of population through numerous privileges, subsidies and compensations. Those are especially concentrated in the energy consumption, which leads to its huge over-consumption. Furthermore, according to IMF (1998a), the public sector wage bill represents 7.2% of GDP in 1997, significantly more than in OECD countries (4.5%), in Romania (5.8%) or Poland (6.1%). While wages in the public sector are low, the excessive employment, especially in education and health care, remains at the core of the problem. In the health care system expenditures are biased towards an excessive number of hospital beds and doctors with insufficient focus on basic preventive health care. Some co-payments schemes in education and health are therefore currently considered, combined with redirecting the education and health care spending towards the basic services. The reform of Social Fund is also rapidly needed, as it is becoming rapidly dependent on the state budget.

Apart from that, the decline of productive sector led initially to the pressure on higher subsidies (both direct and indirect) for enterprises. Only in 1998 more serious attempts to limit direct budget subsidies to enterprises were made, crediting of enterprises amounting to 2–3% of GDP throughout the period.

2.2. Fiscal Deficits between 1993 and 1998

After the explosion of state budget deficit, shortly following the Moldova's independence in 1991, consolidated budget deficit (on cash basis) peaked 25% in 1992. Sharp adjustment, mainly on the expenditure side, reduced the gap to a less frightening level of 9% in 1993. This reduction could have been the promising prelude to the further fiscal consolidation that should have been a part of the stabilisation program. However, no further significant cuts in the deficit were introduced afterwards the extent of the stagnating fiscal problem between 1993 and 1996 is reflected in the constant high
commitment deficit that reached above 12% of GDP in 1994 and 1996. Only 1997 seems to show some positive adjustments. In comparison to 1996, the committed deficit in 1997 was reduced by 7.8%. However, as mentioned before, the reduction was mainly the result of the decision to allow the netting out operations in tax settlements and the one-off proceedings from the sales of military equipment (nearly 2% of GDP), although the freeze of wages at 1996 level and a slight recovery of the economic activity also contributed to this improvement. In 1998, the year of economic crisis, the deterioration of tax revenues re-emerged together with an overall deficit of 9.3% of GDP (Table 5).

<table>
<thead>
<tr>
<th>Table 5. Consolidated Budget Deficit (% GDP)</th>
</tr>
</thead>
<tbody>
<tr>
<td>-----------------</td>
</tr>
<tr>
<td>Budget Deficit (Commitment)</td>
</tr>
<tr>
<td>Primary Deficit</td>
</tr>
</tbody>
</table>

Source: IMF (1998b), Ministry of Finance, own calculations

2.3. Budget Deficit and Aggregate Demand

In the standard Keynesian macroeconomics, fiscal deficit is the tool of stimulating economy during the period of recession. If the failure of private agents to consume and invest enough to meet the production capabilities is the cause of the decline in the output, fiscal expansion can stimulate the economy by enhancement of aggregate demand, leading to the reversal of the economy towards the full employment equilibrium. This result is obviously valid only if the output is under its full employment level and if recession can be indeed viewed as the consequence of a weak demand. The evolution of Moldovan GDP exhibits 70% fall within the period 1990 — 1998. Did it constitute the case for the fiscal expansion? It might be indeed difficult to argue that the economy needed a fiscal contraction [1]. The analysis of the composition of Moldovan GDP brings the response to this question (Figure 12).

As it can be seen, the share of final consumption in GDP was steadily growing and increased from 80% of GDP in 1995 up to 102% of GDP in 1998. However, the rate of investment in the economy did not fall significantly and fluctuated around 25% of GDP throughout the period. This was possible only through substantial external borrowings that offset domestic dis-saving.

[1] Similarly Krugman (1998) comments the discussion on the reforms in Brazil: “Brazil, we are informed, must suffer a recession because of its unresolved budget deficit. Huh? Since when does a budget deficit require a recession?”
Clearly, throughout this period Moldova was significantly credited by its trading partners, which is reflected by the increasing trade deficit (8% in 1995, versus the near-collapse level of 28% in 1998). Such trade imbalance induced an extreme risk to the external position of Moldova and made it very vulnerable to changes in the pattern of capital flows. It is interesting to see what is the role of government consumption in this process (Figure 13).

**Figure 12. GDP Composition (%)**

![GDP Composition Graph](image)

Source: Department of Statistics

**Figure 13. Private and Government Consumption as % of GDP**

![Government Consumption Graph](image)

Source: Department of Statistics
Somehow surprisingly, it was the private consumption that was growing very fast (as measured as the share of GDP) in recent years. In 1995 private consumption amounted to only 55% of GDP, while in 1998 this figure raised to 85%. Meanwhile, public consumption remained stable (27%) until 1997, but it dropped sharply to 18% \[2\] in 1998. Developments of 1998 can be interpreted as the substitution of consumption of public services and goods (as education or health care) with private consumption of similar services. However, the rapid growth of private consumption between 1995 and 1998 can only be explained by the massive drop in savings and the declining ability of state to collect taxes (leading to the raise in the share of disposal income in GDP).

There is one clear message from this analysis: the recovery of Moldovan economy will not be possible by stimulating the aggregate demand. The Keynesian solution to the current recession is completely inapplicable since the rapid growth in final consumption fuels exclusively the increasing trade deficit.

### 3. Financing the Budget Deficit

The economic consequence of fiscal deficits depends not only on their size but also on the way of financing those deficits. According to Laurens and de la Piedra E. (1998), the fiscal deficit should be limited to the level at which:

a) its financing through domestic capital market does not distort the allocation of resources;

b) does not require direct credits from the Central Bank for financing it;

c) does not lead to excessive external borrowings.

Accordingly, there are three basic alternatives of financing the deficit, in order to fully understand the impact of the deficit on the economy — considering the deficit calculated on the commitment basis and with privatisation receipts incorporated into the budget revenues:

- direct credit from central bank (with resulting change in monetary base \(- M_{base}\));
- domestic borrowing from commercial banks and private agents \((BD)\);
- external borrowings \((BF)\),

\[2\] It is also possible that public wages and other expenditures related to the provision of in-kind social benefits for population are included in private consumption, which means that public consumption is actually under-evaluated.
The above elements can be represented by following equation:

\[ D_t = (M_{base_t} - M_{base_{t-1}}) + (B_t^D - B_{t-1}^D) + (B_t^F - B_{t-1}^F) \]

In addition, there is a heterodox solution for deficit financing – through the accumulation of expenditure arrears \((A)\). Therefore the above can be rewritten as:

\[ D_t = (M_{base_t} - M_{base_{t-1}}) + (B_t^D - B_{t-1}^D) + (B_t^F - B_{t-1}^F) + (A_t - A_{t-1}) \]

These four alternatives have various impacts on price stability, on the amount of credits available for private investments, as well as on the external balance. Moreover, the availability of these instruments depends on the independence of Central Bank, the development of domestic financial sector, the external openness of the economy and the ability to induce involuntary savings (arrears). If the access to external markers is limited and domestic financial markets undeveloped, while the government cannot run up arrears, there is a direct conflict of goals between fiscal and monetary policy. This is due to the fact that only three elements in the above equation can be determined independently. Table 6 and Figure 14 show the relative importance of each source of deficit financing in Moldova in recent years. The next sections describe in more details the consequence of each financing alternatives.

**Table 6. Sources of Financing the Deficit (% of total financing needs)**

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>NBM credit</td>
<td>58</td>
<td>18</td>
<td>19</td>
<td>-7</td>
<td>35</td>
<td>101</td>
</tr>
<tr>
<td>Change in expenditure arrears</td>
<td>14</td>
<td>18</td>
<td>25</td>
<td>38</td>
<td>-69</td>
<td>63</td>
</tr>
<tr>
<td>Net domestic borrowing (Commercial Banks and Non-banks)</td>
<td>0</td>
<td>1</td>
<td>13</td>
<td>20</td>
<td>64</td>
<td>-27</td>
</tr>
<tr>
<td>Net foreign borrowing</td>
<td>28</td>
<td>63</td>
<td>43</td>
<td>48</td>
<td>69</td>
<td>-38</td>
</tr>
<tr>
<td>TOTAL (COMMITMENT DEFICIT)</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: IMF (1998b), MET, own calculations

**3.1. Central Bank Direct Credit: Money Printing**

Direct credits from Central Bank fuel the growth of money stock and therefore inflation. In the most adverse scenario, this leads to hyperinflation. In spite of this risk, such policy has been often adopted in Moldova. Until 1993 the government deficit was
covered by direct credit from the Central Bank and seigniorage was one of most important sources of government finance. This was obviously accompanied by high inflation in the economy, with an average monthly rate of 20% in 1993. The reform of National Bank of Moldova and free access to foreign capital markets removed this practise. Since 1994, fiscal and monetary policies have become increasingly independent. As in many other countries, the direct credit from the Central Bank was apparently the only available source for financing the budget deficit during the first stages of the stabilization process. Later on, the Central Bank became the lender of last resort to the government, when the access to non-inflationary sources was temporarily lost. Such developments are characteristic for countries with persistent budget deficits, insufficiently developed domestic financial markets for government debt and with limited access to international capital markets. Laurens and de la Piedra E. (1998) point out that while the median OECD government was repaying its credit to the Central Bank in the period of 1979–1993, the median developing country government was covering 30% of its financing needs from the Central Bank during the same period. The analyses of consolidated banking system balance sheet show the same bias. The Central Bank net credit to the government amounted to 12% of total banking system net credit in the median OECD, and 66% in a median developing country (in Moldova roughly 33% at the end of 1997). The impact of monetisation of deficit on inflation is particularly large in CIS economies where the banking sector is small and the level of monetisation in very low [Markiewicz, 1998], which also reduces the possible gains from seigniorage.

In Moldova, the direct NBM credits to government represented the main source of deficit financing in 1992 and 1993. The volume of those credits amounted to 6 % of GDP in 1993. The next two years this source of budget financing decreased (2.3% and 1.7% of GDP, respectively) while in 1996 it became negative, when the state started to pay back the credit to NBM. In 1997 the recourse to this source reappeared (1.6% of GDP) but in 1998 the Budget Law prohibited explicitly such a procedure. In practice, NBM has been giving direct credits to the government for short-term coverage of its financial needs. Moreover, in September-October 1998 NBM was forced to credit directly the government in order to avoid its default on treasury securities, which resulted in a very high ratio (9.3%). The role of direct NBM credits for deficit financing was mainly determined by the availability of cheap international financing. Although, the role of NBM as an independent and relatively strong Central Bank should not be underestimated. The independence of central bank unfortunately failed to impose the corresponding adjustment of fiscal policy.
Financing the budget deficit through direct credit does not necessarily lead to increased inflation if it is combined with offsetting tightening of credits to commercial banks or decreasing stock of foreign assets. It is interesting to analyse the close influence of NBM credits to the government on the monetary aggregates, and consequently on the inflation rate (Table 7 and Figure 14).

**Table 7. NBM direct credit to government**

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>as % of:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>reserve money</td>
<td>60</td>
<td>58</td>
<td>55</td>
<td>43</td>
<td>46</td>
<td>126</td>
</tr>
<tr>
<td>broad money</td>
<td>40</td>
<td>42</td>
<td>35</td>
<td>26</td>
<td>27</td>
<td>76</td>
</tr>
<tr>
<td>as % of growth of:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>reserve money</td>
<td>NA</td>
<td>56</td>
<td>49</td>
<td>-85</td>
<td>53</td>
<td>-1342</td>
</tr>
<tr>
<td>broad money</td>
<td>NA</td>
<td>43</td>
<td>23</td>
<td>-32</td>
<td>29</td>
<td>-498</td>
</tr>
</tbody>
</table>

Source: IMF(1998b), MET, own calculations

**Figure 14. The rate of growth of direct NBM credit to government and inflation rate**

Source: IMF (1998b), MET

NBM credits to the government amounted to 60% of the supply of reserve money in 1993, but this share was reduced up to 43% in 1996. Similarly, the share of credits in broad money was reduced from 42% in 1993 to 23% in 1996. Until the end of 1995 the extended credit to the government caused more than half of the growth of reserve money. In 1996 the stock of money increased independently from the evolution of NBM credits. In 1997 the situation was similar to that from 1993 and 1994, with significant money growth resulting from direct deficit financing. 1998 brought more spectacular
changes with plunging foreign assets of the Central Bank, which offset an important part of growth of NBM credits to the government.

Until 1998 the NBM tight policy, which was possible due to favourable conditions on the world capital markets, led to non-inflationary financing of the deficit. As a result, successful disinflation occurred between 1995 and 1997. However, the containment of direct credits to the government was not based on a sustainable policy, but rather on the capital markets' propensity to credit Moldovan government, which could not last forever.

3.2. Domestic Borrowings: Shallow Markets

Financing budget deficit through domestic borrowing is usually regarded as being superior to other means, since it allows the Central Bank to conduct independently its policy with respect to money growth, and therefore to reduce the inflationary pressure. Moreover, borrowing on domestic markets does not lead to external exposure. However, lax fiscal policy combined with offsetting restrictive policy may lead to crowding out of private investment and rising cost of government borrowings. Additionally economic agents may expect the future monetisation of debt, which would further drive the current interest rates up. The excessive accumulation of internal debt may temporarily slow down inflationary pressures, but may also lead to its surge in the future. While the cost of placing the debt on the market in short run depends directly on the monetary policy conducted by the Central Bank, the same is not true for a longer time horizon.

Expansionary policy allows initially for prevailing low interest rates. Later on, rising inflation implies higher nominal interest rates, excessive budget deficit, and consequently increased risk premium on government T-bills. On the other hand, a restrictive monetary policy may further undermine the sustainability of fiscal policy, as it raises the primary surplus needed for servicing the outstanding debt. Tight monetary policy may also slow down the economic growth, and therefore reduce tax revenues and the income from (non-inflationary) segniorage. In case of Moldova, the main cause for the deteriorating fiscal position was a reckless fiscal policy, and not the tightness of monetary policy. Rising the domestic interest rate, which put a check on planned fiscal deficits, provides budget makers with clear market signals of expected effects of a given policy. Such signals were ignored in Moldova, as policy makers claimed that the excessively tight monetary policy has been the reason for difficulties in the execution of fiscal policy (e.g. more liquidity necessary to prevent arrears accumulation).

Financing the budget deficit through borrowings on the domestic capital market is also favourable because it facilitates the development of the financial sector, as T-bills are
usually main instruments traded on the emerging markets. Obviously, the Central Bank can still facilitate deficit financing through providing additional liquidity for treasury securities. As Laurens and de la Piedra E. (1998), argue, the best arrangement of monetary policy is to have central bank conduct open market operations in the government securities on a secondary market, while the treasury issues the debt on the primary market. Such arrangement gives both institutions the possibility to pursue its own policy targets. Apart from open market operations, the Central Bank can also allow commercial banks to place government securities as collateral for loans, rediscount them or even substitute them for required reserves. All these arrangements lead to increased demand for such securities.

There are, however, some necessary preconditions for the development of domestic T-bill market: apart from institutional arrangements, curbed inflation, confidence in the domestic currency and a sound banking sector is required. Moldovan government started to place the debt instruments on the domestic market since April 1995 with the annual yield of 90% that were lowered to 20% towards 1997, as a result of the achieved stabilization. Moldova, with a level of monetisation higher than in other CIS countries, had more chances to finance budget deficit through the T-bill market. Still, the domestic sources were quickly saturated: Dąbrowski et all (1999) argue that it took only 1 to 1.5 years to saturate domestic financial resources in Russia and Ukraine. Non-resident participation was therefore allowed, in order to increase the financing base and buy some additional time, when the situation on global financial markets was very favourable. Since the beginning of 1998 the economic agents started to realize that the fiscal policy was not anymore sustainable, and therefore the interest rate spiked to 40%. Obviously, it was in part the result of the general fall in confidence in emerging markets after the Asian crisis in 1997. In the wake of the Asian crisis the foreign participation on the T-bill market decreased from 38% to 22%. The importance of external factors cannot be however overestimated: the financial pyramid built by the government since 1995 could not be sustained, even if the sentiment of foreign investors did not change so rapidly.

Excessive government borrowings on the domestic markets may divert the nature of banking activities, directed almost exclusively towards servicing the state. High interest rate will provide banks with safe profit, which will discourage portfolio diversification. In principle (according to the Mundell-Flemming model), in a country with fixed exchange rate and perfect capital mobility the lessening of fiscal policy should not lead to crowding out of private investments. Any increase in the interest rate, resulting from government borrowings, will be offset by capital inflow. However, if capital is not perfectly mobile (as in portfolio balance theory), fiscal expansion will drive the interest rate up and will crowd out investments.
The Moldovan government, through the conducted policy, entered the indebtedness vicious circle (Table 8). High costs of servicing outstanding debt required higher borrowings at higher interest rate (increased risk premium). In 1998, the net financing from domestic capital markets remained negative.

Table 8. The evolution of domestic debt (% GDP)

<table>
<thead>
<tr>
<th></th>
<th>NBM Loans</th>
<th>Treasury Securities</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1994</td>
<td>5</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>1995</td>
<td>6</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>1996</td>
<td>6</td>
<td>4</td>
<td>10</td>
</tr>
<tr>
<td>1997</td>
<td>6</td>
<td>5</td>
<td>11</td>
</tr>
<tr>
<td>1998</td>
<td>11</td>
<td>6</td>
<td>18</td>
</tr>
</tbody>
</table>

Source: MET

3.3. External Borrowing: Towards a Debt Crisis

The budget deficit of described size, with under-developed capital markets, would usually put significant pressure on the Central Bank for increased money supply. As NBM had already managed to gain the reputation of a conservative Central Bank before 1995, such pressures should have been rejected. The exceptionally good situation in the world capital markets allowed Moldova to finance even very high deficits from external borrowings. Alternatively, it may be judged that the credibility of NBM was built on the basis of foreign financing of the deficit. As Ter-Minassian and Schwartz (1997) note, some Latin American countries also avoided significant fiscal adjustment due to the favourable access to the world capital markets throughout eighties. Indeed, in 1996 net financing from abroad amounted to 5% of GDP in Moldova, while between 1994 and 1997, more than half of net average borrowing requirements were financed by external sources. The availability of external financing reflected the hope of international investors in the recovery of Moldovan economy, which outweighed even fears related to the unsustainable internal and external positions. The interest rate paid on debt issued to external agents was significantly lower than on domestic markets, which led to excessive external borrowings.

The capital inflow also represented the mirror image of the constantly deteriorating trade balance of the country. As it was argued in the previous section, the trade balance was driven by the high share of consumption in GDP by the high share of consumption in GDP with the resulting current account deficit being covered by external
borrowings. The consequent rapid debt accumulation is the main characteristic of Moldovan economy. Since Russia took over the historic debt of the former Soviet Union, Moldova started the transformation with a debt close to zero. The indebtedness raised later from 14% of GDP at the end of 1993 up to 74% at the end of 1998 (Table 9 and Table 10). Although the indebtedness is not surprisingly high for the world standards, it should be noted that among all former soviet countries only Tadjikistan records a higher level of indebtedness than Moldova. However, the most important sign of the unsustainability of macroeconomic policy is the speed of debt accumulation. While the rapid increase of indebtedness in 1998 was the result of currency devaluation, in 1997 this was the result of short-sighted policies regarding the external indebtedness. Since the consumption is the driving force in this process, the share of FDI in capital inflow is insignificant. Also portfolio-equity investments remained negligible while foreign participation in the T-bill market was close to 40% at the end of 1997. Obviously, this means also a pressure on the exchange rate, leading either to currency appreciation, or increased money supply (Central Bank buying currency in the forex market).

Table 9. External Debt of Moldova (% GDP)

<table>
<thead>
<tr>
<th>Year</th>
<th>Direct Public Debt</th>
<th>Publicly Guaranteed Debt</th>
<th>IMF</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1993</td>
<td>7</td>
<td>0</td>
<td>7</td>
<td>14</td>
</tr>
<tr>
<td>1994</td>
<td>29</td>
<td>0</td>
<td>14</td>
<td>43</td>
</tr>
<tr>
<td>1995</td>
<td>30</td>
<td>1</td>
<td>16</td>
<td>47</td>
</tr>
<tr>
<td>1996</td>
<td>33</td>
<td>3</td>
<td>15</td>
<td>51</td>
</tr>
<tr>
<td>1997</td>
<td>41</td>
<td>4</td>
<td>12</td>
<td>58</td>
</tr>
<tr>
<td>1998</td>
<td>56</td>
<td>7</td>
<td>11</td>
<td>74</td>
</tr>
</tbody>
</table>

Source: MET, own calculations

As it can be seen from tables 9 and 10, Moldova is confronted not only with an increasing debt, but also with an unfavourable structure of that debt. Since Moldova repeatedly failed to achieve the conditionality criteria, IMF stopped disbursements in the mid 1997 and this decision was followed by the World Bank, which suspended its Structural Adjustment Loan II. Since 1994 the debt towards bilateral creditors was fairly constant. In this situation the part of debt that was increasing at the fastest pace since 1996 was the short-term commercial debt. The proceedings from private placement in 1996 and issuance of Eurobonds in 1997 were used exclusively to cover the budget deficit. However, the most important and least controllable source of debt accumulation
is the energy sector debt. Lack of restructuring in this sector resulted in a large debt towards Gazprom (140 million in 1997 and US$ 90 million in 1998).

Table 10. External Debt (million US $)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total (IMF included)</td>
<td>173.6</td>
<td>505.9</td>
<td>665.2</td>
<td>800.3</td>
<td>1029.9</td>
<td>1002.1</td>
</tr>
<tr>
<td>Total (IMF excluded)</td>
<td>86.3</td>
<td>343.0</td>
<td>434.8</td>
<td>552.5</td>
<td>795.9</td>
<td>825.7</td>
</tr>
<tr>
<td>Direct public debt</td>
<td>86.3</td>
<td>343.0</td>
<td>416.9</td>
<td>506.0</td>
<td>710.1</td>
<td>719.0</td>
</tr>
<tr>
<td>Multilateral creditors</td>
<td>59.3</td>
<td>158.4</td>
<td>203.5</td>
<td>221.1</td>
<td>257.0</td>
<td>293.4</td>
</tr>
<tr>
<td>IBRD &amp; IDA</td>
<td>28.6</td>
<td>95.7</td>
<td>145.8</td>
<td>145.8</td>
<td>185.7</td>
<td>216.9</td>
</tr>
<tr>
<td>EBRD</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.3</td>
<td>5.2</td>
<td>6.1</td>
</tr>
<tr>
<td>EU</td>
<td>30.7</td>
<td>62.7</td>
<td>57.6</td>
<td>75.0</td>
<td>66.2</td>
<td>70.4</td>
</tr>
<tr>
<td>Bilateral creditors</td>
<td>19.8</td>
<td>162.7</td>
<td>177.3</td>
<td>173.9</td>
<td>155.7</td>
<td>160.2</td>
</tr>
<tr>
<td>Japan</td>
<td>29.7</td>
<td>37.8</td>
<td>33.4</td>
<td>30.0</td>
<td>33.7</td>
<td></td>
</tr>
<tr>
<td>Russia</td>
<td>93.4</td>
<td>90.3</td>
<td>78.8</td>
<td>64.0</td>
<td>62.0</td>
<td></td>
</tr>
<tr>
<td>USA</td>
<td>19.8</td>
<td>39.6</td>
<td>49.2</td>
<td>61.7</td>
<td>61.7</td>
<td>61.7</td>
</tr>
<tr>
<td>Commercial creditors</td>
<td>0.0</td>
<td>0.0</td>
<td>15.0</td>
<td>90.7</td>
<td>277.3</td>
<td>245.2</td>
</tr>
<tr>
<td>Commercial banks</td>
<td>0.0</td>
<td>0.0</td>
<td>15.0</td>
<td>60.7</td>
<td>32.3</td>
<td>30.2</td>
</tr>
<tr>
<td>Eurobonds</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>30.0</td>
<td>105.0</td>
<td>75.0</td>
</tr>
<tr>
<td>Gazprom</td>
<td>140.0</td>
<td>140.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commodity loans</td>
<td>7.3</td>
<td>21.9</td>
<td>21.2</td>
<td>20.3</td>
<td>20.1</td>
<td>20.3</td>
</tr>
<tr>
<td>Publicly guaranteed debt</td>
<td>17.8</td>
<td>46.5</td>
<td>85.8</td>
<td>106.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Multilateral creditors</td>
<td>0.0</td>
<td>8.4</td>
<td>33.1</td>
<td>45.7</td>
<td>53.4</td>
<td></td>
</tr>
<tr>
<td>EBRD</td>
<td>0.0</td>
<td>8.4</td>
<td>33.1</td>
<td>45.7</td>
<td>53.4</td>
<td></td>
</tr>
<tr>
<td>Commercial Creditors</td>
<td>0.0</td>
<td>9.4</td>
<td>13.5</td>
<td>40.1</td>
<td>53.3</td>
<td></td>
</tr>
<tr>
<td>IMF</td>
<td>87.4</td>
<td>162.9</td>
<td>230.4</td>
<td>247.8</td>
<td>234.1</td>
<td>176.4</td>
</tr>
</tbody>
</table>

Source: MET

Dependence on external financing induces a greater thread on macroeconomic stability than domestic financial obligations, as it makes the economy increasingly vulnerable to changes in perceived creditworthiness. Namely, the external debt payment stream is subject to:

– the risk of currency depreciation, which increases the debt burden;
– the risk of a shift in market sentiment, which determines the lenders to require higher interest rates to extend new credit for rolling over the existing debt (e.g. several treasury bills spikes across CIS that reflected the failing confidence preceding the Russian crisis);
– the risk of a negative impact of external financial crisis.

The risk of devaluation is extremely high when then external debt is high. The Asian crisis in the 1997 and especially the deterioration of the economic situation in Russia led to an explosive path of public debt. As a result, the financial adjustment burden for Moldova was getting higher and higher.
3.4. Arrears: How Much Population Can Bear

When the planned revenue is not realised, the government is prone to accumulate expenditure arrears. In fact, a large number of state employees may be regarded as creditors to the state. Arrears appear to be the most important and persistent source of financing of the budget deficit (calculated on the commitment basis). Since the government was unable to reduce its commitments, it simply sequestered its outlays, especially in 1996. The increase in arrears was especially high in 1996, when the unexpected dip in revenues (mainly from corporate income tax and VAT), combined with raising spending on health care and education programs, led to a substantial budget gap. The state responded with sequestering cash outlays, but without adjustment in expenditure commitments. As a result, arrears soared by more than 4% of GDP (Table 11). Similar situation occurred in 1998, when the government could find only one reliable source of financing — its employees and pensioners. On the contrary, the government in 1997 showed some determination in reducing arrears.

Table 11. The evolution of arrears (% GDP)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Budget Deficit</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Cash)</td>
<td>9.0</td>
<td>10.6</td>
<td>6.7</td>
<td>7.6</td>
<td>7.8</td>
<td>3.4</td>
</tr>
<tr>
<td>(Commitment)</td>
<td>10.4</td>
<td>12.9</td>
<td>9.0</td>
<td>12.4</td>
<td>4.6</td>
<td>9.3</td>
</tr>
<tr>
<td>Arrears</td>
<td>1.4</td>
<td>2.3</td>
<td>2.2</td>
<td>4.8</td>
<td>3.2</td>
<td>5.9</td>
</tr>
</tbody>
</table>

Source: IMF (1998b), CISR (1999), own calculations

The cost of arrears is low in money terms, although the social impact is disastrous. A large share of population depends crucially on wages, pensions and other benefits paid by the state; thus, the accumulation of arrears pushes these persons into poverty. Moreover, economic decisions are biased, since arrears distort the expected real returns on various economic activities. Public sector employees face uncertainty about the income they will receive while staying within the sector. At the same time, fictional transactions replace the real economic life. Arrears undermine the credibility of the state, making economic agents more reluctant to meet their tax obligations towards the budget. Workers in state enterprises perform jobs that do no bring any value added; however, instead of labour adjustment or wage constraint, workers are obliged to receive money that it is not paid. The budget finances extensive education and health programs that cannot be afforded; the quality of those programs falls therefore accordingly.

Surprisingly, political costs of running up arrears is apparently lower than in case of open reduction of social expenditures. Still, it seems politically impossible to increase furthermore the stock of arrears.
4. Servicing the Debt

The assessment about the volume of external borrowing must not be conducted separately from its utilisation in terms of future income generation. The growth potential of Moldovan economy was not enhanced, as borrowed funds were not directed to productive investments, but to the inefficient state sector. Moreover, borrowed money was not spent on structural reforms that would have limited the primary deficit of the budget. Instead, the overwhelming majority of funds was used to suspend the restructuring in the energy sector and fiscal adjustment. Externally financed government consumption possibilities undermined the incentives for reform implementation. Such policy led to increasing difficulties of debt servicing. The cost of servicing the debt increased to 4.8% in 1998, from 4.2% in 1997 (Table 12).

Indeed if Moldova would have met all its obligations, the external debt service would have consumed 7.5% of GDP in 1997 and 8.7% in 1998. Serious problems with servicing the external debt appeared already at the end of 1997 and at the beginning of 1998. While social expenditures prove to be rigid, the increase of debt servicing costs leads to the collapse of the budget and financial instability.

Moldova had to reschedule two credits from Russia (US$ 30 million) at the end of 1997, but in the course of 1998 it failed again to meet its obligations on this debt. The government also failed to honour some external guarantees. Payment arrears on energy supplies were developing particularly quickly and there is always the possibility that they will be converted into state debt under the pressure of energy resource suppliers. It is expected that repayments in future years will be so substantial that external financing will remain negative. As an indicator of country external exposure, the spread on Moldovan Eurobonds increased from 380 basic points to 800 at the end of 1997.

In fact, the external exposure of Moldova was already unsustainable in the first half of 1998, as the country faced debt trap and liquidity crisis. Similar cases appeared in other transitional countries [cf. Markiewicz, 1999]. The Hungarian crisis from 1994, for instance,

<table>
<thead>
<tr>
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<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Exports</td>
<td>1</td>
<td>2</td>
<td>10</td>
<td>6</td>
<td>17</td>
<td>28</td>
</tr>
<tr>
<td>Government Revenues</td>
<td>2</td>
<td>6</td>
<td>18</td>
<td>9</td>
<td>25</td>
<td>42</td>
</tr>
</tbody>
</table>

Source: IMF (1998b), Ministry of Finance, own calculations
led to the rebound of inflation. This situation came after 1993 difficulties, when the budget deficit grew to 7.6% of GDP, the public debt accounted for 17.9%, current account deficit increased to 9%, interest payments reached 4.5%, and external debt went to 64%. The 1995 crisis in Bulgaria had also its indirect roots in the accumulation of debt. The National Bank of Bulgaria tried to decrease the interest rates in order to alleviate the burden of debt service. In Russia, during the pre-crisis situation from 1997 the interest payments accounted for 5% of GDP, while public debt in GDP exceeded 60%. In Ukraine, in the eve of the crisis, the public debt represented around 30% of GDP.

5. Conclusions and Policy Recommendations

Instead of structural reforms and consequent fiscal adjustment the Moldovan governments have been heavily dependent on "quick fixes", which represent ,,measures that are easily implementable and relatively less costly politically, albeit nondurable and distortive" [Ter-Minassian, Schwartz, 1997]: in kind tax payments, netting out operations, across the board cuts in non-entitlement programs, reduction of undergoing investment and maintenance spending, delays in civil service wage adjustments, forced and unpaid leaves, payment arrears. The import surcharge tax implemented in 1999 belongs also to such a package of measures. It is however clearer today than at the beginning of transition that a sustainable fiscal policy cannot be run without implementation of structural reforms. Privatisation and restructuring represent the necessary condition to stop the losses generated by the public sector. The social protection system should be focused on the most needing groups. Netting-out operations and in-kind settlements need to be eliminated. The scale of barter must be reduced in order to provide enterprises with right incentives. Spending programs have to be thoroughly reviewed and adjusted. Although short-term macroeconomic considerations may induce the bias towards quick-fix measures, which are expected to bring positive budget outcomes rapidly, the quality of stabilisation is extremely fragile unless long run structural solutions are undertaken.

Discrepancies between predicted and actual state budget items erode credibility of the government. Wishful thinking while budgeting may decrease the general support for reforms. Moreover, unexpected shortfall of revenue financing or expenditure peaks may force the government to undertake costly emergency borrowings. Therefore, tools for responsible budget projections should be developed. It is especially important in case of tax collection analysis, since foreseen low budget
income needs to be reflected in expenditure cuts. As a general rule, projections of tax revenues should be based on the real economic performance, taking into account all factors that can lead to their reduction. Especially the tax base should not be projected on the basis of production capacities, but should account for low level of tax compliance and for the impact of exemptions on effective tax rates. In case of Social Fund, a serious viability analysis of the system should be undertaken. The external audit and budget evaluation should follow the execution of the budget, which can deter the misuse of government resources.

5.1. Sustainable Policies

Sustainability considerations are crucial for the development of good economic policy and need to be explicitly addressed by the Moldovan government. At the end of 1998, Moldova recorded both unsustainable budget and liquidity constraints. This is mainly due to the lax fiscal policy, short-sighted policy towards indebtedness and limited experience in the sovereign borrowings. Moreover, the excessive external borrowings were largely made not to speed up structural changes, but to suspend their necessity, since they were undertaken by public or publicly guaranteed debtors to cover current budgetary outflows. Slow progress of restructuring impedes the growth of the economy, which implies higher relative burden of debt repayments: Moldova has now a large amount of short-term debts. Even in comparison to other transition economies, Moldova is facing a severe indebtedness crisis, especially if interest rates remain high.

Sustainability analysis suggests that the cost of fiscal contraction costs becomes higher as indebtedness rises, therefore the "wait and see" strategy should be immediately dismissed and solvency crisis should be addressed through fiscal tightening. Unsustainable budget deficit is the major cause of current account deficit, since domestic private savings cannot offset the government dis-saving and the budget deficit is financed through negative current account imbalances. Moldova has an alarming current account deficit that exceeds 20% of GDP. The situation has to be alleviated through export promotion and enhanced energy sector efficiency. However, in a medium-term perspective CA improvement will not be large enough to support the increased interest payments.

Table 13 below presents some assessments of fiscal tightening that are necessary to stabilize the existing indebtedness. Obviously, since the economic growth was negative in 1998 and is also likely to be negative in 1999, the increase in the debt ratio can be only compensated by a higher primary budget surplus. The aggravation of the
economic performance since the beginning of 1998 complicates furthermore the unsustainability matter of economic policies. The decline in industrial production and exports lead to further decline in tax revenues without corresponding cut of expenditures.

**Table 13. Sustainable Budget Balance (%GDP)**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>5%</td>
<td>3.1</td>
<td>4.3</td>
<td>1.5</td>
<td>2.5</td>
<td>2.3</td>
</tr>
<tr>
<td>7.5%</td>
<td>4.6</td>
<td>6.4</td>
<td>2.3</td>
<td>3.7</td>
<td>3.5</td>
</tr>
<tr>
<td>10%</td>
<td>6.2</td>
<td>8.5</td>
<td>3</td>
<td>5.0</td>
<td>4.7</td>
</tr>
<tr>
<td>Actual Primary Budget Deficit</td>
<td>-0.4</td>
<td>-4.5</td>
<td>-5.6</td>
<td>-3.1</td>
<td>2.9</td>
</tr>
<tr>
<td>Growth Rate (Expected)</td>
<td>1.7</td>
<td>-5.0</td>
<td>0</td>
<td>1.0</td>
<td>5.8</td>
</tr>
<tr>
<td>Debt/GDP Ratio</td>
<td>63</td>
<td>81</td>
<td>30</td>
<td>50</td>
<td>49</td>
</tr>
</tbody>
</table>

* Calculated at the end of indicated year

The reported Sustainable Budget Balance is estimated as to stabilise the indebtedness at current level, when interest rates exceed the real growth by 5%, 7.5 % and 10%

Source: IMF (1998c), Ministry of Finance, own calculations

The Moldovan central authorities should assume the strategy of debt burden reduction through fiscal consolidation and no-borrowing policy. Further increase in the indebtedness will inevitably lead to the deterioration of debt structure, as the share of multilateral lenders will decline and rising unsustainability and the risk will cause the increase of interest rates on Moldovan liabilities. While the country should run a substantial primary balance, any overall budget deficit should be financed domestically. External borrowings may appear cheaper in short term, when domestic markets are premature and do not offer longer maturity. However, domestic financial markets in Moldova should be developed in order to lessen the exposure to the exchange market volatility and reduce the costs of borrowing in longer-run. Increased share of domestic borrowings in total debt can stimulate the development of domestic financial markets and, ideally, encourage domestic savings. The government should particularly eliminate the explicit or implicit debt guarantees, in particular to the energy sector. This debt is especially hazardous as it is very difficult to be monitored and generally its repayment profile is unknown. The government should make every effort to ensure that agreement with Gazprom on establishment of the new joint stock company MoldovaGas and debt-equity swap contains provisions that will protect the budget from pressures coming from future payment arrears of non-public agents.
5.2. Fiscal Reform

Moldova has enough reserves to raise additional budget revenues. This increase should be conducted through strict limitation of tax exemptions, unifying tax rates across various tax categories and elimination of sectoral differences in tax treatment (including agriculture). With this respect, there are several measures to be implemented in order to improve tax collection. More transparency should be introduced into the tax system, which is currently too complicated and provides opportunities for serious misconduct. Barter agreements and net settlements should be restricted or eliminated to avoid tax evasion. A simpler system and procedures may also promote the switch of activity from shadow economy to the legal economic life. A better tax administration, as well as more efficient procedures and enforcement methods are needed. As far as administration is concerned, the major obstacles to improvement are: inadequate staffing, poor training and low wages. The immediate response should involve the set up of internal control and accountability system to detect incorrect tax assessment and corruption among tax officers. Bonus-based system wages should be considered in the tax administration. Enforcement measures against non-compliant could involve [IMF, 1998c]: instant prosecution of the most flagrant cases of fraud, appropriation of accounts receivables, seizure and sale of property, large interest and penalties on overdue tax payments, accurate and current monitoring of outstanding tax arrears, no further tax exemption of tax penalties.

With respect to the expenditure side of the budget, the economic situation requires a major reduction of certain items, knowing that the implementation of radical reforms will bring additional expenditures to the budget (unemployment benefits, for instance). The social schemes should be thoroughly reviewed and future spending should be determined on the basis of explicitly assumed priorities and not as the renewal of appropriations from previous budgets. The excessive employment should be reduced. Important efficiency gains are possible through the consolidation of activities in the education and health care sectors. The state should withdraw from any kind of implicit subsidies to households and enterprises: tax concessions, deliveries of cheap energy and other utilities or tolerance of non-payment for such deliveries. Such subsidies tend to impede real restructuring. Charging market price for utilities and public services will lead to reduced waste of energy and resources. Remaining subsidies should be made explicit and transparent to eliminate the scope for rent seeking. At the same time, social assistance should be channelled directly to the poorest in order to offset the negative impact of higher prices. Unlike the inherited social protection system, which was not designed to prevent or alleviate poverty, the focus must be put on the most vulnerable groups of population.
III. THE CRISIS OF 1998: CONSEQUENCES AND POLICY RESPONSE

1. Introduction

The first immediate effect of 1998 crisis in Russia was the loss of confidence of foreign investors because of government inability to service the accumulated public debt. However, the crisis had much deeper roots in the lack of structural reforms, and slow pace of privatisation and restructuring. These drawbacks are an expression of the permanent weakness of the state with respect to its public finances. Consequently, the negative impact of Russian crisis was more severe in case of those countries where the same underlying problems have been present.

For Moldova, the lack of structural reforms translated into unsustainable internal and external positions at the end of 1997. Such a situation leads almost always to a financial crisis, unless rapid policy adjustments are undertaken. The turmoil that followed in 1988 the Russian crisis was for Moldova a catalyst that speeded up the collapse of its fragile monetary stabilization. The capital account losses (capital flight) brought the country to the verge of default. The Russian crisis had a deep impact on Moldovan economy, through the abrupt and probably persistent loss of major export markets, a situation that may affect the real economic activity over a longer time.

2. Channels of Crisis Dispersion: Pressures on Balance of Payments

2.1. Current Account

Moldova is a small open economy that is very sensitive to changes in its current account developments and international terms of trade. Unfortunately, the country’s exposure increased in recent years, as one partner – Russia – intensifies its domination over foreign trade. In 1997, exports to Russia accounted for more than 60% of total Moldovan exports, compared to 35% at the beginning of the decade. This involution is the direct consequence of a slow process of restructuring in the economy, reflects the absence of any efforts to diversify export markets. Traditionally, Moldovan producers have benefited from a privileged access to relatively low competitive Russian
markets. However, this situation has impeded the development of marketing skills of Moldovan enterprises, as well as the quality adjustment of goods. On the other hand, the exports to Russia have been politically promoted in order to cover the import of energy from this country. In-kind operations had a large share in total transactions with Russia, which induced further negative consequences on the investment possibilities of Moldovan producers. As a result, the dependence of the economy has been raising, which allowed Russia to enhance its terms of trade against Moldova; a significant part of negative shocks faced by Russian enterprises during the transition has been therefore transferred to Moldovan firms. Consequently, the 1998 crisis determined not only a fall of exports to Russia, but also lower prices paid by Russian importers for Moldovan products. Furthermore, the price decrease reduced the profit margins of Moldovan exporters. At the same time, the Russian supply of energy is realised under less favourable conditions.

Figure 15. External Trade

As a results the collapse of Russian demand for Moldovan products had a devastating impact on the economy. The crisis came unexpectedly and practically froze the exports to Russia, although the situation of exporters had been deteriorating since the beginning of the year. In September 1998 alone exports fell by almost 80% in comparison to the same month of the previous year and the situation did not improve
until the end of the year. For the first time since early 1996, Moldova reported a negative trade balance with Russia.

The post-crisis deterioration of trade flows is not so dramatic when considering the total volume of external commercial changes. In the second half of 1998 the decline of

Figure 16. Trade Balance of Moldova (US$ millions)

Figure 17. Trade Balance and Current Account of Moldova (US$ millions)
exports to CIS markets was offset by the tendency of decreasing imports from non-CIS countries, which alleviated the impact on trade balance. However, the overall trade performance in 1998 was unfavourable, with the external trade deficit reaching 24% of GDP (in comparison to 18% in 1997).

The current account has also deteriorated because of the fall in revenues. More than 10,000 Moldovan citizens work abroad, representing 8% of total employment in manufacturing industry and 90% of those working abroad are employed by Russian firms, mainly in constructions. Since the collapse of investment capabilities in Russia private remittance has shrunk significantly. The net factor income in 1998 decreased by 50% (20 US $million) in comparison to 1997, but this change was offset by the surge in net current transfers. As a result, the current account deficit accounted for 20% of GDP in 1998 (in comparison to 16% in 1997).

2.2. Capital Account

The current account imbalances between 1995 and 1997 were coupled with surging capital inflows that increased twofold over the period. The change in the market sentiment following the Asian crisis, combined with the growing concern about economic developments in CIS countries, reversed the positive trend. As a consequence of Russian crisis, all countries in the region experienced dramatic outflow of private financing, with rising interest spreads on treasury bills. Private capital available to European emerging markets (especially CIS countries) shrank significantly. In response to the crisis, foreign investors in Moldova withdrew their funds, converted them into dollars, and left the market. Domestic entrepreneurs were ready to fake external trade contracts, in order to buy dollars, while Moldovan commercial banks became involved in speculations against national currency.

Such a rapid reversal was possible due to the fact that improvement of capital account in recent years, was fuelled exclusively by portfolio inflows. These inflows increased by more than 4 folds in 1997 compared to 1996, although this was an effect of only two large transactions done in the second quarter of 1997: Eurobond placement and securitisation of the debt to Gazprom. Besides, non-resident played a significant role on the T-bill market. However, the portfolio investment proved to be very volatile. The reluctance to credit the Moldovan government started at the beginning of 1998 and culminated with the massive outflow of funds after the outbreak of Russian crisis. The withdrawal from the T-Bill market was estimated at US$ 30 million, followed by the redemption of US$30 million of the first Moldovan private placement. A massive capital flight was observed in case of primarily unrecorded foreign currency transactions. The receipts from IMF (quite
substantial in 1995 and 1996) dropped almost to zero in 1997 and 1998, due to the halt of EEF credit line. The difficulties with respect to the loan agreements led to negative financing from the World Bank in that period. New disbursements from IMF were not made until January 1999. At the same time, foreign debt payments to IMF alone required about $70 million in 1997 and 1998.

As in many other countries, foreign direct investors proved to be the most stable source of capital inflow. In the first half of 1998 the growth of foreign direct investments in Moldova remained positive, although at a lower rate. In 1998 FDI was 20% higher than in 1997 (FDI increased threefold in 1997 in comparison to 1996). However, it should be noted that so far Moldova failed to attract substantial FDIs (only US$ 90 million in 1998) and even their steady inflow does not compensate the flight of portfolio investment.

In spite of a steadily deteriorating situation, until the end of the third quarter 1998 the capital account recorded a surplus. However, it covered only 45%, 11%, respectively 1% of current account deficit corresponding to the first, second respectively third quarter (while for whole year of 1997 the ratio was 120%). Following the Russian crisis, the capital account shifted into a large deficit.
3. Consequences of the Crisis and Related Policy Dilemmas

3.1. Monetary Consequences

The deterioration of the balance of payments induced a serious financial instability in Moldova, forcing the authorities to adjust their policy accordingly. Fostering such adjustments, while avoiding social costs is the major objective of 1999 agenda.

3.1.1. Exchange Rate and Foreign Reserves

The BoP deterioration exerted a strong pressure on the national currency. The crucial dilemma that NBM had to consider was whether to defend the currency or to allow the market forces to determine a new equilibrium exchange rate. Two main reasons drove NBM initial decision to maintain at any cost the stability of leu until November 1998. Firstly, the costs of servicing the debt would have raised above the financial capabilities of the government. Secondly, a stable national currency was the only
visible sign of successful economic reforms in Moldova: It took NBM five years to gain credibility through exchange rate stability. The decision to devalue the currency was therefore seen as a risk to compromise the whole financial system, which could have led to massive sales of domestic currency and therefore to the collapse of the system.

Initially, NBM tried to maintain the exchange rate through substantial interventions on the foreign exchange market. Until November 1998 the leu was maintained at an artificially high level with very harmful impact on the stock of international reserves. Despite the huge amount of hard currency sold by NBM in September – October 1998, the exchange rate (leu/ US $) increased from 4.7 in August to 5 in mid October.

Such a policy response determined a widely spread criticism, as it was argued that the scale of Russian crisis made it impossible to maintain the existing exchange rate level. It should be also noted that between mid-August and the beginning of November the Russian rouble was devalued by 170% and the Ukrainian hryvna by 65%. A strong leu meant therefore a real appreciation of leu against rouble, which contributed to the loss of Moldovan competitiveness on Russian and Ukrainian markets. In such a situation, the NBM policy proved to be unsustainable: the bank ignored the warnings expressed inter alia by IMF and continued its efforts to revert the capital flight. The support of national currency translated into substantial losses of international reserves. Even before the Russian crisis, an alarming sign was represented by the massive sales of hard currency on the Interbank Foreign Exchange market. For the first time since the introduction of the national currency, NBM net transactions at the Bourse were negative for seven months.

Figure 20. Exchange rate of the Moldovan leu

Source: National Bank of Moldova
(January – July 1998). During this period, NBM sales exceeded by US$ 41 million the overall amount bought on the market. Moreover, even after the crisis NBM intervened massively to defend the leu: only between August and October 1998 NBM blew out of

**Figure 21. NBM’s net transactions at the Bourse vs. exchange rate fluctuations (1998–99)**

![Graph showing NBM’s net transactions at the Bourse vs. exchange rate fluctuations (1998–99)](image)

Source: National Bank of Moldova

**Figure 22. NBM foreign exchange reserves**

![Graph showing NBM foreign exchange reserves](image)

Source: National Bank of Moldova
its reserves other US$ 81 million. Total losses reached therefore almost US$ 123 million. Gross NBM reserves decreased from US$ 366 million at the beginning of 1998 to US$ 144 million at end of the year, i.e. by US$ 222 million (the difference comes from debt service payments). In few months, NBM reserves reached therefore the 1994 level.

In the second half of October 1998 NBM decided to make another attempt to stabilize the leu by using the mandatory reserves of commercial banks as the pivot of monetary policy. The reserve requirement raised from 8% to 25%. By this measure, NBM wanted to limit the demand for hard currency of the banks by diminishing their liquidity in national currency. NBM expected that the lack of cash would determine the commercial banks to sell hard currency on the Inter-bank market. However, the NBM expectations were not fulfilled. Although a number of banks started to build the required reserves, until the end of October no bank managed to accomplish the task. Meanwhile, the currency continued to depreciate, approaching 6 lei per US$ by the end of October.

Starting with November 2nd, the NBM decided to stop selling hard currency, allowing the commercial banks to freely determine the exchange rate. The withdrawal actually meant that NBM failed to meet the growing demand for hard currency. Since that moment, the official exchange rate has been set as a weighted average of the rates resulting from banks transactions.

Facing the impossibility of commercial banks to meet the reserve requirement, NBM reduced the compulsory level to 15%, requiring that 10% of total assets of the banks to be represented by T-bills. As a result, the national currency depreciated sharply from 6.40 lei/US$ (November 1st) to 9.71 lei/US$ on 1st December 1998. The exchange rate became then rather stable, mainly due to NBM strong enforcement of reserve requirements. Moreover, the leu knew a slight appreciation (8.32 lei/US$ on January 1st, 1999) and NBM managed to buy US$ 16 million. Then the depreciation started again, but at a slow pace. By the end of March 1999, the exchange rate recorded 9.16 lei/US$, which represents a new equilibrium of the market. The non-intervention policy of NBM proved therefore to be successful. This policy is likely to be maintained in the future, since the main concern of the Central Bank must be the accumulation of new foreign reserves.

3.1.2. Deposits and the Banking System

The commercial banks passed relatively untouched through the crisis because there was no substantial currency forward exposure and the debt was not largely denominated in foreign currency. Still, many months after the outbreak of crisis the banking sector faced a serious lack of funds. The initial confidence in commercial banks, reflected by the high growth of households' deposits in domestic currency (Lei 71.3 million in the first half
of 1998), was drastically reversed at the end of August 1998, when the Russian banking sector collapsed. This event induced strong depreciation expectations in case of Moldovan population: a significant drop in Lei deposits was reported, which decreased from 746.7 million in January 1998 to 492.6 million in January 1999. On the contrary, dollar deposits doubled during the same period, meaning that a large part of savings in lei were converted into hard currency deposits: between August and October 1998, more than Lei 250 million were withdrawn from banks, while Lei 120 million were converted into foreign currency. The dollarisation ratio of deposits, which increased from 20% in 1997 to 44% in the end of 1998, show the falling confidence in the national currency. However, this loss of confidence was not accompanied by a similar attitude towards the banking system. Due to the small size of Moldovan banking system, the withdrawal of deposits, which determined a fall of banks available liquidity, brought serious difficulties in honouring payment commitments, especially those in national currency. These difficulties have been overcome and banking crisis has been avoided.

3.1.3. Inflation

In 1998 the inflation rate showed a significant shrink compared to previous years, with four months of deflation that brought the inflation rate to only 0.97% within the period January-October. The deflation had a seasonal nature (falling prices of food),
but also a monetary explanation. The cash in circulation shrank by about 25% in 1998, due to massive NBM withdrawal of lei in exchange of hard currency. However, the ulterior depreciation of leu re-fuelled the inflation. High dependence of Moldovan economy on imports, as well as the high level of dollarisation, induced inflationary effects through exchange rate movements. Prices of imported goods increased proportionally to the exchange rate, substitution of foreign goods with domestic products, higher costs of manufacturing increased the prices of domestically produced goods. As it was noted by Rybinski (1998) the lower level of competition in the market the higher the response of prices to the depreciation, so the monopolistic structure of Moldovan market made the price response immediate. On the other hand, because of deteriorated export possibilities, local producers tried to sell more on domestic markets, which determined a certain constraint on price movements. Finally, depreciation induced higher tariffs for imported gas and electricity. It is important to note that a significant component of 1998 inflation is the money growth related to the NBM direct credit to the government in the fourth quarter of 1998 and at the beginning of 1999.

**Figure 24. Inflation vs. money growth and currency depreciation**

![Inflation vs. money growth and currency depreciation](image)

Source: National Bank of Moldova

Falling monetisation of the economy (increasing velocity of money) was another cause for increasing inflation. Declining demand for real money balances was the obvious result of the loss of confidence in the national currency. The impact of the crisis on the
level of monetisation is however difficult to measure due to the very high seasonality of the demand for money in Moldova.

3.1.4. Wages

Real wages of Moldovan workers were not initially negatively affected as a result of the currency depreciation. The wage hike in the last quarter of 1998 (of seasonal character) more than offset the inflation effect and put further upward pressure on prices. Wages however fell, both in nominal and real terms, in the first months of 1999 which significantly reduced the purchasing power of the population. Wages expressed in dollar terms were falling since the outbreak of the crisis. Declining wages contribute significantly to the fall in inflation and imports in 1999.

3.2. Fiscal Consequences

3.2.1. Revenues and Expenditures

The first nine months of 1998 featured a very unsatisfactory level of revenues to the Consolidated Budget: only 54% of the whole year projection was collected during
that period, compared 64.8% in 1997. At the end of November, less than 70% of the planned revenue was collected. The major reason for such a situation resides in the

Figure 27. Budget Revenues and Expenditures

Source: MET
general decline of the economic performance, especially in the export sector. Since the 1998 budget was shaped within the pre-electoral political climate from 1997, the amendments were inevitable. The unfavourable situation on international financial markets, which preceded the Russian crisis, made impossible the financing of the deficit. Consequently, the government introduced in August some expenditure cuts, together with the freeze of public wages and revocation of certain pension privileges. At the same time, the excise taxes were increased and several tax exemptions were removed. These measures reduced significantly the expenditures; during the first nine months of 1998, only 52.4% of annual expenditures were made, compared to 72.4% in 1997 (the same period). Despite the express priority given to the public debt service and payment of salaries, large arrears were accumulated: in October 1998, total arrears to the budget reached Lei 950 million (Lei 600 million at the beginning of the year). As a consequence, additional amendments became necessary, and they were introduced in November.

3.2.2. The T-Bills Market

T-bill market started to function in the second half of 1995. The initially high interest rates decreased steadily while inflation rate was brought down to a rate oscillating around 10%. Between 1995 and 1997 the NBM strict monetary policy and the commitment to stabilize the exchange rate induced significant credibility to domestic and foreign investors. The rates on T-bills fell with the increasing maturity of the debt: 182 days T-bills were introduced in 1996 and 273 days treasury securities in 1997. Moreover, the hump shaped yield curve suggests that investors anticipated a slow depreciation (successful disinflation) of the currency in long run. The average market rates halved between 1995 and 1997, which reduced the dependence of the budget on the direct credit from the Central Bank. The volume of T-bills sales doubled both in 1996 and 1997.

Unfortunately, these developments were mainly the result of a wider participation of foreign investors on the market, rather than the growth of domestic financial resources. Moreover, while interest rates on state securities were gradually decreasing, they were high enough to allow commercial banks to get easy and guaranteed profits, instead of crediting the economy. The volume of securities issued by the state increased continuously until 1998, when the proceeds from newly issued bills and bonds could not cover the amount needed for securities redemption. The unfavourable evolution of interest rates started at the end of 1997 and it was partly the result of the attitude change of investors following the Asian crisis, and partly the raising doubts about the sustainability of the economic policy implemented by Moldovan authorities. The interest rate increased sharply in June, when the demand for long-term securities
Figure 28. Annual interest rates on T-bills

Source: MET

Figure 29. T-bills sold at NBM auctions

Source: MET
plunged. Since in June the economy experiences the usual seasonal deflation, it follows that the increase in real terms was even important and became explosive when the Russian crisis erupted.

The crisis induced the collapse of demand for state. Foreign investors left the market despite the high attractive price of securities offered by the state. Traditionally, out of the total number of T-bills issued, 35% were bought by foreigners, 5% by local enterprises, and the remaining 60% by domestic commercial banks. As the sovereign rating of Moldova has been downgraded from "stable" to "negative", the external financing of the budget became impossible.

The returns on T-bills started to be converted into US dollars (also by domestic banks), which led to a decline of T-Bills value from Lei 315.4 million to Lei 280.2 million. The low demand for treasury securities induced serious difficulties in rolling-over the outstanding debt. No long-term securities were demanded, while the interest rate on shorter maturity increased sharply. In September, only 25% of T-bills offered for sale were bought. The next months, the situation worsened even more: the T-bills market was unable to provide funds not only for covering the budget deficit, but even to roll over the already issued T-bills. In order to alleviate the crisis of confidence, the government proceeded to a new issue of 7, respectively 14 days maturity T-Bills. The new titles attracted some buyers, but the government was forced to substitute shorter

Figure 30. Financing of the Budget Deficit

Source: Ministry of Finance
maturity T-bills for those with three months. For the first time since 1995, the government was unable to redeem all T-Bills, and therefore unable to finance its outstanding commitments. The country was on the verge of default, no new loans from abroad being available.

In this situation, NBM was forced to direct a credit to the Ministry of Finance, with obvious impact on monetary aggregates. In order to offset this effect, NBM increased the rate of required reserves up to 25%. Commercial banks were also forced to hold a part of their reserves in T-bills, which helped the T-bill market. beginning of 1999 showed a slow recovery of demand for short maturity T-bills.

3.2.3. The External Debt Service

Devaluation means the raise of the burden in case of dollar-denominated debts. Such a debt trap led in Latin American countries to the "lost decade" of economic stagnation. Similarly, such a considerable external debt generated the Russian crisis. In case of Moldova, where the devaluation is equivalent to a proportional increase of indebtedness, all interest and amortisation payments that government needs to make require more domestic resources. This is because the tax revenues are denominated in lei, and they are not likely to raise in response to devaluation. The massive outflow of foreign investors from the market of securities (which makes impossible the rolling over of obligations), combined with the necessity to make payments in dollars, leads to a situation that is not

Figure 31. External Debt Service

![Graph showing external debt service from 1994 to 2002](image)

Source: CISR estimations (1999)
far from the international default. The accumulated stock of external debt reached US$ 1.3 billion on January 1st 1999, which represents almost 80% of country's GDP. The share of debt service to exports raised from 17% in 1997 to almost 30% in 1998, and is likely to remain at the same level in 1999. In practice, Moldova is unable to service its external debt without a strong support from international organizations.

3.3. The Impact on Real Sector

According to the official forecast, 1998 was supposed to be the second year of economic growth in Moldova, with a real GDP increase of more than 3%. However, negative tendencies started to appear in the economy since the beginning of 1998. The bad harvest in agriculture, combined with the crisis that hit the economy in the second half of the year, led to a decline of real GDP by 8.6% in 1998.

While in the first eight months of 1998 the industrial output fell by 2%, compared to the same period of 1997, in September the decline represented 32.5%. This fall was determined by the abrupt decline of Russian demand for Moldovan products. Virtually, all industrial sectors were damaged, including the leading agro-industrial complex, which shows unfavourable prospects for the future. Since the exports to Russia are not likely to

Figure 32. Index of the Agricultural Output — Constant Prices

![Graph of agricultural output](source: MET)
recover in medium term to the level reported in 1997, this sector will not be able to stimulate the economy in the upcoming years. On the other hand, the reorientation of exports towards Western markets will require certain time. The same time constraint applies for quality improvement of exported goods and for adopting corresponding marketing strategies.

The impact of financial instability on the real economy will be less significant, although high interest rates impede bank lending to the private sector and discourage fixed investments. Currency and banking crises implied, on average, an accumulated loss of 14% of GDP in 26 cases of crises in the emerging economies in the period 1975–1997 (IMF 1998a). In case of Moldova these effects will be limited by the less significant role of bank credits and low leverage of corporate sector. Moreover, a large share of transactions are conducted on a non-cash basis. However, if the development of financial markets slows down, the inefficiency in supplying the funds that are necessary for restructuring purposes may hamper the long run growth of the economy.
4. Impulses for Further Reforms

It might seem odd, but the Russian crisis may have some positive influences on the economic reforms in Moldova. The current crisis may force the authorities to start thinking about solving the fundamental problems of the country, mainly related to the absence of structural changes. A critical situation makes the public more likely to accept the painful measures that are necessary to revert the negative tendencies accumulated in recent years. The fact that the state fails to deliver basic services is a credible reason for radical reforms; the population may indeed believe that the government has no other choice but to change immediately the situation. The large external debt makes the country fully dependent on the co-operation with international organizations, especially the IMF. It should be also noted that the developments of the crisis in Moldova were more similar to those in Ukraine rather than in Russia. Specifically, Moldova did not announce the default, the banking sector remained relatively stable and political changes did not bring additional destabilization [cf. Dabrowski et al. 1999]. It may be therefore possible that the post-crisis evolution in Moldova will be close to the Bulgarian experience, where the financial crisis from 1997 induced the adjustment of economic policy with restrictive fiscal stance. The acceleration of structural reforms allowed Bulgaria to restore the growth in 1998, unlike Russia where the fiscal policy was further loosened, financial discipline weakened, and structural reforms abandoned.

A window opportunity for accelerating Moldovan reforms emerged therefore from the recent crisis, and there are signs that policy-makers approach more seriously the budgetary problems. Besides, the government adopted a relatively more austere (but not fully feasible) budget for 1999, prepared under the IMF recommendations. Significant institutional changes are also envisaged. The custom offices with Transnistria were introduced in order to eliminate the smuggling phenomenon. The unification of VAT regimes has been introduced since January 1st, 1999. At the same time, the Moldovan government committed to abolish non-cash tax payments. The new cabinet of young and liberal reformers, voted in March 1999, initiated a more energetic program of measures aimed to improve the following policy fields:
- constraining social privileges and tax exemptions;
- the reform of energy sector, with privatisation of distribution network to be completed in 1999;
- cash privatisation (including MoldTelecom);
- smoothening of bankruptcy procedures.
Somehow surprisingly, the crisis may have also a positive impact on FDIs in a medium term perspective. Although the fall in confidence contributed to the deterioration of the economic situation, the cash stripped budget and the general fall in industrial production forced the policy makers to speed up the privatisation process. As a result, the state started to seek for more reasonable prices for enterprises offered for sale, which determined the successful execution of some transactions. Previously, the government was very reluctant to sell the state property and therefore only 20% of planned privatisations were concluded in 1997 and 1998.

Similarly, the decline of exports to Russia forced Moldovan enterprises to search new export possibilities. At the same time, the devaluation of national currency facilitates the penetration of non-CIS markets. Indeed, many companies are trying to enter non-traditional western markets, struggling to enhance its competitiveness and finding market niches. The Moldovan economy reports an improvement of trade with non-CIS countries and a declining significance of the exports to CIS-countries.

Table 14. Exports of Moldova to selected countries (US$ million)

<table>
<thead>
<tr>
<th></th>
<th>1998 Q1</th>
<th>1999 Q1</th>
<th>% change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Russia</td>
<td>104.6</td>
<td>32.2</td>
<td>-69%</td>
</tr>
<tr>
<td>Ukraine</td>
<td>12.6</td>
<td>7.2</td>
<td>-43%</td>
</tr>
<tr>
<td>Romania</td>
<td>13.0</td>
<td>9.4</td>
<td>-28%</td>
</tr>
<tr>
<td>Other Non-CIS CE economies</td>
<td>3.3</td>
<td>10.4</td>
<td>215%</td>
</tr>
<tr>
<td>Non-transition economies</td>
<td>31.0</td>
<td>31.4</td>
<td>0%</td>
</tr>
<tr>
<td>Total</td>
<td>176.0</td>
<td>100.6</td>
<td>-43%</td>
</tr>
</tbody>
</table>

Source: Ministry of Economy and Reforms
References


Moldovan Economic Trends, TACIS, Chisinau, various issues.


69
Appendix: Moldova – basic facts

Area: 33,700 sq km (including Transnistria)
Length if boundaries: 1,389 km (Romania 450 km, Ukraine 939 km)
Geography: rolling steppe, gradual slope south to Black Sea
Climate: moderate winters, warm summers
Population: 3.6 million – including Transnistria 4.4 million (July 1997 est.)
Population growth rate: -0.02% (1997 est.)
Natural growth rate: 0.19% (1997 est.)
Net migration rate: -0.21% (1997 est.)
Infant mortality rate: 19.9 deaths/1,000 live births (1997 est.)
Life expectancy at birth: 66.7 years
Share of urban population: 46%
Adult literacy rate: 96.4%
Ethnic groups: Moldavian/Romanian 64.5%, Ukrainian 13.8%, Russian 13%, Gagauz 3.5%
Languages: Moldovan/Romanian (official), Russian, Gagauz (a Turkish dialect)

Moldova, an independent state since 1991, was the second smallest republic of the former Soviet Union. The territorial integrity of the country, landlocked between Ukraine in the north, east and south and Romania in the west, is under the threat from the self-proclaimed secession of Transnistria, the Russian-speaking territory. Long-term settlement of the conflict is still to be accomplished.

Moldova is the most densely populated country in the CIS, but at the same time one of the least urbanised. Fertile soils and a moderate climate encourage agricultural production that accounts (together with agro industry) for 50% of GDP. Food products were traditionally supplied to the vast market of former Soviet Union. The collapse of trade links, deterioration of terms of trade that followed the dissolution of Soviet Union had very negative consequences on the Moldovan economy and the real GDP declined by 66% between 1989 and 1997. Moldova remains fully dependent on imports of energy resources. While the consequent IMF-guided policy of National Bank of Moldova allowed achieving fragile macronomic stabilisation before 1997, only very limited progress was made in structural reforms.

Table 15. Moldova in the process of reforms

<table>
<thead>
<tr>
<th>Countries</th>
<th>Private sector share of GDP in %, mid-1997 (rough EBRD estimate)</th>
<th>Enterprises</th>
<th>Markets and trade</th>
<th>Financial institutions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Large-scale privatisation</td>
<td>Small-scale privatisation</td>
<td>Governance &amp; restructuring</td>
</tr>
<tr>
<td>Belarus</td>
<td>20</td>
<td>1</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>50</td>
<td>3</td>
<td>3</td>
<td>2+</td>
</tr>
<tr>
<td>Latvia</td>
<td>60</td>
<td>3</td>
<td>4</td>
<td>3-</td>
</tr>
<tr>
<td>Moldova</td>
<td>45</td>
<td>3</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Slovenia</td>
<td>50</td>
<td>3+</td>
<td>4+</td>
<td>3-</td>
</tr>
<tr>
<td>Ukraine</td>
<td>50</td>
<td>3-</td>
<td>3+</td>
<td>2</td>
</tr>
</tbody>
</table>

Scale 1−5, 1 — the lowest grade: very small or no progress, 5 — the highest grade: the complete, successful reform
Source: EBRD, Transition report 1997
Figure 34. Structure of GDP – 1998

Figure 35. Structure of Exports – 1998

Figure 36. Destinations of Exports – 1998

Source: Ministry of Economy and Reforms
### Table 16. Main Macroeconomic Indicators

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Real GDP growth rate</strong></td>
<td>-1.2%</td>
<td>-30.9%</td>
<td>-1.4%</td>
<td>-7.8%</td>
<td>1.6%</td>
<td>-8.6%</td>
</tr>
<tr>
<td><strong>Nominal GDP (excl. Transnistria), lei million</strong></td>
<td>1821</td>
<td>4737</td>
<td>6480</td>
<td>7658</td>
<td>8917</td>
<td>8804</td>
</tr>
<tr>
<td><strong>Nominal GDP, USD million</strong></td>
<td>1214</td>
<td>1164</td>
<td>1443</td>
<td>1665</td>
<td>1933</td>
<td>1630</td>
</tr>
<tr>
<td><strong>GDP per capita, USD</strong></td>
<td>337</td>
<td>322</td>
<td>400</td>
<td>463</td>
<td>538</td>
<td>454</td>
</tr>
<tr>
<td><strong>Export (fob), USD million</strong></td>
<td>395</td>
<td>618</td>
<td>739</td>
<td>822</td>
<td>851</td>
<td>644</td>
</tr>
<tr>
<td><strong>Import (fob), USD million</strong></td>
<td>530</td>
<td>672</td>
<td>794</td>
<td>1056</td>
<td>1235</td>
<td>1043</td>
</tr>
<tr>
<td><strong>Trade balance, USD million</strong></td>
<td>-135</td>
<td>-54</td>
<td>-55</td>
<td>-234</td>
<td>-384</td>
<td>-399</td>
</tr>
<tr>
<td><strong>Current account, USD million</strong></td>
<td>-155</td>
<td>-97</td>
<td>-115</td>
<td>-195</td>
<td>-308</td>
<td>-332</td>
</tr>
<tr>
<td>as % of GDP</td>
<td>-12.7%</td>
<td>-8.3%</td>
<td>-8.0%</td>
<td>-11.7%</td>
<td>-15.9%</td>
<td>-20.4%</td>
</tr>
<tr>
<td><strong>Foreign direct investments, USD million</strong></td>
<td>1</td>
<td>18</td>
<td>73</td>
<td>23</td>
<td>71</td>
<td>88</td>
</tr>
<tr>
<td>as % of GDP</td>
<td>0%</td>
<td>1.5%</td>
<td>5.1%</td>
<td>1.4%</td>
<td>3.7%</td>
<td>5.4%</td>
</tr>
<tr>
<td><strong>Stock of foreign debt, USD million</strong></td>
<td>255</td>
<td>633</td>
<td>840</td>
<td>1068</td>
<td>1228</td>
<td>1300</td>
</tr>
<tr>
<td>as % of GDP</td>
<td>21%</td>
<td>54.3%</td>
<td>58.2%</td>
<td>64.1%</td>
<td>63.6%</td>
<td>79.7%</td>
</tr>
<tr>
<td><strong>NBM gross forex reserves, USD million</strong></td>
<td>76</td>
<td>180</td>
<td>257</td>
<td>314</td>
<td>366</td>
<td>144</td>
</tr>
<tr>
<td><strong>NBM reserves in months of imports</strong></td>
<td>of goods and services</td>
<td>1.73</td>
<td>2.85</td>
<td>3.03</td>
<td>3.00</td>
<td>3.07</td>
</tr>
<tr>
<td><strong>Internal debt, million lei</strong></td>
<td>105</td>
<td>270</td>
<td>477</td>
<td>737</td>
<td>940</td>
<td>1500</td>
</tr>
<tr>
<td><strong>Budget balance as % of GDP</strong></td>
<td>-7.5%</td>
<td>-5.9%</td>
<td>-6.7%</td>
<td>-7.6%</td>
<td>-7.8%</td>
<td>-3.6%</td>
</tr>
<tr>
<td><strong>Annual inflation rate (end period)</strong></td>
<td>2706.0%</td>
<td>104.6%</td>
<td>23.8%</td>
<td>15.1%</td>
<td>11.2%</td>
<td>18.3%</td>
</tr>
<tr>
<td><strong>End-year exchange rate, lei/1USD</strong></td>
<td>3.64</td>
<td>4.27</td>
<td>4.50</td>
<td>4.65</td>
<td>4.66</td>
<td>8.32</td>
</tr>
<tr>
<td><strong>Average exchange rate, lei/1USD</strong></td>
<td>1.5</td>
<td>4.1</td>
<td>4.5</td>
<td>4.6</td>
<td>4.6</td>
<td>5.4</td>
</tr>
</tbody>
</table>

Source: CISR calculations based on data from Ministry of Economy and Reforms, Ministry of Finance, National Bank of Moldova
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