# 3. MONETIZATION OF THE MOLDOVAN ECONOMY

Monetization in Moldova in comparison with other countries

Money and credit tend to play a greater role in more developed countries, than in less developed ones. Rich countries are more stable: they tend to have (or can afford) more efficient tax administrations and usually have less urgent budget needs, which diminishes their incentives to resort to inflation tax as a way of generating budget revenues. Also, they have (or can afford) a higher level of human capital and better financial institutions, which implicates a more efficient, safer and wider use of credit. In 1997 in countries with the annual income above 10,000 US$ per capita, the average monetization (ratio of Broad Money, including foreign currency deposits, to GDP) was 82%, while in the remaining countries – 37%. Figure 3.1 presents the relationship between per capita income and monetization graphically, with a fitted regression line.

Figure 3.1. Per capita GDP and monetization in the world (excluding transition economies) in 1997
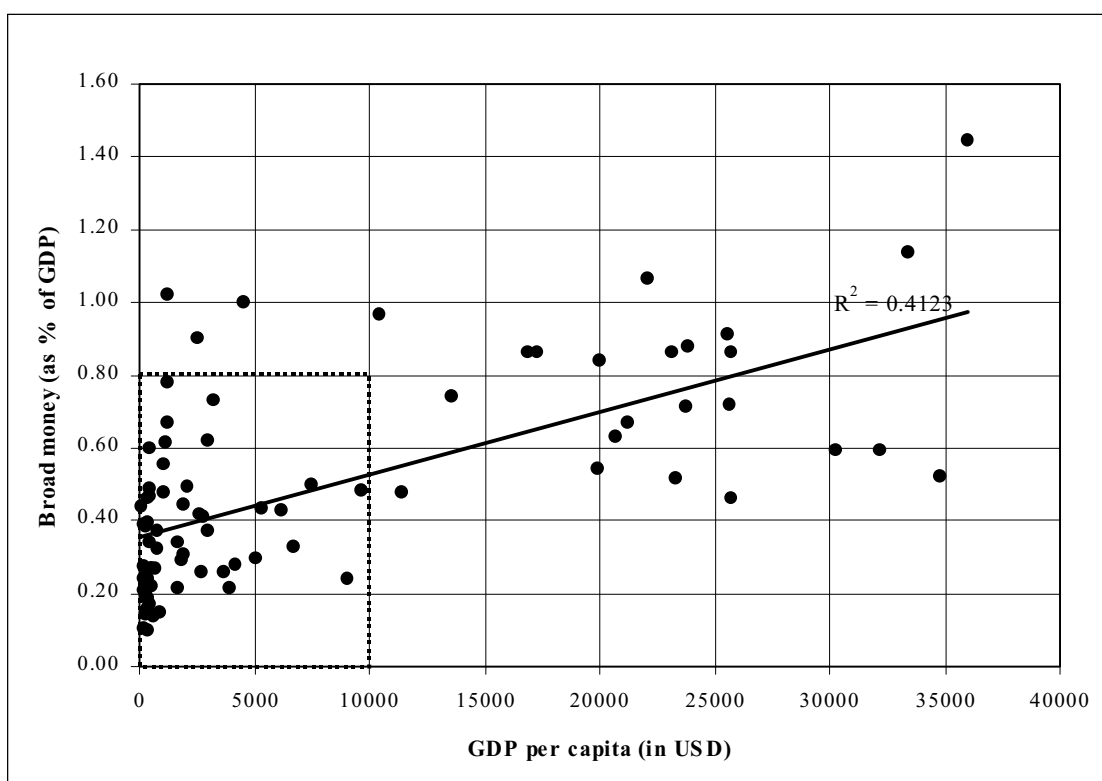
Note: The year 1997 was chosen for the comparison, because this is the latest year for which data exists for most countries. Broad money includes foreign currency deposits, because this data is most widely available.

Source: International Financial Statistics

A simple regression of monetization on income (and a constant term) captures 40% of the variability of monetization[5]. This result has been shown to be independent of the period for which the data is analyzed[6].

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[5] Wellisz (1995) used an analogous regression analysis to assess the level of monetization in Poland. Below his reasoning is repeated for Moldova.
[6] See: Wellisz (1995), Jarociński (1998)

Table 3.1. Regression analysis of monetization and per capita GDP

	Coefficients	Standard Error	t-Statistic
Intercept	0.36	0.029784	11.9
GDP per capita	1.72 E-05	2.28E-06	7.54
Observations: 83	Std. Error: 0.22	R^2: 0.41	Adj. R^2: 0.41

Source: own calculations

Transition economies, to which Moldova belongs, are likely to have a low monetization level at least because their per capita GDP is low. Additionally, their financial systems were being seriously developed only for the last several years. Finally, high inflation is proved to cause a fast and not easily reversible reduction of monetization[7] and most transition countries had an episode of high inflation in the beginning of transition.

Figure 3.2 demonstrates that transition countries indeed tend to lie below the line illustrating the average level of monetization, controlled for the level of income. Monetization is especially low in the post-soviet countries (excluding Baltic states). In fact some of them (Georgia, Armenia) have lower monetization level than any other country of the world.

Figure 3.2. Per capita GDP and monetization in 1997 including transition economies – countries with per capita income below 10,000 US$, vertical scale truncated at 0.8% of GDP
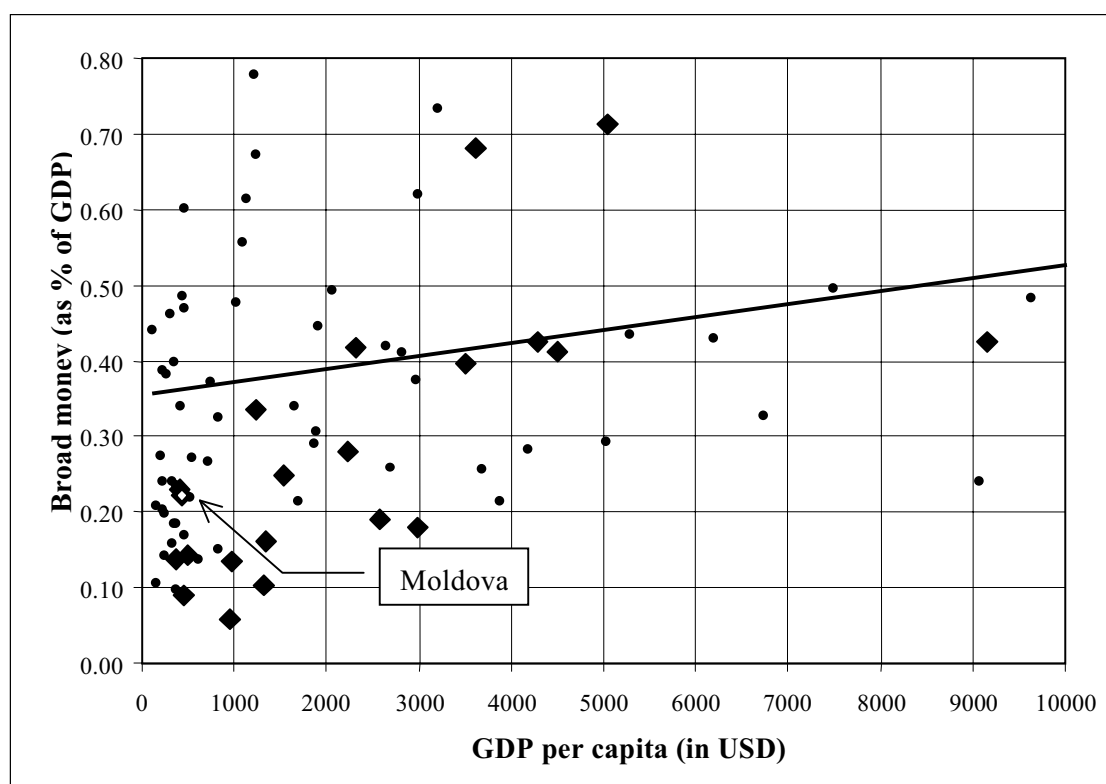
Note: Non-Transition Economies are marked with small points, Transition Economies are marked with big squares, and Moldova is marked with the big empty square.

Source: International Financial Statistics

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[7] See Ghosh (1996), De Broeck et al. (1997).

Table 3.2. Monetization in transition countries in 1997

Country	Monetization
GEORGIA	6%
ARMENIA	9%
KAZAKHSTAN	10%
UKRAINE	14%
KYRGYZ REPUBLIC	14%
AZERBAIJAN	14%
BELARUS	16%
RUSSIA	18%
LITHUANIA	19%
MOLDOVA	**22%**
MONGOLIA	23%
ROMANIA	25%
LATVIA	28%
BULGARIA	34%
POLAND	40%
HUNGARY	41%
ESTONIA	42%
SLOVENIA	42%
CROATIA	43%
SLOVAK REPUBLIC	68%
CZECH REPUBLIC	71%

Source: IFS

In 1997 Moldova (which is marked by the empty square) had the level of monetization at 22% of GDP, and the per capita income of 435 US$. Monetization was lower than the average for its income level, but it was by no means an exceptionally demonetized economy. In fact, her level of monetization is one of the highest among the post soviet republics (excluding Baltic states), which are the closest 'peer group'. Even in the world perspective, Broad Money above 20% of GDP is a low indicator, but within a norm. A similar level of monetization was noted in a number of low-income countries, such as Lao People's Rep. (18%), Ghana (19%), Tanzania (20%), Madagascar (20%), Guatemala (21%), Senegal (22%). Also, monetization was not much higher in some middle income countries, which had a recent episode of high inflation, such as Venezuela (22%, per capita GDP 3880 US$) or Argentina (24%, per capita GDP 9000 US$)

Let us now look at the dynamics of monetization in Moldova.

Dynamics of monetization in Moldova

The Problem of Seasonality

Seasonal pattern of monetization is influenced by the underlying seasonality of both the money supply and GDP figures. In most countries money supply exhibits a significant seasonality. Moldova is no exception here: M2 tends to decrease in the first quarter; its growth is strongest in the second and the third quarters and slows down in the fourth quarter. The crisis year 1998 is a striking exception from this pattern.

Figure 3.3. Percentage change of M2 in comparison with the previous quarter
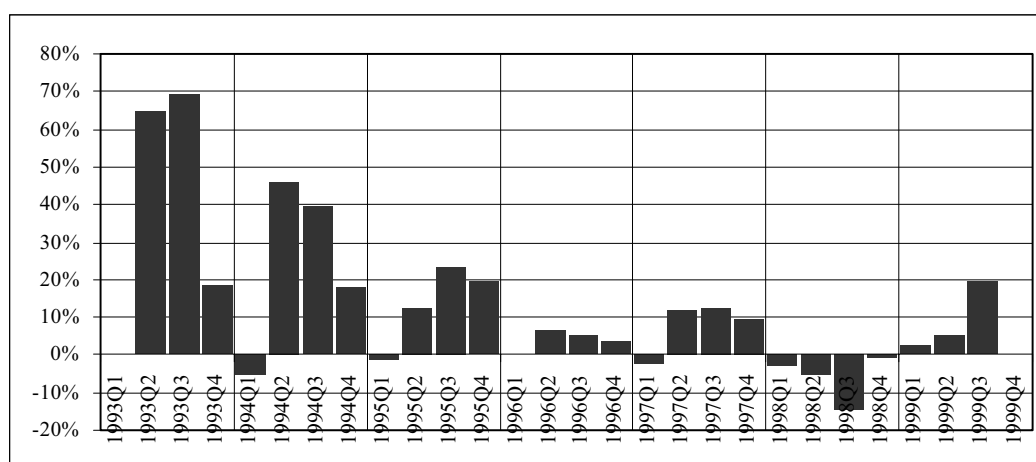

Note: 1993Q1 data is missing.

Source: Moldovan Economic Trends

However, a very pronounced seasonality of quarterly GDP data overwhelms other effects. This seasonality results from the high share of agriculture and food-processing industry in the Moldovan economy. In order to abstract from these seasonal effects and concentrate on the underlying trends in monetization, seasonally adjusted data on monetization are used further.

Remonetization Trend and Its Reversal

Monetization of the Moldovan economy has been following a typical pattern: unsustainably high in the period of a fast money supply growth, reduced sharply in the moment of stabilization and gradually growing afterwards. In 1997 Moldova reached the level of monetization, which, as figures 3.1 and 3.2 demonstrate, did not differ significantly from many low-income countries. Unfortunately, stabilization proved to be fragile and after a peak in late 1997 monetization started to decrease again. By 1999 Q2, when the effect of the regional crisis could already be felt strongly, Moldova was again close to the countries with the lowest monetization by world standards.

Figure 3.4. Monetization: share of M2 and M3 in GDP, annualized, seasonally adjusted
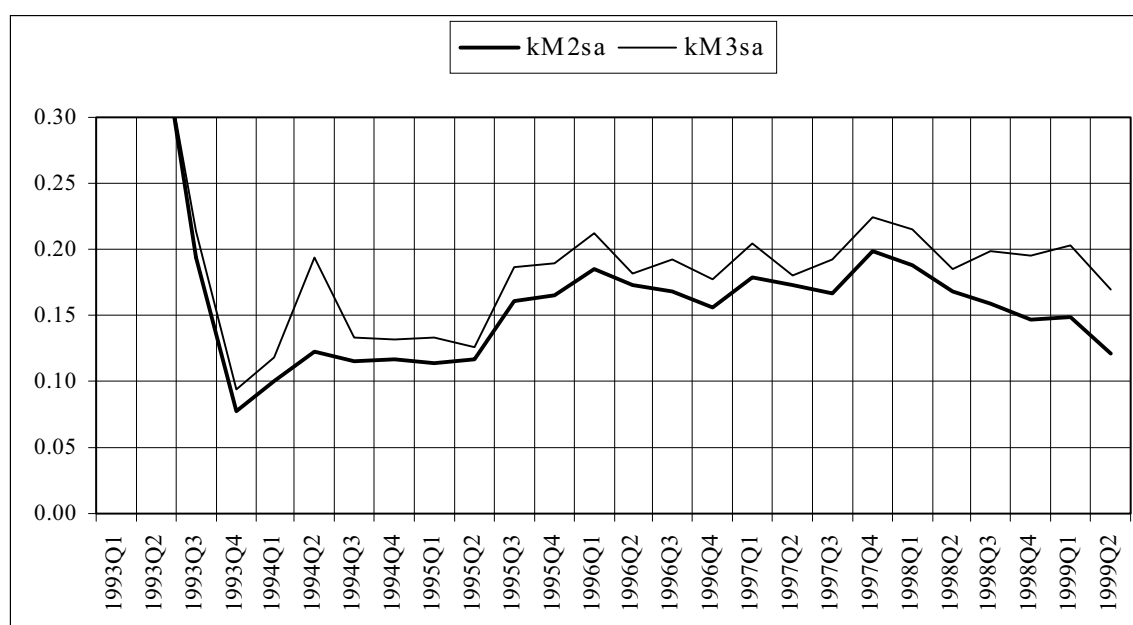
Source: MET data, own calculations

High monetization in the period of a fast monetary expansion prior to first stabilization attempts has been noted in all transition economies and Moldova was not an exception. The increasing rate of inflation was a signal, that this was an unsustainable situation. As soon as the rate of monetary expansion slowed down, real money balances were reduced. Slowing down of inflation rate can be interpreted as a sign that the equilibrium between money supply and demand was restored. The sustainable level of money supply, which corresponded to the demand, proved to be very low, below 10% of GDP.

In 1994-1997 a gradual growth of monetization can be observed. Abstracting from the changes in the real GDP, this means that the rate of inflation was slower than the rate of money supply growth. Part of the monetary expansion was accepted by the economy without inducing growth of prices. This process is usually referred to as a growth of the real demand for money.

In the second half of 1998 the Russian crisis stroke Moldovan economy. It is interesting to note, however, that the reversal of the remonetization trend happened already in the end of 1997 / beginning of 1998, signalizing some unfavorable structural change taking place, and providing an early warning signal. This structural change can be labeled as an outflow of demand for the Moldovan leu.

Such is the interpretation of monetization developments from the money demand perspective. Implicitly, it assumes that, once some kind of macroeconomic equilibrium is reached, money demand is the driving force behind monetization changes. According to this point of view, if money supply diverges from demand, price level reacts and brings real money supply into conformity with real demand.

An alternative explanation would concentrate on an excessively tight monetary policy as the cause of the 1998 demonetization. It is sometimes argued that prices are rigid downward and even if money supply is much below demand, they, nevertheless, cannot fall to restore the equilibrium. To check the validity of such an argument for Moldova, one should study the demonetization in 1998 from the money supply side. This analysis should help to understand whether the monetary contraction was the cause of demonetization, or a result of some other forces, which also reduced money demand.

Monetization Developments and Money Supply

The reversal of the remonetization trend happened at the end of 1997. Figure 3.4 allows to distinguish 2 distinct phases of demonetization that followed. First, since the beginning of 1998 until the third quarter of the year the driving force behind it was a monetary contraction. Then, beginning with the fourth quarter of 1998, the main factor in this process was an increased inflation which reduced real money balances. The devaluation of the leu was the cause of inflation and money supply growth lagged behind.

Figure 3.5. Changes of M2, CPI and MDL/US$ exchange rate, in percent, quarterly
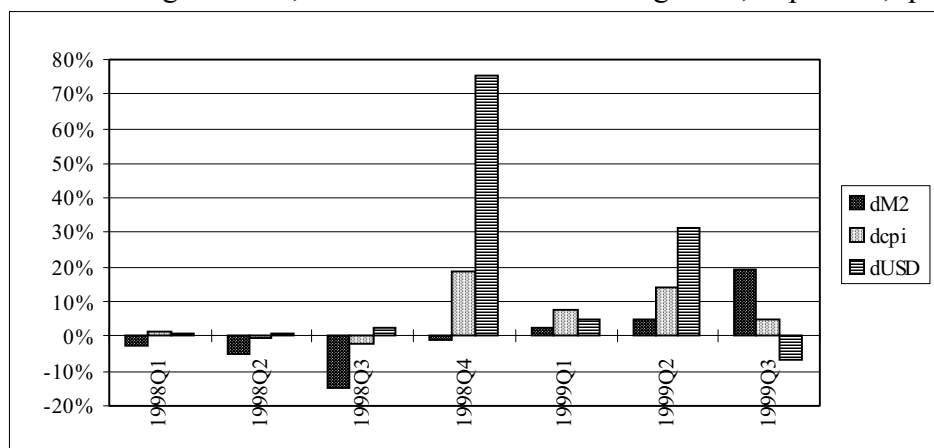
Source: MET

Table 3.3 presents contributions of separate components of money supply to changes in Broad Money. Contraction of currency in circulation was initially the most important factor of money supply reduction. It slowed down in the second half of 1998, but then an outflow of deposits from banks became stronger. Lei deposits were influenced much more than foreign currency deposits. Finally, in the first half of 1999 lei deposits recovered slightly and the growth of US$ deposits even significantly overcompensated the previous decrease. However, if inflation is taken into account, real money continued to shrink.

Table 3.3. Categories of Banking System Liabilities - Contributions to Broad Money growth (in %)

	Dec97-Jun98	Jun98-Dec98	Dec98-Jun99
Currency in circulation	-5.64%	-0.44%	3.13%
Lei deposits	-1.44%	-12.73%	2.78%
Foreign deposits	4.51%	6.90%	19.38%
in US dollar terms	*4.34%*	*-3.19%*	*8.33%*
exchange rate adjustment	*0.17%*	*10.09%*	*11.06%*
sum: Broad Money (M3)	-2.57%	-6.27%	25.30%

Source: own calculations, data from IMF, Moldova Recent Economic Developments, CR99/110.

Mysteriously, in the eyes of the depositors, the banking sector asset portfolio was invulnerable to the more than 70% devaluation of the leu. There was no larger scale bank run and no banking crisis. The main problem was not a fall of confidence in the banking system, but rather a fall of confidence in the stability of the Moldovan currency. Leu deposits were withdrawn mostly temporarily and later converted to foreign currency deposits. Total deposits decreased, but rather moderately.

The whole process of demonetization began with the shrinking of the currency in circulation (which is a Central Bank liability) since the beginning of 1998. It is interesting to see what were the corresponding changes on the asset side of the Central Bank balance sheet. Table 3.4 shows that the monetary contraction was caused by the shrinking of Net Foreign Assets. Later, the Table 3.shows a highly unhealthy process of a rapid increase in the credit to the government sector and a decrease of credit of the NBM to banks and of the banking sector to the private economy. This should have undermined the confidence in the stability of the economy and in the perspectives of real sector's development in Moldova.

Table 3.4. NBM Assets - Contributions to Reserve Money growth (in %)

	Dec97-Jun98	Jun98-Dec98	Dec98-Jun99
NFA adjusted	-19.4%	-81.6%	18.9%
Net Claims on General Government	1.3%	82.3%	11.0%
Credit to Banks	3.6%	-8.3%	-8.5%
Other Items (net) + adjustment	1.8%	15.7%	-3.5%
sum: Reserve Money	-12.6%	8.1%	17.8%

Note: NFA (Net Foreign Assets) contributions have been decreased by the valuation adjustment (adjustment for the change in the leu value of dollar assets caused by the devaluation). which was added to Other Items.

Source: own calculations. data from IMF. Moldova Recent Economic Developments. CR99/110.

Table 3.5. Moldovan Banking System Assets - Contributions to Broad Money growth (in %)

	Dec97-Jun98	Jun98-Dec98	Dec98-Jun99
NFA adjusted	-18.9%	-36.5%	24.0%
Net Claims on General Government	3.9%	35.0%	8.2%
Credit to the Economy	14.2%	-1.0%	1.0%
Other Items (net) + adjustment	-1.8%	-3.8%	-7.9%
sum: Broad Money	-2.6%	-6.3%	25.3%

Note: NFA (Net Foreign Assets) contributions have been decreased by the valuation adjustment, which was added to Other Items.

Source: own calculations, data from IMF, Moldova Recent Economic Developments, CR99/110.

Explaining the outflow of the Net Foreign Assets of the NBM is the key to understanding the reversal of the remonetization trend in 1997/1998. The answer can be found in the Balance of Payments. Since the beginning of 1998 a gradual deterioration of the Current Account is reported. This increased the excess demand for foreign currency. However, the Capital and Financial Account (abstracting from the use of Reserves) deteriorated too. An outflow of Portfolio investments, which had begun already in the last quarter of 1997, accelerated. The asset position under Other investment, which shows mainly non-repatriation of export receipts, increased[8] (with the minus sign in the BOP). Part of the increase of the liabilities position reflects accumulation of arrears. All these phenomena are a clear signal of an undermined confidence in the stability of the Moldovan economy and, especially, its currency.

Table 3.6. Moldova - Balance of Payments 1997-1999, semiannually

	97H1	97H2	98H1	98H2	99H1
Current account	**-148.6**	**-118.8**	**-182.3**	**-151.4**	**-14.5**
Trade balance	-180.3	-164.7	-216.1	-182.4	-62.7
export (FOB)	395.2	494.4	363.9	280.2	192.5
import (FOB)	-575.5	-659.1	-580.0	-462.6	-255.1
Services	-29.7	-32.3	-34.5	-38.9	-29.4
Income	30.6	32.5	23.6	17.0	18.3
Current transfers (net)	30.7	45.7	44.6	52.9	59.3
Capital and financial account	**155.0**	**101.5**	**179.3**	**127.1**	**35.1**
Capital account	-0.1	-0.1	0.0	1.5	115.5
Financial account	155.1	101.6	179.3	125.6	-80.4
Financial account less Reserves	**177.7**	**131.1**	**101.3**	**-19.0**	**-49.9**
Direct investments (net)	30.2	41.3	45.2	41.1	11.6
Portfolio investments (net)	236.2	0.4	-12.4	-42.4	-141.7
Other investments	-88.6	89.4	68.5	-17.7	80.2
assets (net)	0.5	0.2	-22.8	-26.3	-35.5
liabilities (net)	-89.1	89.2	91.3	8.6	115.7
Reserve assets (net)	**-22.7**	**-29.5**	**78.0**	**144.6**	**-30.4**
Errors and omissions	-6.3	17.3	3.0	24.3	-20.6

Source: National Bank of Moldova

Foreign assets of the National Bank started to leak out in the beginning of 1998 because of the shortage of foreign currency on the market. As follows from the above analysis, the shortage was induced not only by the negative trade balance – in principle, it could have been financed by a capital inflow (as it usually happens). The problem seems to be that the exchange rate started to be perceived as not sustainable. This could be due to the deterioration of the trade balance or due to the situation in the government finances. As a result, capital inflow into Moldova slowed down and outflow accelerated.

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[8] See: A comment on the Balance of Payments data for 1998 in the NBM internet site: http://www.bnm.org

The above analysis suggests that monetary contraction in 1998 was not a cause of demonetization, but rather a result of a structural shift of demand towards foreign currency, away from the Moldavian leu. This shift of demand can be interpreted as reflecting an increased uncertainty regarding the future value of the leu, a decrease of confidence in this currency.

Monetization and Confidence in the Moldovan Leu

Monetization and Other Indicators of Confidence in the Leu

Further this paper attempts to interpret developments in money demand and monetization in Moldova in connection with the issue of confidence in the stability of the value of the Moldovan leu. To ground the validity of this reasoning, one can check the empirical relationship between monetization and other variables related to confidence.

International Reserves

There are two links between the gross international reserves and monetization. One of them is, that when the Central Bank has a higher level of reserves to back up the domestic currency, people have more confidence in its stability and are more willing to hold it. However, this interpretation alone would be an oversimplification, because there is also a direct link between foreign currency reserves and money supply. The NBM increases the money supply by buying dollars in exchange for leu and vice versa. Thus, the direction of causality here is trickier to determine and all that remains is to recognize the strong correlation between the two variables in Moldova.

Figure 3.6. International reserves of the NBM, in US dollars and monetization (M2/GDP), annualized
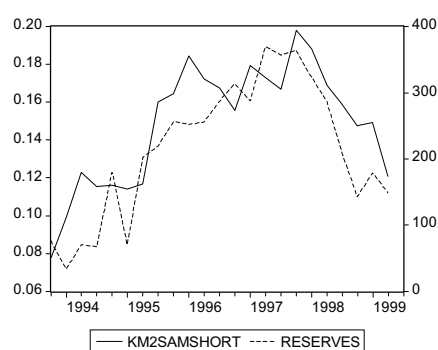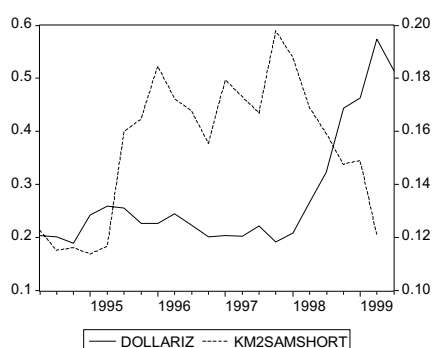

Source: MET data, own calculations.

Dollarization of deposits

Dollarization of deposits can be interpreted as another indicator of confidence in the domestic currency – the less people trust domestic currency, the higher share of their savings they will choose to keep in foreign currency. Figure 3.4 presents the behavior of dollarization and monetization.

The size of the coefficient of correlation varies strongly (between -0.2, which can be regarded as insignificant, and -0.7) depending on the examined sample range. The growth of monetization in early 1995 was not accompanied by proportional changes in dollarization. Afterwards, for 2 years a negative correlation was present (coefficient around -0.6 in 1995Q1 - 1998Q1). Finally, the reversal of the remonetization trend in early 1998 was accompanied by a rapid and unprecedented growth of dollarization.

Figure 3.7. Dollarization of deposits (share of foreign currency deposits in total deposits) and monetization (M2/GDP), annualized

Source: MET data, own calculations.

It can be concluded, that the dynamics of the level of monetization was broadly similar to the dynamics of at least two other variables connected with the confidence in the domestic currency.

A Simple Model of Public Confidence in the Stability of the Moldovan Leu

There exist no surveys of public expectations regarding the exchange rate in Moldova. Thus, statements about the level of confidence in the national currency and its influence on other variables are only speculations. Let us engage in such a speculation, stating clearly all the underlying assumptions.

The starting point of the analysis is a money demand function. For simplicity, let us abstract from the effect of interest rates on money demand. Assume that the alternative investment is in cash US dollars and the depreciation of the exchange rate is the opportunity cost of holding domestic money. Therefore, consider a money demand function of the form:

$$\ln M - \ln P = a + k \ln y - n\, E\{de/e\} \quad [1]$$

where M is a money aggregate, P – price level, y – real GDP, e – exchange rate (MDL/US$) and $E\{de/e\}$ is the *expected rate of depreciation*.

The National Bank of Moldova considers national currency stability as one of its primary goals[9] and for most of the period it intervened in the foreign exchange market in support of the leu. Therefore, the *expected rate of depreciation* can be expressed in terms of the credibility of the National Bank commitment to stabilize the exchange rate. Let us express the *expected rate of depreciation* as a weighted average of the stability scenario (i.e. depreciation rate equal to zero) and a depreciation scenario (say, that the exchange rate will depreciate enough to reverse all the real appreciation, which occurred since the time just before stabilization, the latest moment when the exchange rate had been free floating for a longer period of time).

Then in the time period t, the expected rate of devaluation is:

$$E\{de/e\} = \theta * 0 + (1-\theta) * [P_{Mol}(t)/[e(t)*P_{USA}(t)]] / [P_{Mol}(t_0)/[e(t_0)*P_{USA}(t_0)]] \quad [2]$$

where t_0 denotes the last quarter of 1993, P_{Mold} is the Moldovan CPI, P_{USA} is the CPI in the USA.

The key parameter of interest here is θ. It provides a measure of the credibility of the National Bank commitment to the leu stability. For example, assume that there are only two sorts of economic agents in Moldova – optimists, which believe that the NBM will keep its

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[9] "The main objective of the National Bank of Moldova is the maintenance of the national currency stability. This objective can be achieved through the implementation of a severe monetary and credit policy and through the implementation of a foreign exchange policy that corresponds to the situation of the market of the Republic of Moldova. In the condition of deterioration of external balance of payments and absence of a durable economic growth, the stability of the Moldovan leu exchange rate is one of the main pillars that contribute to the stability of the national currency and attraction of foreign investments." - National Bank of Moldova, 1997 Annual Report

promise and pessimists, who believe that the depreciation scenario will come true. Then θ is the share of optimists in the population. Alternatively, θ and (1-θ) can be understood simply as the probability weights that people assign to the two scenarios.

To illustrate the interpretation of monetization developments in Moldova in terms of public confidence in the national currency, one can calculate exemplary values for θ for each period. What is needed for this, is to assign values to the parameters of the money demand function. The values for a, k and n, were chosen in the following way:

k – real income elasticity of real money demand was assumed to be equal to 1, so that monetization is not influenced by the real growth or shrinking of the economy;

a – constant term was chosen so, that in the situation of the credible exchange rate stability monetization increases to about 37% of GDP – the average value for a country with the income level as in Moldova (see figures 3.1, 3.2 and regression in Table 3.1);

n – elasticity of the money demand with respect to the expected depreciation was chosen so, that in the situation of a perfectly certain 50% depreciation, monetization decreases to 3.7% of GDP, or one-tenth of the 'stable-exchange-rate' value.

As can be seen from the above, the choice of the parameters was fairly arbitrary. However, whatever values are chosen, they do not influence the qualitative characteristics of the resulting series of θ values. The series reflects the assumptions of the model:

- Growth of monetization is ascribed to the growth of public confidence in the leu.
- When inflation in Moldova accelerates, the risk increases that the exchange rate would become unstable. If, nevertheless, economic agents do not reduce their holding of leu, this is again ascribed to the growth of public confidence in the leu (and vice versa).

The exemplary time path of θ values calculated with all the above assumptions is presented in Figure 3.5 below.

Figure 3.8. Public confidence in the stability of the leu
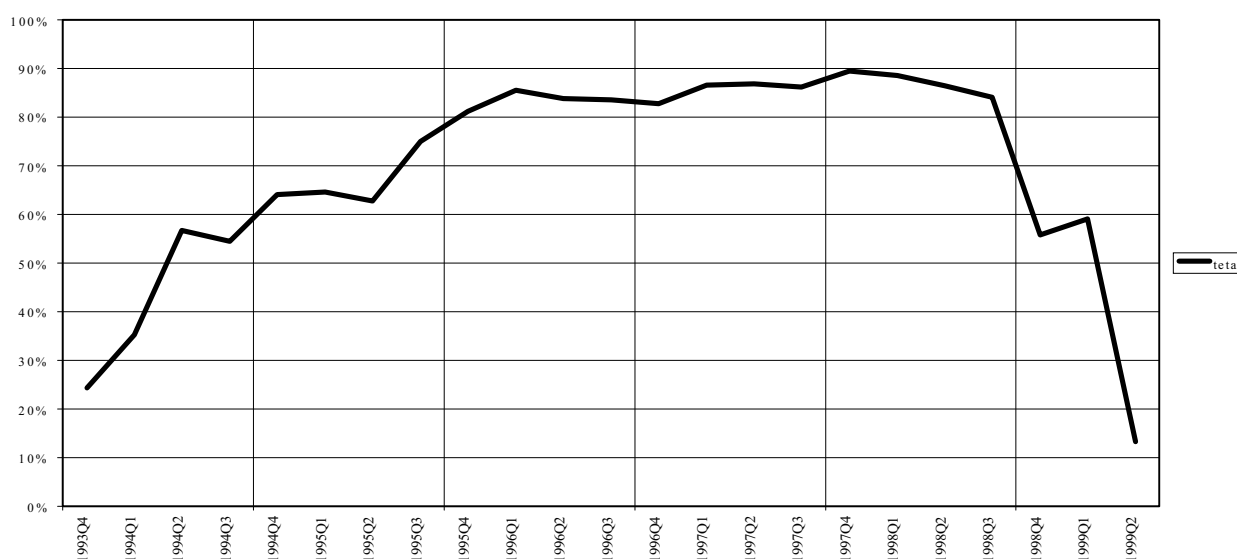
Source: own calculations

Interpretation of the monetization developments in Moldova in terms of the model described above is following: Since the currency reform and introduction of the leu, public confidence in its stability was increasing steadily, initially very fast and more slowly beginning with 1996. The peak was reached in the last quarter of 1997. Already in the first quarter of 1998 the confidence begun to decrease. After a devaluation in 1998 Q4 it dropped sharply

and, after a small recovery in the first quarter of 1999, it plummeted again to a level close to zero[10].

Conclusions

Monetization of an economy (ratio of Broad Money to GDP) is an important indicator showing the level of activity and development of the financial sector and public confidence in the banks and in the national currency. Monetization has been shown to be closely linked with the overall level of development of the economy.

After a successful macroeconomic stabilization Moldova underwent a significant re-monetization. As a result, by 1997 the ratio of broad money to GDP, although still low in the world perspective, was one of the highest among post-soviet countries. In 1998 process of demonetization of the economy started again, casting doubts on the depth of the earlier progress. Disturbances caused by the regional crisis aggravated the situation. However, demonetization started much earlier and resulted from structural factors. Money supply factors played only a secondary role.

Monetization was shown to behave in a similar way as other variables connected with the public confidence in the currency: the level of International Reserves of the Central Bank and dollarization of deposits. The reversal of the remonetization trend, as well as the concomitant shift in the other two variables, provided an early warning signal that something was going wrong in the economy. Exchange rate crisis in the fourth quarter of 1998 proved the signals to be right. A close monitoring of all these three variables together could have prevented the Central Bank from leaning against the flow for too long and defending a currency that was increasingly perceived as bound to depreciate.

Monetization developments interpreted in terms of a simple money demand model proposed above allow to draw an inferred time path of public confidence in the stability of the leu. This experiment shows an increasing confidence in the leu since its introduction, an outflow since beginning of 1998 and a dramatic tumbling down since the end of 1998.

Both the results of the developed model and the levels of monetization of the economy and of dollarization of deposits convey a clear message: Currently the confidence of economic agents in the national currency is very low. This is an unfavorable circumstance for the National Bank of Moldova and it should be taken into account in the design of the present monetary policies. In the conditions of such low confidence in the leu any monetary expansion is likely to be reflected especially quickly in the level of exchange rate. Attempts to stabilize the exchange rate are likely to be much more costly than if the confidence were higher.

The model and the earlier analysis concentrate on the issue of confidence and abstract from the underlying reasons of changes in public expectations. The rational grounds for formulation of expectations are broadly twofold. First, it is the speed of development of an efficient, market economy with an export potential. The second crucial factor is the health of the public finances. These factors determine the future pressures on the foreign exchange market and the prospects for currency stability. In addition, irrational, bandwagon expectations or blurred perception of the actual developments can also influence the public expectations.

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[10] Admittedly, the validity of model assumptions and the stability of parameters can be questioned after the huge devaluation in 1998 Q4 and after the Central Bank apparently temporarily g ave up its policy goal.

4. WEAK BUDGET POLICY?

In Moldova the fiscal-budgetary policy is under the constant attention of the public opinion, this being determined by its importance as the main economic policy instrument, and by the critics coming from power structures, public and international organizations, political movements, and mass media information means. This is of no wander, the fiscal-budgetary policy being the only policy where interests of different social groups meet together in the most obvious way.

Efficiency Criteria of The Fiscal-Budgetary Policy

To reach a consensus concerning goals, means and results of the fiscal-budgetary policy among the interested social groups is rather difficult, therefore an objective appreciation of this policy should be based on a number of acceptable criteria.

The efficiency of a fiscal-budgetary policy focusing on : (*1) collecting budget revenues, (2) honoring budget commitments, and (3) management of the budget deficit and state debt*, can be measured by analyzing the result of the public authorities activity in the mentioned above fields.

The state of public finance has a strong influence on the real sector of the economy, *the dynamics of macroeconomic indicators* constituting one of the success (or unsuccessful) criteria for the promoted policy scenarios.

Another descriptive factor of the fiscal-budgetary policy is the *degree of executing the budget related legislative and normative documents.*

Revenues of the Consolidated Budget

Essential Elements Affecting the Tax Collection

- Economic activity is the most important factor that determines tax collection. Most taxes are related to the economic performance. Income tax will generate sources only when the income is actually earned. The indicator of income tax applied on non-juridical entities drops as well, although not to this extent. A general fall in taxation basis is being registered.

The fall of economic activity determines the decrease of sales and of the value added tax, excise taxes, etc. Value added tax, excise taxes, imports are very good indicators of the economic activity level.

- The second important factor that determines tax collection is the fiscal regulation efficiency level, it depends on the professionalism and skills of personnel involved in perceiving taxes, and on the corruption level.

- The legislation is the basic element in tax collection process. Its ability to comprise a rather large taxing basis is essential for a fair distribution of the fiscal burden. The willingness to honor fiscal commitments depends on the tax payer's vision concerning the correctiveness of the fiscal burden attributed to him.

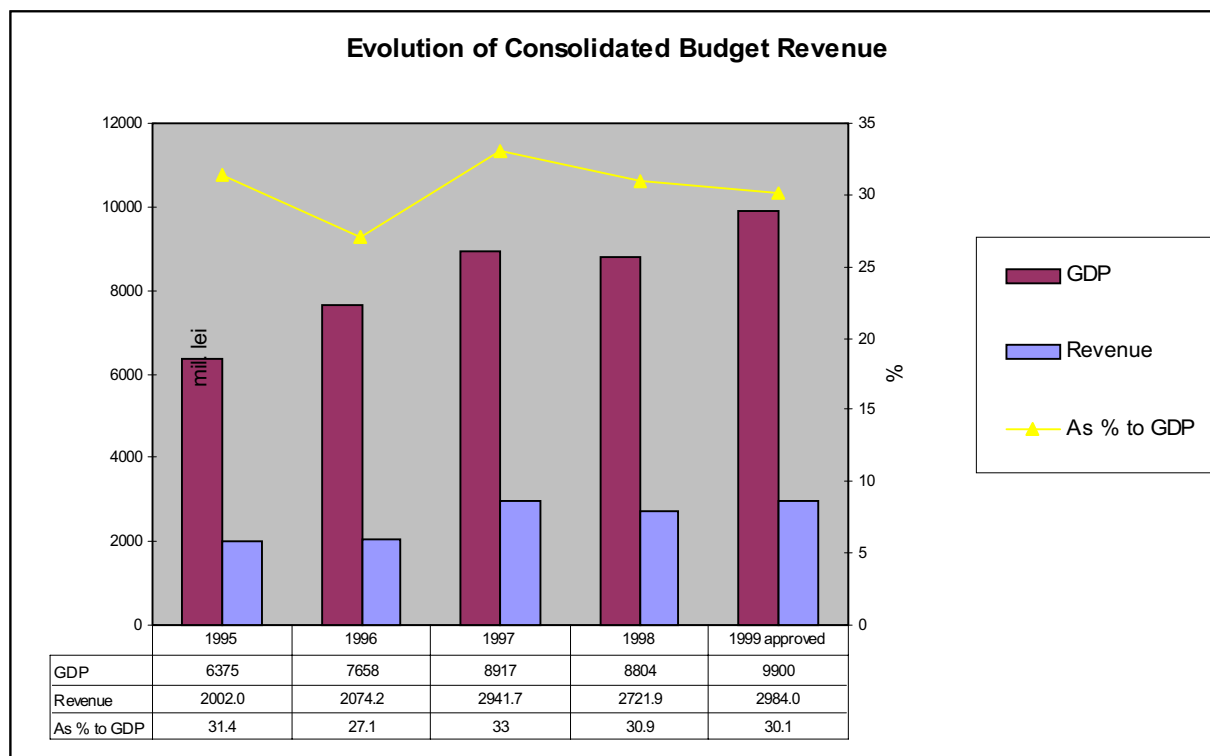### *The Evolution of Incomes Collection*

First of all we will analyze the evolution of the consolidated budget *vis-a-vis* the macroeconomic performance, this constituting one of the major problems encountered by Moldova.

The growth rate of the gross domestic product in real terms in 1995 was of (-3), in 1996 – (-7), in 1997 – 1.6, and 1998 – (-8.6) percent. In general, when a slowdown in the economic activity is being registered, fiscal revenues should drop, because they tend to be in direct relationship with the economic performance. The correlation between these indicators gives information about the economic activity cycle.

The collection of revenues in the consolidated budget in 1995-1999 was not uniform (Figure 4.1).

Figure 4.1.

Evolution of Consolidated Budget Revenue

	1995	1996	1997	1998	1999 approved
GDP	6375	7658	8917	8804	9900
Revenue	2002.0	2074.2	2941.7	2721.9	2984.0
As % to GDP	31.4	27.1	33	30.9	30.1

Source: Ministry of Economy and Reforms, Ministry of Finance

Two regresses in tax collection are evident – in 1996 and 1998 years, as well as a significant increase registered in the 1997 year. For a better understanding of changes that influenced these evolutions it is necessary to examine descriptive factors of the tax collection level.

The analysis of tax and other financial means collection evolution proves that in the period of 1995-1998 the share of fiscal revenues in the total consolidated budget revenues was maintained at 78-81% level, these collections registering an increase from lei 1619.2m in 1995 to lei 2298.5m in 1997 and lei 2205.9m in 1998 (an increase of approximately 1.4 times). At the same time the share of non-fiscal revenues registered a number of essential changes in the 1997 year, they being characterized by the increased collection of revenues from transactions with capital. (Table 4.1)

Although we have no possibility to estimate with certainty the influence of inflation rate on the incomes growth, it is evident that a part of economic activities (shadow economy) is taxed, especially when performing import-export operations.

Therefore, opportunities to improve the macroeconomic statistics do exist.

Table 4.1. Structure of the Consolidated Budget Revenues in 1995-1999 (in percent)

	1995	1996	1997	1998	1999 approved
Total revenues	**100**	**100**	**100**	**100**	**100**
• Fiscal revenues	80.9	81.3	78.2	81.0	76.1
- direct taxes	35.2	34.2	23.1	18.8	18.8
- indirect taxes	40.9	43.6	50.2	59.1	53.9
• Non-fiscal revenues	17.9	16.9	13.6	16.1	14.9
• Revenues from operations with capital	1.2	1.8	8.2	2.9	5.3
• Grants					3.7
Information: the share in the total payments:					
• In cash	74.5	64.8	63.2	64.2	90.4*
• Through mutual compensations	25.5	35.2	36.8	35.8	9.6*
Note: *Based on results of executing the budget on 9 months of 1999 year"					

Source: The Ministry of Finance

The share of direct taxes registers a continuing decrease in the Total Revenues and in Fiscal Revenues, especially with respect to the share of value added tax. In 1996 direct taxes constituted about one third of Total Revenues, and in 1998 – less than a quarter. At the same time the share of indirect taxes registered an increase from 40.9% in 1995 to 59.1% in 1998. During this period value added tax collections, one of the main budget revenues sources, evaluated to 41.3% in 1998 as compared with 28.8% in 1995 in the Total Revenues.

Although the sum of the value added tax was rather satisfactory, it is necessary to present a evolutionary differentiation of collections of value added tax applied on goods made in the country and on imported goods. The value added tax to goods imported in Moldova has registered a significant increase, and to goods produced in the county – a tendency of considerable decrease, especially in 1999 year (Table 4.2). This type of taxes is a rather precise indicator of changes in fiscal policy and reflects the evolution of the economic activity in the country.

Table 4.2. Value Added Tax Collection in 1995-1999 Period (mil. lei)

	1995	1996	1997	1998	1999	
					Approved	Executed
Value added tax total, including:	576.7	613.9	948.9	1124.0	963.1	614.1
- to goods produced in the country	528.0	520.5	787.8	763.8	459.1	223.2
- to imported goods	48.7	93.4	161.1	360.2	504.0	390.9
The Share of value added tax in Total Revenues	28.8	29.6	32.2	41.3	32.2	30.8

Source: The Ministry of Finance

The differentiation between the VAT due to imports and to goods produced in the country is important because it affects the distribution of revenues between the state budget and local budgets. The divergent evolution of its components states a considerable decrease of revenues at the level of local budgets, they receiving transfers only from the value added tax to goods produced in the country. Considering that for some territorial-administrative units revenues from this type of taxes constitute more than 50% of the total own revenues, their dependence on the state budget and the tremendous increase of debts to expenditures can be easily explained.

Indirect taxes refer more to transactions than to the activity that generates the value added tax. Still, indirect taxes such as excise taxes, value added taxes are much easier to collect, because they are applied on visible transactions, while direct taxes such as income tax, land tax,

and real estate tax are collected (in final form) after all activities that generated them are completed or were estimated. Thus, the regulation of direct taxes is more expensive and depends much on the cooperation of taxpayers when completing honestly the declarations.

An important factor that influences the tax collection level is the use of an adequate mechanism for performing mutual debts compensations between the state and economic agents. The share of these compensations has registered an increase from 25.5% in 1995 to 35.8% in 1998 in the total consolidated budget revenues. Usually, these compensations reach large dimensions by the end of the year. Thus, in the fourth quarter of the 1997 year collections through mutual compensations constituted 52.9% of the total collected revenues during this period, and in the fourth quarter of the 1998 year – 62%.

At the same time economic consequences of this payment form were multilateral– from undermining the fiscal basis of the budget for the future periods to extending the dimension of using non-monetary instruments in relations with economic agents, which contributed much to the degradation of the payment system from Moldova.

To your attention, when some restrictions in performing mutual compensations were introduced cash collections registered a considerable increase. When approving the budget for 1999 year a 10% limit of the total revenues for performing payments through mutual compensations was set, it having a positive influence on the budget. Thus, nominal collections of budget revenues paid in cash during 9 months of the 1999 (lei 1800.2m) exceeded the value of annual cash collections registered in 1998 (lei 1746.4m).

The level of calculated payments in budget collection and debts

Payment commitments of taxpayers are not completely honored in the set terms and are added to debts. Debts to budget increased from lei 509.8m in 1995 to lei 917.6m in 1998, maintaining this tendency during the 1999 year (Figure 4.2). These debts constitute about one third of effective collections from the budget revenues.

Figure 4.2.
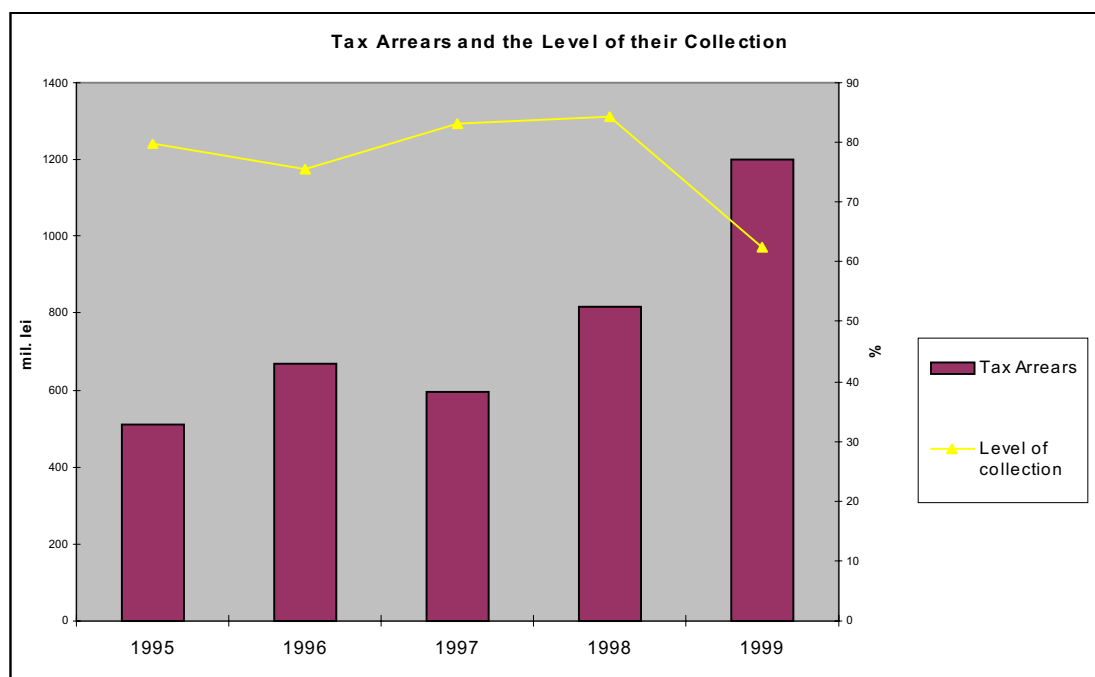
Source: The Ministry of Finance. For the 1999 year are used data on 9 months

The highest budget calculated payments collection level was obtained in 1997 (83.2%) and in 1998 (84.3%). This index on 9 months of the 1999 constitutes 62.4%.

In the total debts volume the debts share to paying value added tax and excise taxes constitutes more than 50%. From the perspective of national economy branches the biggest debts to budget on all types of taxes registered in 1998 year were debts of enterprises from the agro-industrial sector – 52%, from the processing industry branch – 8%, from the power engineering sector – 3%, from constructions – 2%.

Who collects taxes?

In the last couple of years a change in the importance of state institutions involved in collecting taxes was observed. The share of collections regulated by the State Fiscal Service has diminished, while customs offices increased their contribution to collecting revenues.

According to calculations of the Center for Budgetary and Financial Analysis, revenues collected by fiscal bodies reduced from 79.1% in 1995 year to 56% in 1998 and revenues collected by customs bodies increased respectively from 7.5% to 24%.

A possible explanation of changes in the functional structure of tax collection would be the considerable increase of value added tax applied on imports, it being collected at the customs offices. At the same time increased debts to budget this proving the low level of fiscal regulation.

Honoring Budget Commitments

The dynamics of the consolidated budget expenditures registered essential deviations as well. (Table 4.3)

Table 4.3. Consolidated Budget Expenditures Dynamics in 1995-1999 Period

	1995	**1996**	**1997**	**1998**	**1999**
Expenditures, total (million lei)	2376.0	2827.0	3608.4	3027.1	3567.0*
Share in the GDP (in percent)	37.3	36.9	40.5	34.4	36.0
Budget cumulative debts (million lei)	552	670.0	560.0	884.0	940.0**
Share in GDP (in percent)	8.7	8.7	6.2	10.0	9.4***

Note: *Approved for 1999 year, considering rectifications made during the year
   **Cumulative budget debts as of October 1, 1999
   ***The share is calculated with respect to the annual forecasted GDP.

Expenditures as part of the gross domestic product were rather high and exerted excessive pressures on the monetary policy (that continued the adherence to the policy aimed at maintaining a relatively low and stable inflation rate), resulting in high interest rates (the interest for state securities were in average of 30%, and in several periods from the 1998 year exceeded 40%).

Pressures on expenditures originate from the following fields:

An important part of budget expenditures – about one third – are made through mutual compensations that represent a method to increase expenditures. Mutual compensations, viewed as a non-monetary transaction, have become a form of fight against the economic shock when the economic growth registers a decrease. As a consequence, the fiscal discipline is neglected. Through it is being maintained the activity of non-efficient enterprises, and the structure and functions of the current expenditures of the public sector remains unchanged.

- The Government has an expensive program for social expenditures. Annually these constitute more than 50% of total budget expenditures. The restructuring of expenditures in

education and medicine, social assistance was slow and did not contribute to improving the efficiency, reducing energy consumption and labor force use.

Due to big internal and external government debts, expenditures for returning these debts continue to increase reaching the level of 13.9% in the total budget expenditures for the 1998 year with respect to 4.9% in 1995. In the budget approved for 1999 year the share of these expenditures constitutes 26.2%.

Internal and external Government guarantees have defalcated from the budget additional expenditures in the share of 2.4% in 1995 and 1.7% in 1996 and 1997 of the total expenditures and continue to cause debts increase in the future. During 9 months of 1999 were disaffected budgetary means for honoring internal and external guarantees of the total sum of lei 150.8m.

Mechanisms for regulating public expenditures are not elaborated, and to date effective expenditures exceed levels foreseen in the budget, thus being created budget debts in arrears.

Budget expenditures registered a considerable increase in 1997 year – 40.5% of the gross domestic product. In this period were reduced debts of budget financed institutions, especially debts to salaries and from the power engineering sector.

In 1998 budget expenditures diminished in absolute value by 16.1% or by 6.1 percentage points as share in the gross domestic product with respect to indices obtained in 1997. At the same time the budget debts increasing rate was 1.6 times or lei 324m, their cumulative level being one of the highest in the last years – 10% with respect to the GDP.

Consolidated budget expenditures for 1999 year were set at lei 3,100 million, being recently rectified to lei 3,567 million (an increase of lei 467m). On October 1, 1999 were financed lei 2275.5m, constituting 63.8% of annual budget stipulations, during the year being accumulated new debts of the total value of lei 56m.

The Budget Deficit and the State Debt

The basic term of budget deficit is determined as a difference between the total sum of government expenditures and collected revenues. If expenditures exceed revenues, the government finances the deficit by issuing internal and/or external debt.

In a country where the economy is „monitored" by financial markets and by the civil society, governments are stimulated to reduce the deficit, because its existence might stop the flow of foreign and internal investments. When private economic agents are worried about an economy led by the deficit, interest rates increase, thus leading to increasing costs of financing it.

During the last years Moldova was facing the problem of high budget deficit (Figure 4.4). The highest budget deficit level was registered in 1996 and 1997, respectively 9.8 and 7.5% with respect to the gross domestic product, the lowest level – 3.5% – in 1998 year.

Figure 4.3.
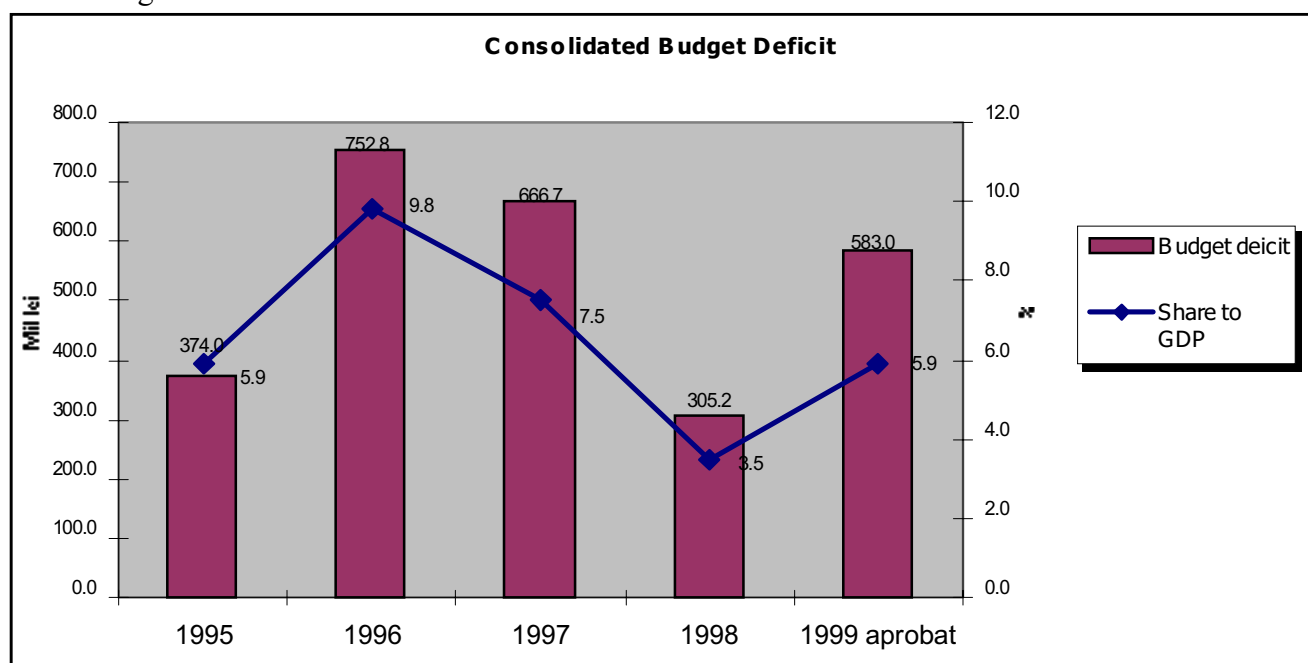
Source: The Ministry of Finance

In Figure 4.3 is presented the deficit of cash operations, data used by the Ministry of Finance, it does not showing the real situation in the budget. The process of accumulating budget debts continues, and this with a lack of a mechanism aimed at ensuring the respect of budget limits marks the inclination to accumulating public debts in order to cover the budget deficit. As a consequence, the level of Moldova's debts continues to increase.

Internal and external debts of the state (regulated by the Government), their annual increase and   share of expenditures for honoring the state debt are presented in Table 4.4.

Table 4.4. Evolution of the State Debt In 1995-1999 Period

Indicator	1995	1996	1997	1998	1999 approved
Internal debt, *million lei*	476.7	736.8	983.9	1571.9	2000.0
Annual increase (with respect to the precedent year), million lei	206.4	260.1	247.1	588.0	428.1
External debt, million US$	435.9	508.9	709.1	719.6	810.0
Annual increase (with respect to the precedent year),million US$	118.3	73.0	200.2	10.5	90.4
Expenditures for honoring state debts, million lei	116.0	163.2	376.5	421.2	933.8
Share of expenditures for debts servicing in the GDP, %	1.8	2.1	4.2	4.8	9.4

Source: The Ministry of Finance

External state debt registered a significant increase in 1996-1997, when state securities were issued on the external capital market and international organizations (IMF and WB) granted credits to Moldova, considering the positive appreciation of the economic-financial situation given by the international rating companies. The use of a part of these means for supporting the Balance of Payments created the capacity to finance additional budget expenditures and conditioned the increase of the budget deficit.

For 1998-1999 period is characteristic the necessity to honor external commitments, that due to lack of external financing imposed the use of internal sources and especially of credits granted to the Government by the National Bank of Moldova. As a consequence, in 1998 year the internal debt increased with respect to the 1995 year by more than 3 times, being expected a dramatic increase in the 1999 year.

The use of crediting resources of the National Bank of Moldova as financing sources for the budget deficit, including honoring and returning external commitments of the Government, exert excessive pressures on the monetary policy, affecting the level of exchange rate of the national currency and the inflation rate, thus diminishing the crediting capacity of the real sector of economy. When maintaining under control the inflation is strictly necessary to reduce expenditures for services provided to the budget and of the public debts taking into consideration the limited capacity of the Government to register revenues from inflation.

When costs of internal and external credits tend to grow, one of the main tasks is to attract sums from privatization and direct investments (flows that do not generate debts) so that to create premises for Moldova to honor the payment of interest on external debts for the future without accumulating considerable debts in case the external credibility drops, or to go through a liquidity crisis.

A recently appeared problem that can grow in dimension, is allowing the creation of deficit by the Social Fund and local budgets. Attraction of commercial credits can create a debts crisis, its consequences being reflected in the state budget. Thus the policy aimed at attracting credits of any level must be regulated by the Government.

Features of the Macroeconomic Dynamics

In a market economy the macroeconomic policy should be based on the prognosis of government revenues and expenditures, it depending greatly on the technical prognosis of the gross domestic product. Economic estimations used to calculate this index must be clear and supported by the economic theory and empirical evidence.

The experience of the past years proves that preliminary estimations of the gross domestic product were constantly over-evaluated: in 1996 – by 2.5%, in 1997 – by 24.4%, and in 1998- by 12.8% (calculations in nominal terms). Avoiding to accept the reality leads to unjustified revenues over-evaluation. With respect to expenditures the Government is forced to create bigger debts in cash and in the form of arrears, because planned expenditures exceed collected fiscal revenues. Debts influence the governmental deficit that is the most important statistical index in the macroeconomic policy.

The execution degree of budget related legislative and normative documents

The execution degree of budget related legislation and normative documents in the analyzed period proves the statement that indices approved through the annual budget law are not always based on real forecast. Introducing new amendments to the budget law during the year became a rule (in 1997 being introduced 9 amendments, and in 1998 - 5).

In the table that follows are shown approved budget indices and the real evolutionary execution of the consolidated budget (1995-1999 period). The execution degrees of budget differs in different periods. Common for each year is that the budgets were not executed with respect to the approved indices, and with the rectified indices as well, although amendments to the law were introduced by the end of the year.

Table 4.5. The Execution Degree of the Approved Budget Indices In 1995-1999 Period

	1995	1996	1997	1998	1999
Approved Budget (million lei):					
Revenues	1790.4	2370.0	2620.6	2950.0	2900.0
Expenditures	2090.4	2720.0	2950.6	3300.0	3100.0
Deficit	300.0	350.0	330.0	350.0	200.0
Rectified Budget (million lei):					
Revenues	2214.5	2438.1	2654.6	2880.1	2984.0
Expenditures	2597.7	2867.6	3254.6	3180.1	3567.0
Deficit	383.2	429.5	600.0	300.0	583.0
Real Budget Execution (million lei):					
Revenues	2002.0	2074.2	2941.7	2721.9	1993.7*
Expenditures	2376.0	2827.0	3608.4	3027.1	2275.5*
Deficit	374.0	752.8	666.7	305.2	281.8*
Budget Execution Degree (executed against the rectified), in % :					
Revenues	90.4	85.1	110.8	94.5	66.8*
Expenditures	91.5	98.6	110.9	95.2	63.8*
Deficit	97.6	175.3	111.1	101.7	48.3*
To your information: Budget arrears created during each period as compared with the precedent year (million lei)					
Debts to budget	253.6	160.1	-74.3	222.0	383.4*
Budget Arrears	152.2	118	-110	324.0	56.0*

*Note: * Data on 1999 year regarding budget execution and budget arrears are presented in accordance with the situation registered as of October 1.*
Source: The Ministry of Finance

The fiscal-budgetary policy promoted in Moldova during 1995-1999 cannot be considered sufficient enough. When the fiscal–budgetary policy was the most loyal, it caused the increase of budget debts and debts of economic agents to the budget (more specific for the 1996 and 1998 years). The use of a more harsh policy (in 1997 year) allowed to register a slow-down in debts increase and even a reduction of their absolute level in real terms.

These conclusions are made on the basis of results obtained when executing the budget, and not on policies declared in the process of budget elaboration and adoption. At the same time it is important to monitor the influence of factors and the influence of these results on other economic variables.

The 1999 year – new chances, new failures

The 1999 fiscal year began in difficult political and economic circumstances. Although since the beginning of the year the state fiscal-budgetary policy was pretty much clear (the budget law was already adopted) there were many questions regarding the reality of the budget.

The financial crisis from the region generated premises for devaluating budget allocations foreseen in the budget. In a half of a year most budget -financed institutions exhausted their annual allocations to some expenditures chapters, as it was foreseen at the beginning of the year.

Nevertheless, the partial liquidation of the financial crisis effects by implementing urgent measures aimed at improving the economic situation (that foresaw a tightened budget as well) allowed rectify the state budget. A special role had to have external financial means, Moldova having rather good relations with international financial organizations at that time.

In case of Moldova a rather important role in the efficiency of the fiscal-budgetary policy belongs to the political will. An attempt to prove this will was made during the 1999 year. This is being manifested through the following:

- The fiscal-budgetary policy can be efficient only when all agents activate according to *universal laws for everyone, with no exceptions.* Such exceptions during the last couple of years were: crediting from the budget, offering state guarantees, mutual compensations, fiscal holidays, forgiving compulsory payments for certain agents. This year it was reduced to minimum.

- The efficiency of the fiscal-budgetary policy depends much on the *capacity to protect the customs territory* of the state. From political and economic considerations customs territory of Moldova during these years remained "broken" from the Eastern side of the country. With the creation of fiscal posts the flow of imported goods in Moldova without paying the respective tariff reduced. The solution of the problem is pure economic, although it is not rather efficient.

- *Mutual compensations* that transformed in a profitable business during the last years were stopped to a certain extent. In April 1999 the Regulation regarding mutual compensations was elaborated and approved. During the first 9 months of the year about 9.5% of budget revenues constituted revenues through mutual compensations (in 1998 year this figure constituting over 35%). To mention that recently the Constitutional Court decided to announce illegal this Regulation...

- *State (internal and external) debt regulation,* is an element that determines the fiscal-budgetary policy and its efficiency. 1999 year is a peak for the country at the chapter of returning the external debt. Certain successes have been achieved, the main event of the year being considered the transaction for re-purchasing securities issued for Russian Gazprom company of the total value of US$ 140m.

The policy aimed at ensuring equity, transparency, the compulsory character of the fiscal-budgetary policy was supported to a great extent by the international financial organizations. Re-setting relations with the IMF, and the negotiation and receiving new credits for structural reforms from the World Bank proved their credibility concerning the economic policy, and especially concerning the fiscal-budgetary policy.

The decrease of the external trade could seriously affect the budgetary system of the state. On the other side, measures aimed at consolidating the financial discipline (reducing mutual compensations and instituting fiscal posts) and, to a certain extent, devaluation of the Moldovan leu in the first quarter, contributed to maintaining the budgetary system in a functional regime.

Collections to the budget, especially in the second and third quarters, exceeded levels registered in the precedent year.

Monthly Collections in the Consolidated Budget (million lei)

	1999	1998
January	105.3	174
February	148.4	118.2
March	201.7	226.3
April	198.4	148.4
May	269.3	163
June	260.6	189.6
July	248.2	190.1
August	215.4	213.2
September	346.3	169.7
TOTAL on 9 months	1993.6	1592.5

Monthly Collections in the Social Fund In Financial Means (million lei)

	1999	1998
January	25.15	25.7
February	26.54	25.9
March	27.06	33.7
April	41.9	35.09
May	36.36	28.7
June	34.44	27.87
July	42.95	28.83
August	45.34	34.67
September	47.67	28.89
TOTAL on 9 months	327.41	269.35

Honoring commitments with increased responsibility has become a permanent priority. Statistical data show a positive evolution in diminishing debts to paying salary from the state budget, and during the last two months – at the level of local budgets as well. Debts to old age persons register a decrease. Starting with September debts to salaries and pensions are paid regularly, from the state budget being paid a part of these debts. It is important that in this process are used current collections of the budget system and not credits from the banking system.

The Evolution of Debts to Budget Financed Employees and Old Age Persons (million lei)

	1/01	1/02	1/03	1/04	1/05	1/06	1/07	1/08	1/09	1/10
State Budget	67	98	94	94	99	97	103	85	66	52
Local Budgets	106	136	149	158	166	151	160	160	159	142
To pensions	259.3	275.5	303.2	339.0	338.7	354.2	371.8	378.5	371.9	349.1

During September and October the tendency of decreasing interest rates on the State Treasury Bills market was maintained. Only during two weeks the interest rate registered a double fall up to the level of 14.21%. This phenomenon is a consequence of the policy aimed at limiting the issuance of state bills till the level when the state can repurchase them from circulation. For the following periods this moment can be crucial especially when determining the interest rates at crediting the national economy, making the banking system more open for crediting economic agents at the same time.

Although expectations were more pessimist the leu stability in the June-September period proved its credibility for the economic policy promoted in the country.

During the year were registered several chances to improve the situation in the country's economy, as well as a number of failures.

The main failure is related to restructuring the power-engineering sector, the largest generator of public financial means losses and generator of social pressures. Intentions to restructure this sector caused anxiety in the respective sector, but had no political support in the society. Here we shall stress once more that the greatest part of mutual compensations were passing through this sector, credits under state guarantee being granted, for this sector being characteristic the most sophisticated state acquisitions system.

The consolidation of the financial discipline leaves to be desired. Measures that are taken are superficial. Fiscal, customs and financial control bodies remain to be corrupted and involved in different schemas for public funds embezzlements. The motivation of their work is not sufficient, this making the entire activity of the respective structure inefficient.

The governmental crisis from the beginning of November swiped away all chances to improve the economic situation, planned before the end of the year. The elaboration of the budget for 2000 year is being tergiversated, there is no clarity in the economic policy for the next coming year.

All these create uncertainties for economic agents, external creditors, potential investors, the society in general.

The de-blocking of the governmental crisis is a premise for marking a clear fiscal-budget policy that could contribute to the solution of social-economic problems. It is important to continue, and not to deny everything was done, better or worse during the 1999 year.

It is important to re-gain the credibility of international financial organizations and of the potential investors through negotiations.