

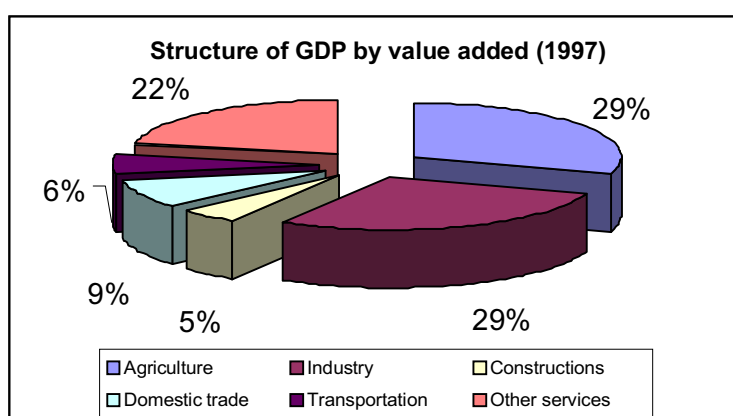
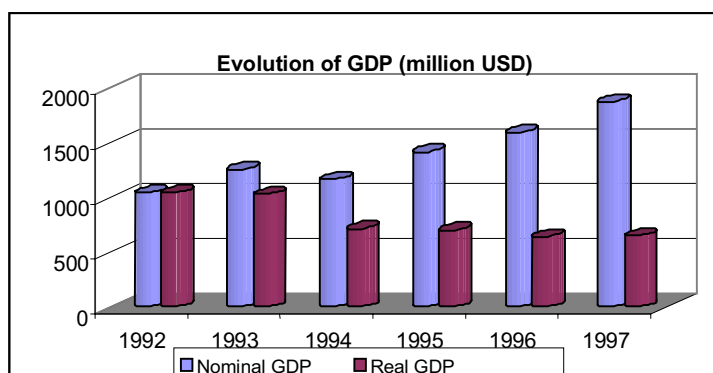
## 4. Real sector: official and underground economy

### 4.1 Gross Domestic Product

Moldova's transition towards a market economy is characterized by a deep economic decline in the real sector of the economy, a dramatic fall in production, a rising inflation and growing unemployment. During 1992-1997 statistical data show a record (37%) shrink in real GDP and 64% compared to 1990, reaching 8.7 billion lei. GDP per capita is also at lowest level among CIS countries – 2.4 thousand lei (USD 515). Another 5-10 % fall in real GDP is expected for 1998.

Opening of Moldova in terms of international trade led to an equalization of domestic and external prices, resulting in a smaller GDP fall calculated in USD (less than 40% since 1990). The evaluation of GDP in US dollars even in nominal terms showed an increase by approximately 80%, reaching USD 1,878 million.

GDP structure (by added value) divided by economic sectors is relatively stable, with an emphasis on the agro-industrial sector. Services' share is continuously expanding.



### Structure of GDP by expenditures (%)

	1992	1993	1994	1995	1996	1997
<b>Final</b>	57.5	55.9	75.4	82.9	95.8	96.6
<b>Including government</b>	5.4	15.9	22.9	27.1	27.2	26.1
<b>Gross capital</b>	59.8	55.8	28.8	24.9	24.4	24.2
<b>Net</b>	-17.3	-11.7	-4.3	-7.8	-20.2	-20.8

GDP by expenditure components displays a discouraging tendency of final consumption growth (from 57.4 % in 1992 to 96.6% in 1997). The index for 1998 are even more frightening, constituting 123%. There are two causes of this phenomenon. On one hand, the state lives on borrowed money, paying little attention to revenues. On the other hand, it is common for most economies that the population seeks to declare its expenses and to hide its incomes, contributing to the underground economy. Our estimations show an increase in the share of shadow economy reaching 55-60% in 1997. Starting 1995 the whole economy (including unofficial) shows a growth.

State structures became more costly for the society in the past six years. The state expenditure share in GDP grew 4.8 times (from 5.4% in 1992 to 26.1% in 1997). The fact that the share of state expenditures in total expenditures grows is also alarming. While in 1992 it constituted 9.4%, in 1997, when the role of the state diminished, the share of state has come already to 27%.

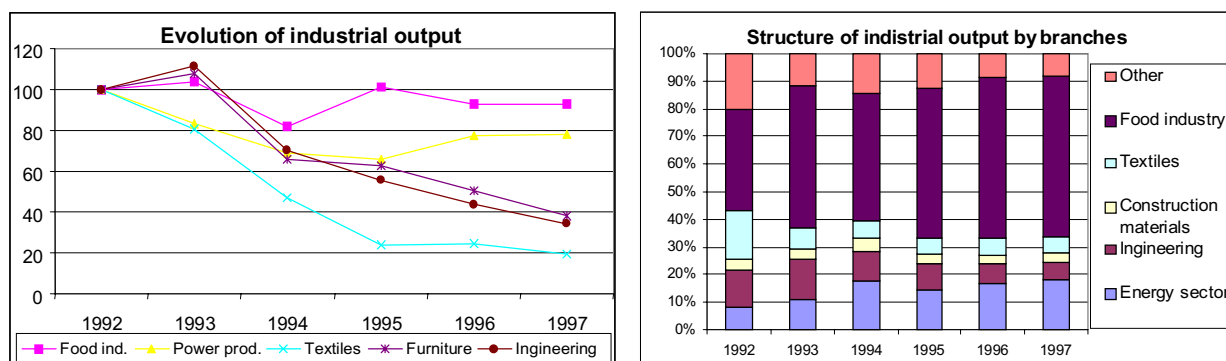
This phenomenon is accompanied by a dramatic decline in the gross capital formation (from 59.8% of GDP in 1992 to 24.2% in 1997). This will imply in the long run an economic decline.

Net export rate varied from -17.3% in 1992 to -20.8% in 1997 (See Chapter 4.5), with its minimal value in 1994 (-4.3%).

## 4.2 Industry

The evolution of industrial production in 1992-1997 shows a 36% reduction in the gross production, and the decline varies by sectors. Thus, construction machinery production fell by 66%, furniture production – by 61%, textiles – by 80%, power – by 21%, and the food production – by 36%. During first three quarters of 1998 the industrial production shrank by 5.7% compared to the same period of 1997. In September 1998 a sharp drop in industrial production took place (32.5%). The production was reduced in wood-proceeding enterprises by 17.3%, light industry – 9%, construction materials – 10.6%, sugar – 13.4%, bakery products – 11.6%, meat – 28.3%, wine – 21.4%. The causes of that reduction were: the impact of the Russian financial crisis (decline in demand), VAT levying on raw goods, materials, spare parts, as well as double taxation of exports to Russia and Belarus.

The structure of industry has been altered in the most unfavorable way: the share of food processing industry rose from 36.1% in 1992 up to 58.2% in 1997, of the energy sector – from 8% to 18.4%, while it declined from 18% to 5.8% for the light industry, and from 13.6% to 5.8% for engineering.

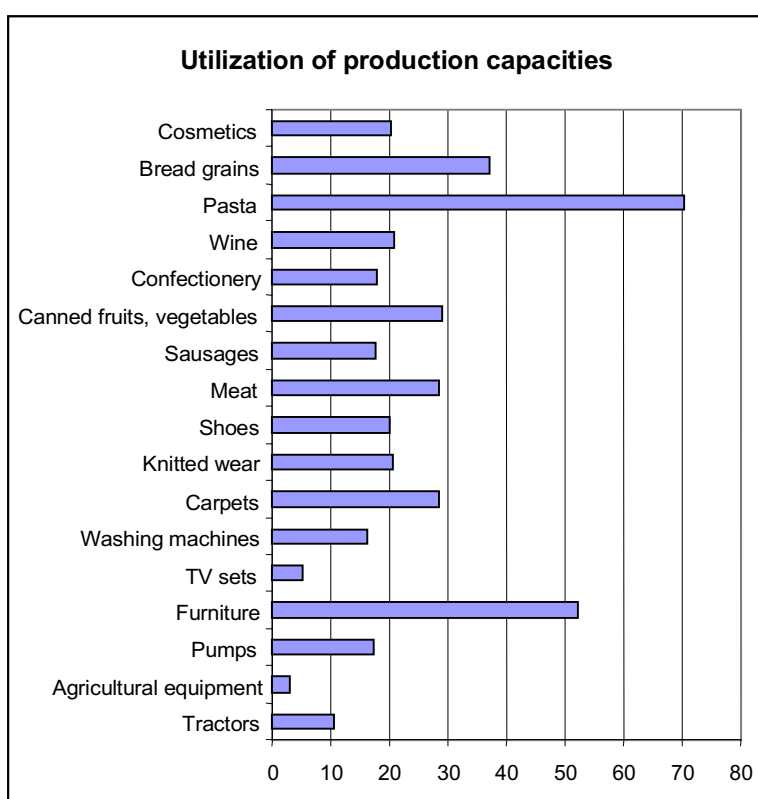
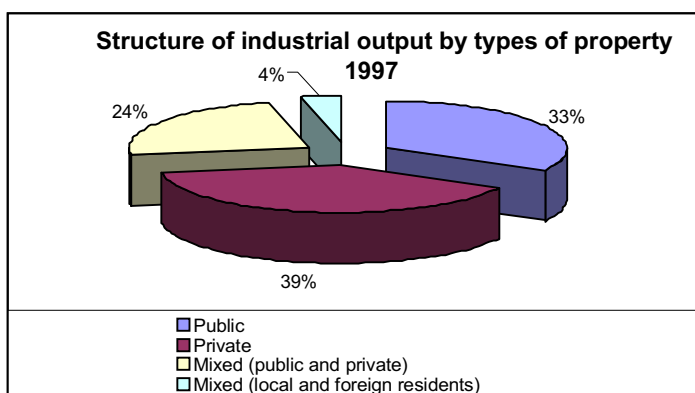


The utilization of enterprises' production capacities diminished significantly as a result of considerable reduction of industrial production. More than two-thirds of enterprises are producing now only at a level of 10-20% of their capacities. It is clear that complete restoration of those obsolete production capacities, which are producing non-competitive merchandises, is impossible during the transition to the market economy.

The setup of market economy structures and the creation of new productive formations changed the structure of industrial production by types of property. Hence, the share of the private sector in the industrial output reached only 38% in 1997. Presumably, this would imply the beginning of an increase in overall efficiency of the industry. In 1992-1998 the labor productivity in this sector experienced a slight increase (11%).

The increase in energy intensity of industrial production is of a continuous concern. In the conditions when technologies virtually do not change much, or there are insignificant changes towards decrease in production of energy-intensive goods, the actual growth of the energy intensity of industrial production may well be explained by the increase in stealing of energy, which in the end has negative implications on prices.

As a way of improvement of industrial sector could serve the privatization and continuous restructuring of enterprises, conversion of historical debts into shares, implementation of corporate management, promotion and support policies for new competitive hi-tech and energy-efficient technologies, stimulation and promotion of exports, and the negotiation of export quotas with developed countries.



### 4.3 Agriculture

Agriculture and related industry is still a vital sector for the economic and social life of the country, accounting for almost 40% of GDP, three quarters of export and employs over 43% of the national labor force.

Reforms in agriculture, which include privatization of land and restructuring of agriculture constitute a fundamental part to accomplishment of a global transformation in Moldovan economy.

Almost all measures within the agrarian reform have brought to the present situation. The reform in agrarian sector lag behind, and causes negative reactions to:

- Price liberalization of agricultural products. In January 1992 in Moldova were officially liberalized prices on most of the consumer goods. But the underdeveloped domestic marketing system and the low competitiveness of the domestic products still keeps most of their prices considerably below the prices for import.
- Price liberalization on inputs, which led to the increase prices on key inputs up to international levels prices and created considerable changes in production process and export patterns;
- Reduction of subsidies before the creation of institutions and legal framework on agricultural market which led to diminished consumption of fertilizer, purchase of high quality seeds; reduced investments for development of rural services despite the extremely low standards of living in the areas; insufficient access to credits due to high interest rate.

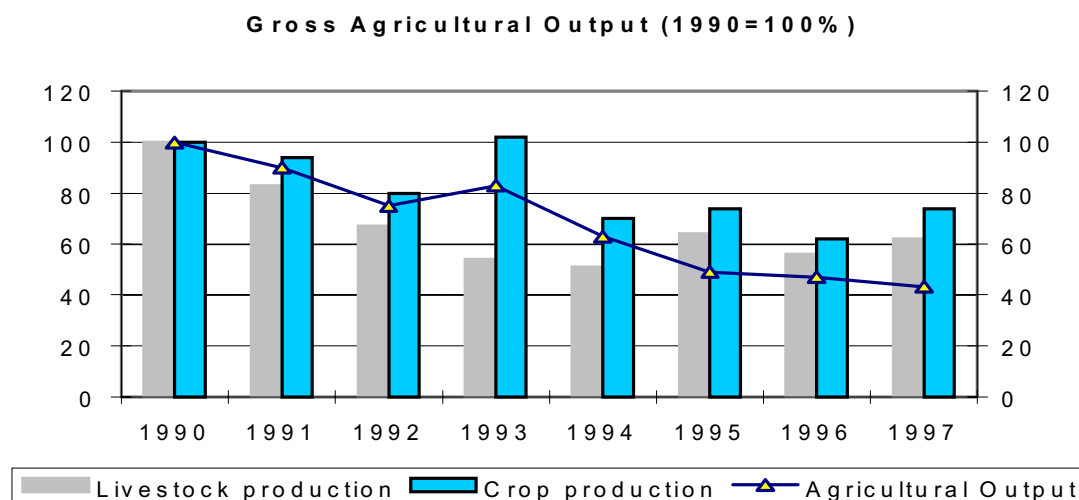
Although, the mechanism mentioned above has been proved for long time in different countries with market or transition economies, in case of Moldova, mistakes have been made in terms of timing, vision, pace, and in reality perception in reaching the market stability.

The quick shift without any strategy from an excessive command based economy in agriculture to an excessive liberalization can not assure the economic efficiency, with the exception of infusion of big investments, considerable discrepancy in population's incomes and deepened poverty related to Moldovan situation.

Since 1991 the changes in agricultural production have been mentioned. They were mainly influenced by lost of the traditional markets as a result of the collapse of the social system and appearance of the new private structure (individual sector).

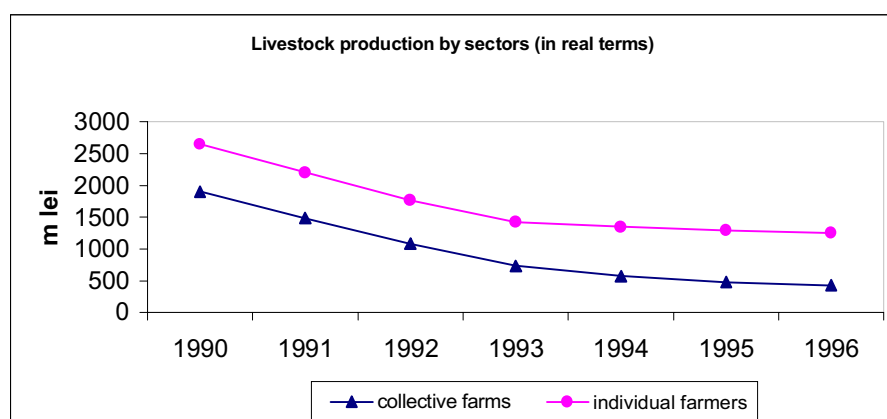
Since independence, total agricultural output declined by more than 44% compared to pre-transition levels, with crop production falling by 38% and livestock production by 53%. A change in the product mix was observed as the share of crop continuously increased since 1990 opposite to decrease in livestock production. As a result, the production of food halved and the local consumption started to be satisfied by the imported products.

Crop production prevails in the structure of the agricultural production. In both, the large scale and individual enterprises the level production of crop is higher than of livestock one.



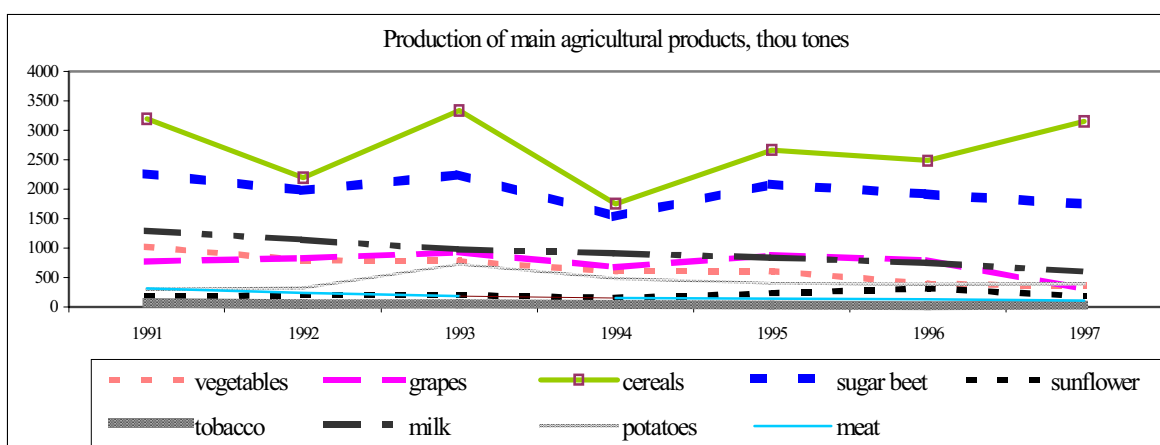
#### 4. Real sector: official and underground economy

The decline of livestock production is caused by the reduction of livestock by 60-70% as compared to 1990 level and the liquidation of cattle and pigs farms. In the same time individual sector showed better results in livestock production than collective farms.



For the period of 1991-1997 there has been a sharp increase of grain production and insignificant increase of sugar beets, sunflower, and potatoes due to their relative simplicity in cultivation and commercialization. The share of milk production remained stable, although the production of meat, tobacco and vegetables decreased considerable.

The lack of financial resources, reduction in mineral and chemical fertilizers use (from 136 kg per ha in 1991 to 11 kg per ha in 1996) as well as bad weather conditions during the last years led to a considerable reduction in average production per hectare of most of the crops.



In 1997 the production of vineyards per ha decreased by 40%, the production of vegetables by 52% compared to the 1991 level.

A reduction of the surface used for labor

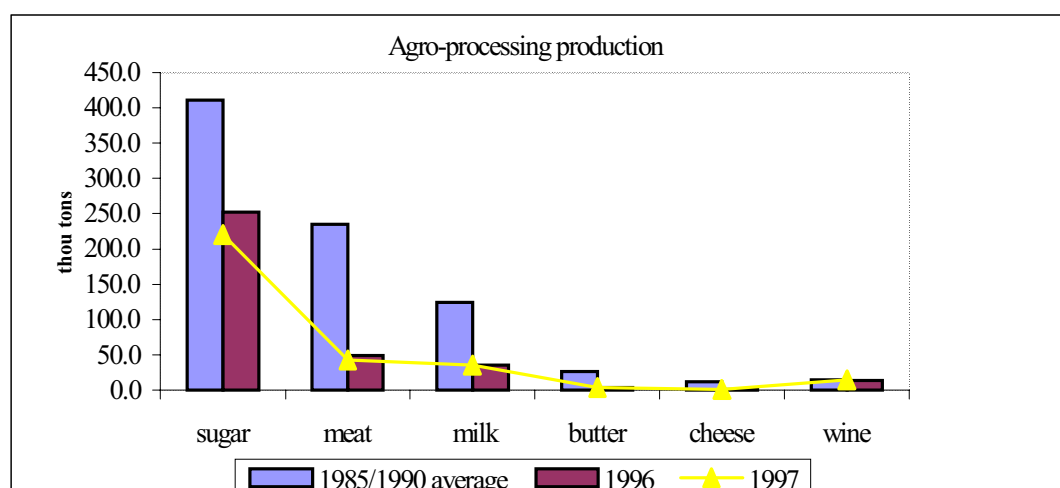
Average yield per ha, (in quintal)

	1991	1992	1993	1994	1995	1996	1997
Fruits	44	31	61	37	37	34	62
Vegetables	121	102	100	83	76	58	63
Grapes	45	49	54	40	50	45	18
Cereals	37	28	37	21	29	22	33
Sunflower	13	15	15	11	14	14	10
Sugar beet	283	239	271	184	230	228	247
Potatoes	62	56	102	349	68	57	63
Tobacco	20	15	16	15	14	11	13

intensive crops was mentioned. Thus, during the transition period the vineyard area in Moldova diminished by 70 thou ha down to 164 thou ha in early 1998. There is continuous decline of the surface sown: some 9-11 thou ha per year taking into account that only 500-700 ha are annually replanted. The surface sown with orchards started to decrease in 1994 and the decrease will continue because the orchards are no longer being renewed and trees are aging significantly. An important problem to solve is orchard renovation. Their age indicates, that a decrease of fruit production can be expected in the nearest future: 10% of fruit trees are older than 18 years, 20% are 13 to 17 years old and only 13 % are younger than 3 years.

Changes have taken place in land ownership, followed by significant structural change of transfer of production to the individual sector, which showed 140% increase compared to 1990. These changes have linked to an essential increase in the share of individual sector in GAO: from 20% in 1990 to 51% in 1996. The 21% of land in private ownership produced more over a half of all agricultural output, while large scale enterprises produced only 35% of the 1990 level.

An enormous food-processing industry was built in Moldova with the objective to supply on a guaranteed market in Soviet Union. Barter and other non-cash modes of payment, massive tax and wage arrears, growing mutual indebtedness between commercial agents – all of this could characterize the present situation in agro-industrial sector. Since independence almost all processing plants have been privatized and the majority of them were transformed into Joint Stock companies with practically 100% of private capital. At the same time a new sector of processing industry is being established – on the basis of private ownership and small size and are meant to provide services to private farms and other small producers of agricultural raw material.



During transition period the food-processing industry confronts difficulties and faces new challenges: no centralized provision of raw material, fuel, packaging, equipment and spare parts. The production of agro-processing industry dramatically declines: in 1997 the total meat production has declined 5 times, milk- 3.4 times, sugar – 1.8 times, butter – 7.7 times as compared to 1985/1990 average.

The wine production faced a considerable decrease during 1992-1995 (about 40%). In 1997 production reached the 1985/1990's average level. Currently, Moldovan wineries are in very bad situation; most of them are working at 30-40% capacity, some are even closed and their employees are on imposed vacation. The total production of processed fruit and vegetables has declined by 45% as compared to 1985/1990 average. There are 16 fruits

and vegetables processing plants currently operating. Almost all plants had problems with their supplies of raw material. With the exception of apple processing all other fruits and vegetables are processed according to the availability of raw material without any communication between producers and processors. Apple is the only crop processed on a commercial basis. The production of cigarettes was relatively stable during the transition period. Recently the tobacco industry faces both internal and external problems; lack of constant raw material supply as well as loss of two main tobacco markets: Russia and Romania.

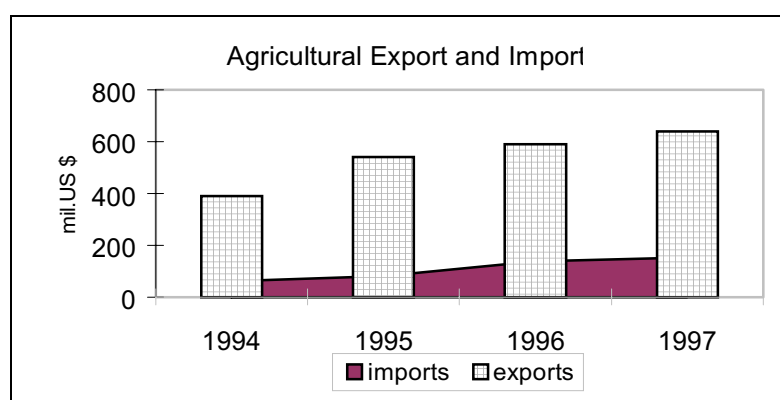
The lack of new required skills together with lack of cash for financing working capital to run processing activities make this sector absolutely inactive. Almost all plants work only around two to four months a year, or at the capacity of 30-40% of their capacity. There is no analysis of profitability, planning, cost control, and monitoring of the company budget. The development of the agriculture sector of Moldova is directly connected to the processing industry. The regular supply is the first step to run processing industry according to economic criteria. The number of existing processing plants currently operating in Moldova is much in excess to the current agricultural production.

The slow pace of ongoing reforms is very expensive for the state budget. The state of budget doesn't allow, as before, the subsidizing and disbursement of technical credits and credits granted by state. The canceling of the debts of economic agents, in order to liquidate the damages caused by the natural disasters is inefficient, even have negative results. In the situation of crises created state granted credits in the amount of 360 million lei. But only 50% were reimbursed which bring the losses in the amount of 141 million lei. The historical debts of the agricultural enterprises constitute on average 2 billion lei, 40% of which represents debts to the state budget and social fund, and the rest – debts to other economic agents.

The privatization process is not finished yet, and questions arise about the measures, which can stop the continuous demolition of the private and public property. The property of the agricultural enterprises is in danger of continuous demolition. On average 961 agricultural enterprises could be included in the process of privatization and restructuring. As of January 1<sup>st</sup>, their assets valued approximately 1.9 billion lei. On average 30% of these enterprises have not completed the re-evaluation of their assets, and 16% of them overestimated their value. Based on the estimation of the specialists of the Center for Private Business and Reforms (CPBR), after completing the restructuring and privatization of the enterprises from the national program, the total amount of repaid debts will account for 200-300 million lei. The remains 430-460 million lei will be canceled during the period of 1998-1999.

The unique possibility of debt cancellation will exist only after the real privatization and restructuring of the agricultural enterprises. The debts canceling should be done only after the completing by the enterprises of reform process. Only a real privatization, accompanied by real reorganization, could insure the growth of revenues to state budget and eventually improvement of the of the whole system functioning.

Since independence the volume of agricultural exports in nominal value registered a continuous growth, being accompanied by an increase of import of food and livestock products. The export expansion is mainly due to increase of prices, rather than to increase in volume of products exported.



Food and agricultural products traditionally dominated Moldovan exports.

Agricultural exports, share in total exports (%)

	1993	1994	1995	1996	1997
Agricultural export (total)	<b>41.3</b>	<b>67.4</b>	<b>72.6</b>	<b>74.3</b>	<b>76.6</b>
Livestock products	6.5	8.1	9.1	7.5	8.9
Fruits, vegetables, cereals	5.7	17.7	10.2	8.5	9.3
Food products, drinks, tobacco	28.3	40.0	51.3	56.8	56.9
Skins	0.8	1.6	2.0	1.5	1.5

The CIS countries and especially Russia are still the main trade partners of the country. The share of exports to Central Europe decreases but the share of EU countries practically remains the same.

Moldova is beginning to face competition from Western European countries, especially Poland, Hungary and Bulgaria, which already started to penetrate the Russian market very successfully. Moldova is not ready to face the new challenges, neither technically nor with respect to human resources. The future success of Moldova's export industry in agricultural and food products in either the CIS markets, or the EU and other international markets, will depend on the competitive supply of higher

#### Production Cost (PC) and Producer Price (PP).

		1994	1995	1996
Sunflower	PC	236	369	483
	PP	425	578	557
Sugar beet	PC	52	80	97
	PP	37	99	107
Grapes	PC	349	373	461
	PP	384	374	504
Cereals	PC	94	156	342
	PP	242	309	447
Beef	PC	4154	7681	10954
	PP	1345	1345	2171
Pork	PC	4058	5901	7820
	PP	2332	2332	4308
Lamb	PC	2712	4862	8456
	PP	1029	1029	1761
Poultry	PC	4690	5537	5871
	PP	3607	3866	4799
Milk	PC	431	792	1106
	PP	312	478	673
Eggs (1 thou)	PC	195	247	268
	PP	181	217	260



quality products, and consistent supply, two areas in which Moldova, with few exemptions, is not competitive.

Since independence Moldova signed a free trade agreement with 10 countries, an agreement for partnership and collaboration with EU, and currently is negotiating the WTO membership. The development of external relations representing an important aspect for agrarian reforms.

In January 1992 in Moldova were officially liberalized prices on the most of the consumer goods. It is difficult to choose the prices so it could attend both the market stabilization and assure a corresponding level of producer's income. In general the "shock model" of price liberalization has brought a huge amount of external debts and instability in local market.

During the transition an increase in production costs over the producer price can be easily noticed especially what concern livestock products. The production costs of meat products are 2-4 times higher than their producer prices, which eventually makes highly unprofitable their production and completely explains its continuous decrease. For milk, eggs, poultry, fruits and berries the production costs are slightly higher than the producer prices, but the gap seems to decrease over years.

Price stabilization, based on the international average prices over the last years, could represent the opportunity cost for the long period of exports. But the general tendency of the agricultural products prices on the world market is in decline. If the average world price is taken as a reference, the following is necessary to consider: the support of process of agriculture modernization in order to avoid the high production cost; establishment of loyal market conditions; to practice a comparable agriculture with those of developed countries in order to achieve a comparative advantage.

#### **Land reform**

One of the most controversial issues that the first task of agricultural reform, which is the elimination of the state monopoly on ownership of land, still remains unsolved.

The land reform started in January 1991, along with enactment of Land Code, but went very slowly during the transition period. The first effort of land privatization was done in early '90s, when 180 thou ha in 1991 and 300 thou ha in 1992 were given to the population in form of household plots. Then followed period of stagnation almost for four years, due to many drawbacks in the legislation and bureaucratic constraints. Starting with 1996 the process received a new impulse, when Constitutional Court canceled restriction on land buying-selling transactions, and then accelerated significantly in 1997.

More than 1 million of the present and former state and collective farm workers and rural citizens have the right to land ownership with the average size of about 1.7 hectares. At the beginning of 1998, only 21% of agricultural land (540 thousand ha) were by individual sector (340 thousand ha - household plots, and 200 thousand ha - independent peasant farms), the remained 61% were controlled by various large-scale enterprises, which in their essence represent the same state collective structures. Thus, the statement that 82% of Moldovan land is in private property is exaggerated. Issuance of land titles has just created an illusion about the continuation of the reforms in the countryside. The state retains 18% of agricultural land in a reserve fund, which is given in lease to producers.

The “Land” project, which is implemented with the technical assistance of USAID, is the main project dealing with land privatization and agricultural enterprises restructuring. Project started in spring 1996 following an intergovernmental agreement between Moldova and the USA and began its activity with “Maiak” enterprise. The project is operating through the Center for Private Business Reforms (CPBR) in close co-operation with the Ministry of Privatization and Administration of State Property. The commencement of the project follows the main objective of elaboration of the methodology of privatization and restructuring of agricultural enterprises with the final goal being land and property distribution. At the end of pilot stage 72 enterprises were privatized, 100 thousand ha of land and property worth of 200 million lei were distributed.

In order to accelerate the path of reform Government adopted the National “Land” Program for privatization and restructuring of agricultural enterprises. The program is implemented by CPBR, together with Booz Allen and Hamilton and East-West Institute of Management, companies that provide technical and consultative support.

Presently 793 enterprises presented their requests of joining the National Program, and 652 of them already concluded contracts of participation. But land and property distribution has been temporally suspended due to huge debts of agricultural enterprises. As long as the law on enterprises restructuring is active, the property distribution can not take place. The laws on bankruptcy and enterprises restructuring are not efficient under the created situation. Implementation of bankruptcy procedures will take months or even years, but the existing laws concerning enterprise’ debts are encouraging them to continue debt accumulation. Since the procedures stipulated by the law does not allow the acceleration of agrarian reform it is absolutely necessary to adopt a new law, which would have greater impact. Only after completing the reforms, the enterprises’ debts will be automatically canceled. As the new law would have temporally character, the enterprises will be stimulated to start and finish the reforms process within the time stipulated in the National Program. But the most important factor is that the new law would stimulate creation of new enterprises based on private property and insure the liquidation of those having huge debts.

The land will be privatized very soon and then distributed to the farmers. This is indeed a very important development in the history of the country, which would have consequences not only for the people directly involved but also for the country as a whole. In the end a new group of people would emerge in the economy. These people with the time will become more and more responsible for ensuring the development of the agricultural sector for the economic health and future benefit of the country’s economy. Thus is both for the farmers interests and for the best interests of the nation, that the private farmers sector is fully supported and encouraged. Agrarian reforms are not completed just at the stage of land distribution but are continuing with property consolidation, modernization of economic and production structures. What will happen to the new landowners and how will they organize their work within the created infrastructure? Farmers face the situation when they need to be competent and skilled. They are now responsible for making their own policy about what it is necessary to produce, how it will be accomplished, where and how to sell the final product. This is a new experience of the newly emerged farmers, and not every farmer is able to perform these roles equally well. The division of land into small private farms, which are then subdivided into smaller plots based on different crops has several advantages – more employment, more fair distribution of income, and wider home market for the manufacturing sector. However small holdings must also be capable to face other

requirements as well. It is essential to consider the effects of land reform on agricultural production, both for export and for increasing food production. At present day, the farmers can not get help they need. Neither local authorities or the Government agencies are able to give the support they need, due to their own scarcity of resources and the problem involved in physically dealing with so many thousands of small farm units, comparing to the small number of former collective units. Experts from various fields who worked in the former system need to be retrained in order to deal with the entirely changed environment which private farmers face, since now their experience can hardly be applied to the new circumstances.

As a solution to the created problem, TACIS project Assistance to Reform the Agriculture Support System elaborated the draft of the law on cooperation in agriculture, which would be hopefully approved by the Parliament till the end of the current year. Present law puts a stress on constituting and functioning of agricultural service co-operatives such as: processing, collecting, transporting and storing, sorting and trading the agricultural production, etc.

The idea of the creation of service co-ops is based on the experience of co-ops development in some of European countries (Ireland, Denmark, Holland, France, Germany, etc). Of course all these countries adopted their own model taking into account specific circumstances of each country. The co-operation at the village level would be one solution to use the existing infrastructure in order to increase farmers' efficiency. Nevertheless, decisions about the organization of the new farmers activity depends entirely on the own will.

Seven years passed, and the agrarian policy was based on the assumption that agricultural growth is ensured by rapid technical changes: allocating few resources for the rural development, heavily taxing if possible, and getting the agricultural outputs cheaply to support industrial development. Now, hopefully, the policy-makers understand that agriculture cannot be neglected since it is adequately providing employment opportunities, materials, markets and savings to the industry.

The fact that agro-industrial sector faces certain problems does not in itself justify the government intervention; it only identifies the potential area for it. An analysis of the appropriate policy for Moldovan agriculture must therefore begin by identifying factors which led to the current crises and the instruments the Government could use to remedy the situation.

#### 4.4 Domestic trade and services

##### *Domestic trade.*

The economic decline, along with the decrease of the purchasing power of population, and the slide of domestic trade into the unorganized market essentially caused a fall in domestic trade. In 1998 the gross domestic sales in real terms amounted to about 1.96 billion lei, a 61% drop. Public catering has a stable share of 8% in gross domestic sales.

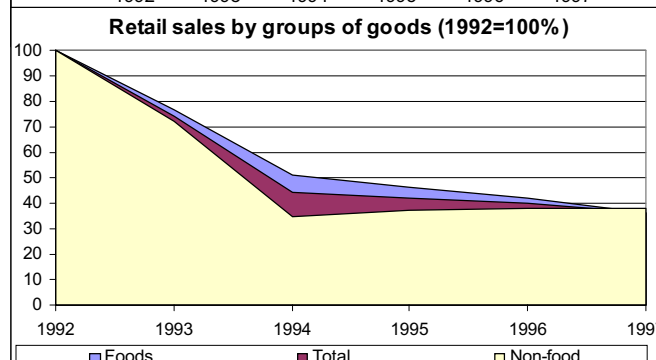
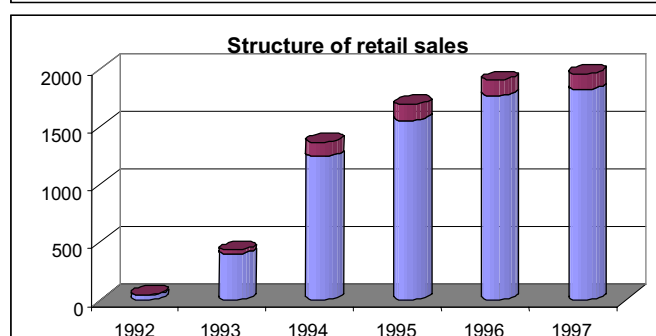
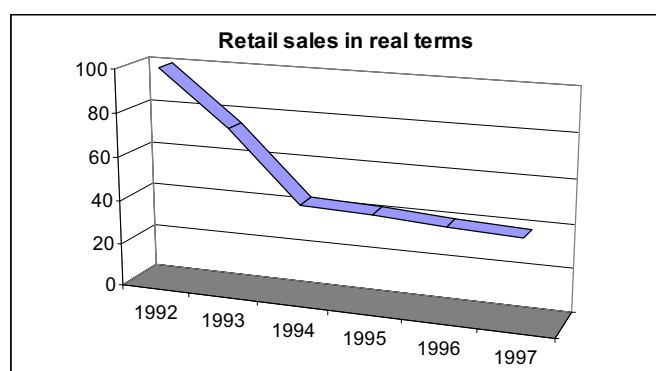
The share of foodstuffs in retail sale is constantly growing (from 51% in 1992 to 65% in 1997). The decline in real sales of food merchandises was larger than of non-food goods. During this time prices of foods increased 116 times, and only 98 times of non-food items.

The analysis of *per capita* sales suggests that sales on the organized market amount to only 5-10% of the total. It is hard to conceive that average *per capita yearly* sales come to only 2.5 kilograms of meat, 600 grams of fish, 200 grams of butter, and so on. The share of organized trade (in fact, the part taxed by the state) is permanently diminishing, destroying any hope of getting more budget revenues from this sector, which is the most profitable at the moment.

Rural population, which constitutes 54% of the total, held 32% of the total trade in 1992 and only 26% in 1997. This confirms the fact that rural population is getting poor faster.

The structure of retail trade is shifting towards private sector (from 39% in 1992 to 70% in 1997). Simultaneously, the mixed sector is growing (18%).

The number of public retail trade units decreased from 3300 in 1992 to 504 in 1997, while of private ones - increased from 1800 in 1992 to 6488 in 1997. It is important to notice that the average yearly volume sold by one enterprise in the public

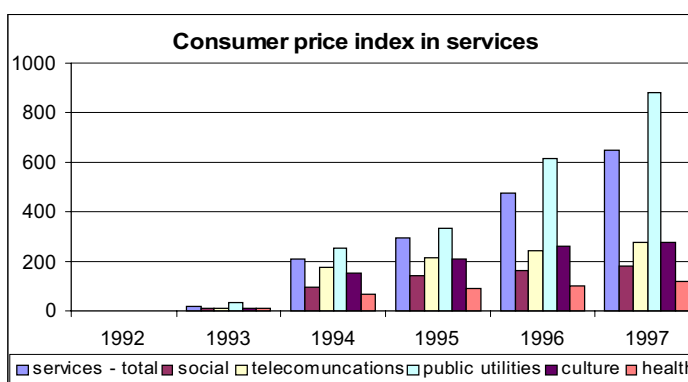
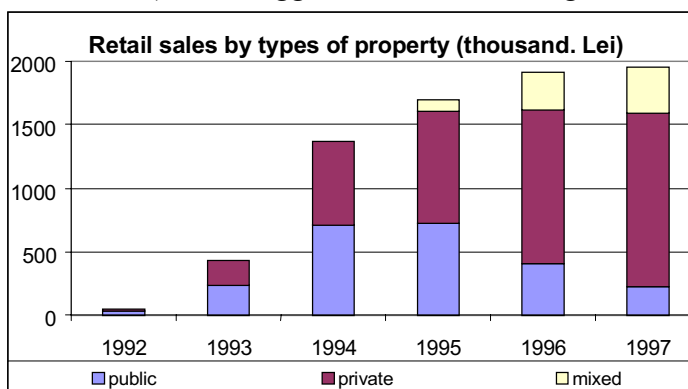


	Unit	1995	1996	1997
Meat	kg	1.68	2.89	2.53
Fish	kg	0.46	0.82	0.62
Butter	kg	0.32	0.34	0.20
Vegetal oil	kg	0.63	0.91	0.79
Eggs	piece	10.12	43.78	40.49
Sugar	kg	1.89	3.65	5.89
Potatoes	kg	2.16	2.81	1.97
Vegetables	kg	3.36	3.33	3.47
Fruits	kg	1.85	5.61	7.62
Vodka	liters	1.68	1.24	1.37
Brandy	liters	0.11	0.17	0.18
Champagne	liters	0.24	0.04	0.04

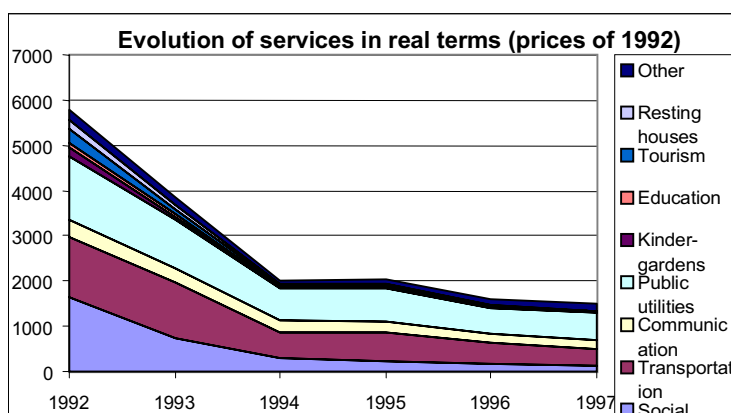
sector did not change in real terms (8.7 thousand lei in 1992 prices), while in the private sector it decreased from 10.3 thousand lei in 1992 to 4.2 thousand lei in 1997 (only 350 lei per month – which is incredible). This suggests about concealing of real data on commercial turnover in the private sector.

A positive tendency of diminishing retail stocks (from 90 days sales coverage in 1992 to 54 days in 1997) is marked. On October 1, 1998 the retail merchandise inventories were estimated at 246 million lei, and marked a two-percent reduction compared to the same period of 1997. It ensures a 51 day reserve. Domestic trade become more flexible, and responsive to demand.

According to the data presented by the Department of Statistical and Sociological Analysis, commodities with a net worth of 2,791 million lei were sold during first three quarters of 1998 (8% decline in real terms compared to the same period of 1997). This can be explained by the deterioration of purchasing power of the population, salary arrears for budget sphere employees, enormous pension debts, continuous economic decline and emerging of inflationary tendencies. The private sector accounted for 74% of the total sales, the public sector – 7%, and the mixed sector -19%.

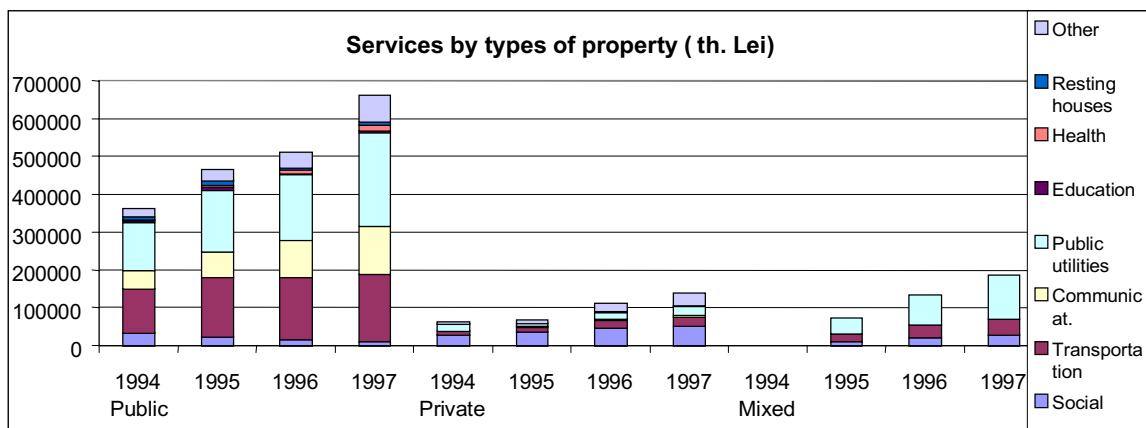


**Services.** The volume of services rendered for fees to the population increased in nominal terms from 5.79 million lei in 1992 to 987.5 million lei in 1997. The decline in real terms in the amount of rendered services is deeper than in retail, constituting 74% for the given period. The structure of services has also modified. Consequently, the share of social services in the total decreased from 28% in 1992 to 9.5% in 1997, of utilities - increased from 24% to 39%, and of communications - rose from 6 to 13 percent. Relatively stable remained the share of transportation (23-24%).



The inflation and gradual convergence of domestic and international prices changed in a different manner the prices of goods and services. Thus, the largest increase was experienced in utilities – 884 times, transportation – 492 times, culture and communication – 276 times. The price of services soared 651 times overall.

The public sector is dominant, when taking into account the division by type of property (362.6 million lei in 1992 and 662 million lei in 1997). This is mainly due to utilities, transportation, and communications. Its share in total services constituted 85.6% in 1994 and 76% in 1997. The share of private sector remained virtually unchanged at 14% (61 million lei in 1994 and 138 million lei in 1997). However, the mixed sector emerged, accounting for 19% or 186 million lei in 1997.



During first three-quarter of 1998 services were rendered, valued at 976 million lei through all the channels. This was 3% lower than in the same period of 1997 in comparative prices. The share of public services sector amounted to 67% of the total services, of the private sector to 14% and of the mixed – to 19%.

It is necessary to solve the problems related to the implementation of a modern market-oriented system of trade and services, rational positioning in the territories of retail-sale and service enterprises, renovation of accountability of sectors' enterprises to statistical offices, ensuring functioning of legislation related to consumer protection. The Government should find a way to attract the retail sale and the services system into the formal sector of the economy, so it would become liable to taxation.

#### 4.5 Foreign Trade

Globalization of the world economy, opening of a number of economies to international flows of goods, services, capital, labor force, and information creates, on one hand, absolutely new economic opportunities, practically not achievable in previous years, on the other hand, rises the dependence and the vulnerability to external shocks. The external trade of the Republic of Moldova suffered a number of modifications since obtaining the independence. Unfortunately, some of these changes cannot be regarded as positive. The degree of openness of the economy of Moldova, being calculated as the rate of external trade to GDP, grew up. By 1997 this indicator reached 113.5%. The trade balance worsened both in nominal and in real terms, reaching its minimal value of 344 million lei in 1997.

By the moment of obtaining the independence, the Government stood for a structure of exports being less colonial, more industrialized, with a larger share of

finished for consumption goods. The reality displays an increase of agro-industrial complex's exports in total exports from 40% in 1992 to 70% in 1997. This increases the economic dependence of the economy on climacteric factors. A positive tendency of diminishing share of energy resources (from more than 40% in 1992 to 33% in 1997) and textiles (from 10.5 to 5.7%) emerged. A large share of imported foods is of a certain concern, especially since it was believed that Moldova has a comparative advantage in this field.

Geographic structure of imports shifted: the share of imports from CIS fell from 75.6% in 1992 to 51.6% in 1997, while from the rest of the world - increased. This is reasonable, since Moldova is opening to new partners.

Increasing share of imports from Russia is alarming for the economic security (from 38% in 1992 to almost 60% in 1997). The financial crisis in Russia (August, 1998) generated a shock in demand for Moldovan exports. This led to a dramatic fall in Moldovan exports and the cession of production of some Moldovan enterprises. Thus, in September-October, 1998 the export of fruits and vegetables to Russia and Belarus was almost suspended. According to the Ministry of Agriculture and Processing Industry, export of 90-100 thousand tones of fresh vegetables, 110 thousand tones of fruits, and 10 thousand tones of grapes is expected in 1998. As of the end of October only 10 thousand tones of vegetables (10% of the planned quantity), 12.3 thousand tons fruit (11%), and 2 thousand tones grapes (20%) were actually exported.

The analysis of Moldova's foreign trade in real terms is of interest. The evaluation of a sample of exports and imports of Moldova in prices of 1994 (thousand US dollars), represented by a set of 56 goods (43-60% of total imports), and of 47 goods (64-68% of total exports), showed that imports have risen by 45%, while the exports remained unchanged during 1994-1997.

It is good to notice that the prices of exports grew by 64%, while of imports - by only 26%, according to our estimations for the given period of time. However, this is not resulting from some policy of increasing efficiency of Moldovan exports, but from the fact that, at the beginning Moldovan exports were sold at considerable lower prices than the world prices. The spontaneous entering into the market economy forces Moldova to accommodate to international demand, prices and standards.

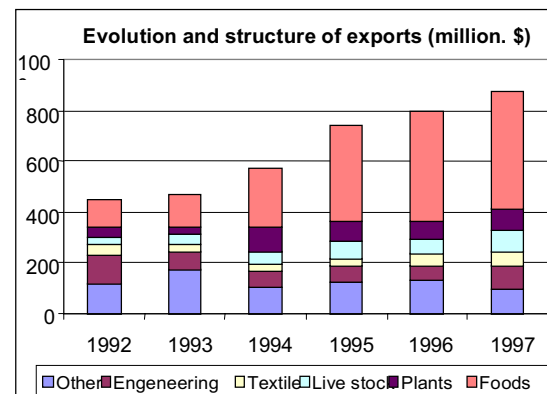
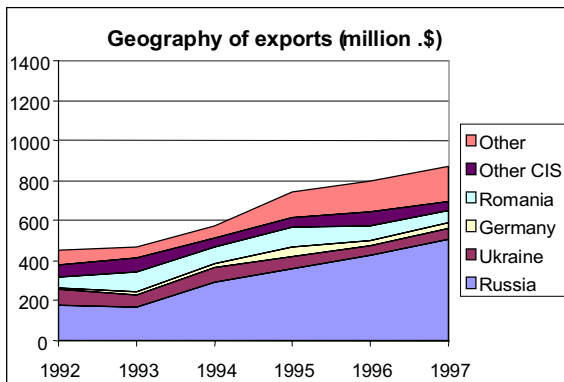
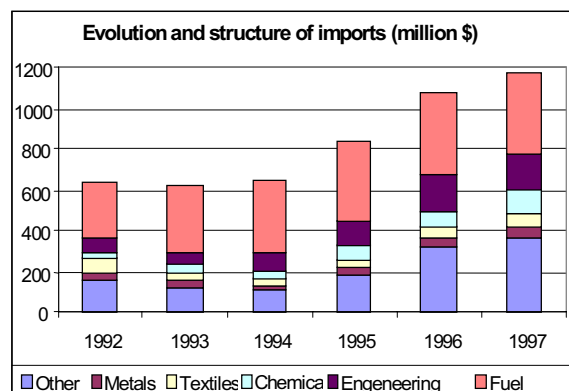
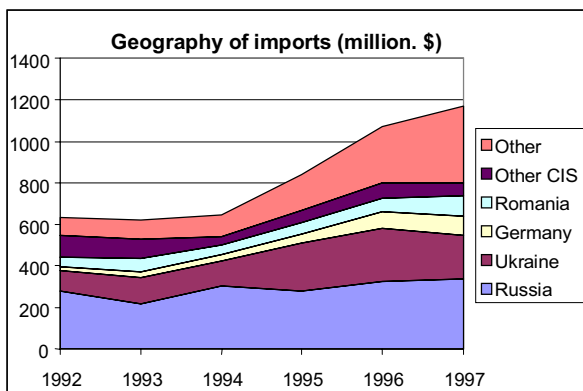
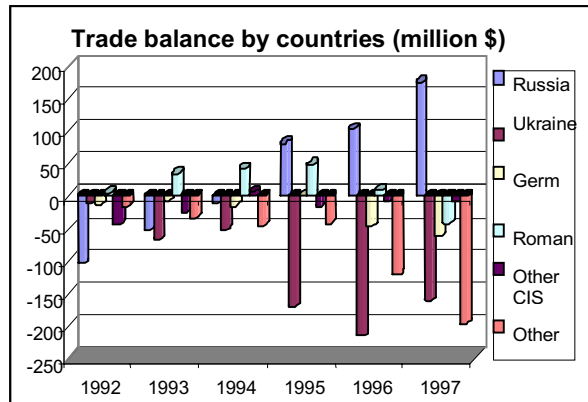
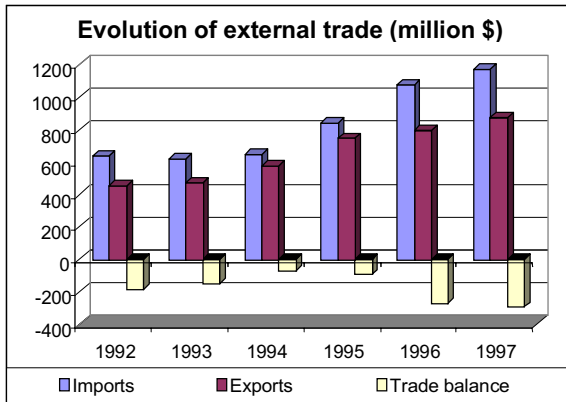
The survival of Moldovan economy requires an urgent elaboration and implementation of economic and organizational measures for expanding the market, exporting Moldovan goods to nontraditional directions (Afro-Asian countries, for example, where the temps of population growth is much higher than the growth of their agro-alimentary sector) Moldova also requires assistance from international economic institutions to fight the results of the current crisis, negotiation of some facilities for the Moldovan exports to the EU (even temporary ones).

***Exchange rate and country's foreign trade.*** It is well known that the result of foreign activity of a country depends on its currency exchange rate, i.e. net exports depend on the real exchange rate.

The simplest definition of the real exchange rate ( $\epsilon$ ) is equal to the nominal exchange rate  $e$  multiplied by the ratio of the domestic price level  $Pd$  to the foreign price level  $Pf$ .

$$\epsilon = e * Pd / Pf \quad (*)$$

The export is more convenient when real exchange rate is smaller, i.e. the net exports are a function of the real exchange rate. Therefore, it is normal to expect an export boost as a result of the Moldovan leu depreciation. But the efficiency of such measures for the Republic of Moldova should be prudently estimated.





Data from the National Bank of Moldova show that since its introduction leu depreciated by approximately 230-250% in nominal terms. But in real terms leu essentially appreciated (see chapter 2), negatively impacting net exports.

There are several causes for this contradictory phenomenon of evolution of the national currency rate in real and nominal terms. One of them is the internal and external price equalization tendency as a result of price liberalization and Moldova's direct participation on the international markets. Thus, the table below shows a relatively faster increase in the prices of exports.

Another cause is the local psychology of adaptation of prices to the changes in nominal exchange rate of the currency. High inflationary environment in Moldova in early 1993 resulted in a subconscious adaptation of the population to convert everything into US dollars, even when the actual transactions were expressed in national currency. The population got used to consider the average salary to be USD 50, GDP - close to two billion dollars, a loaf of bread about 20 cents, a kW/h – a nickel, a pair of shoes - USD 25, of boots – USD 50, and so on.

Almost 80 % of merchandises are sold on the non-organized market, which is extremely receptive to changes in the nominal exchange rate. It is enough for the nominal exchange rate to change, and it immediately implies changes in prices on the domestic market. This phenomenon became quite evident in November 1998, when the prices are being changed daily in accordance with the exchange rate. Relatively less elastic are prices for food, energy and services. In formula (\*) the depreciation of the nominal exchange rate  $e$  implies a more rapid rise in domestic prices  $P_d$  than the diminution of  $e$ . Hence, the real exchange rate increases.

$$e \downarrow \Rightarrow P_d \uparrow \uparrow \Rightarrow \varepsilon \uparrow.$$

There are several more causes of the real appreciation of the exchange rate. It may be caused for instance by state's economic policy. Macro-texts contain a number of examples, when the state, by stimulating the economy through tax cuts or increased government spending, generates a decrease in domestic savings, resulting in an increase of the exchange rate. The investment promotion and domestic markets protection policies, domestic savings reduction (the case of Moldova) have a similar effect on the real exchange rate.

An explanation of evolution of the trade balance and its components is required in these conditions. The correlation method indicated the following relationship function between net exports and real exchange rate for Moldova

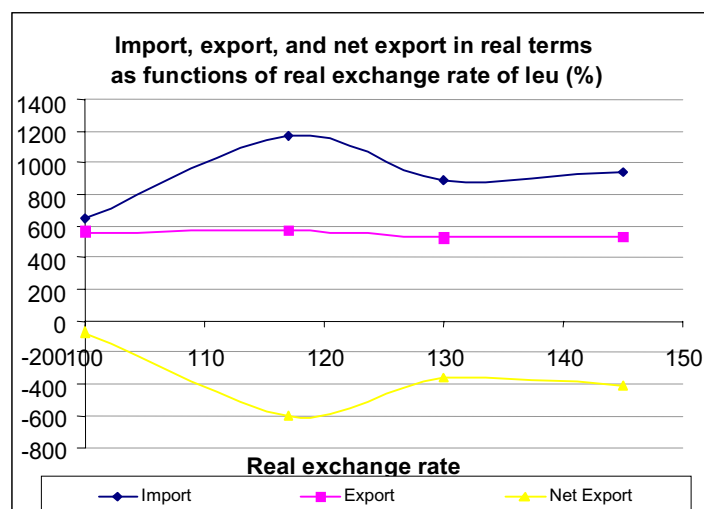
$$NX(\varepsilon) = - 5.62 \varepsilon + 505.06 \quad (R^2 = 0.84)$$

This basically shows that the increase in the real exchange rate by one percent resulted in a USD 5.26 million reduction of net exports in 1994 prices (USD 7.8 million in 1997 prices), while the real exchange rate of the Moldovan leu grew by 45%.

Net exports may be divided into its components – imports and exports in order to study their elasticity to changes in the exchange rate. The same method gave the following relationship between the real exchange rate, exports (EX) and imports (IMP):

$$EX(\varepsilon) = 6.67 \varepsilon - 75.62 \quad (R^2 = 0.94)$$

$$\text{IMP}(\varepsilon) = 12.29 \varepsilon - 580.68 \quad (R^2 = 0.97)$$



The basic result is: an appreciation of the real exchange rate by one percent generates a double increase in imports, compared to exports (both calculated in nominal terms). Furthermore, imports have a big constant component of energy resources. Similar calculations for real exchange rate show an insignificant decline in exports (USD 0.91 million) and an increase in imports (USD 4.8 million). However, the results are quite unstable, since R-squared are inadmissible low. Both cases, for nominal and real terms calculations, display a greater elasticity to the exchange rate fluctuations of imports compared to exports.

*Question:* after a seven times increase by the NBM of the money supply (M0) in the last four and a half years, would it be efficient to depreciate the exchange rate in order to support the foreign trade?

*Answer:*

1. The devaluation of the Moldovan leu takes place in the conditions of inflationary expectations. Therefore, domestic prices are rising, resulting in a real rate appreciation. Thus, domestic goods are not becoming cheaper, and this cannot stimulate exports;
2. Even performing a real exchange rate devaluation, the NBM would most likely discourage imports instead of encouraging exports, and this would be a positive result;
3. Such a policy however, would generate an increase in prices for energy resources relative to domestic goods, having an unfavorable impact on the entire economy;
4. Export-promotion policy based on national currency depreciation is a short-run solution, and it can not be implemented in the long run;
5. A rapid growth of inflation would reduce Moldova's economy rating, which would become less stable, and less attractive for foreign investors.

#### 4. Real sector: official and underground economy

**Evolution of nominal and real imports of the Republic of Moldova  
(1994-1997) base year - 1994**

	Unit of measure	1994			1995				1996				1997			
		Quantity	Thou \$	price	Quantity	Thou \$	Thou \$(1994)	price	Quantity	Thou \$	Thou \$(1994)	price	Quantity	Thou \$	Thou \$(1994)	price
1 Poultry	Thou pieces	752	279	0.37	1485	764	551	0.51	974	557	361	0.57	1148	725	426	0.63
2 Beef	Tons	46	38	0.83	672	987	554	1.47	542	602	447	1.11	1213	1445	1001	1.19
3 Fish	Tons	1495	810	0.54	4886	3362	2647	0.69	11353	9120	6150	0.80	9811	7067	5315	0.72
4 Potatoes	Tons	13876	1769	0.13	18120	3264	2310	0.18	62915	11845	8019	0.19	26167	4154	3335	0.16
5 Banana	Tons	796	268	0.34	3307	713	1116	0.22	3157	765	1065	0.24	3931	968	1326	0.25
6 Citrus	Tons	1992	654	0.33	3965	882	1302	0.22	3372	849	1107	0.25	6046	1486	1986	0.25
7 Tea	Tons	338	527	1.56	114	216	178	1.89	147	335	229	2.29	145	396	226	2.73
8 Wheat	Tons	38574	6166	0.16	62753	5008	10030	0.08	34867	7188	5573	0.21	8957	1623	1432	0.18
9 Rye	Tons	16470	987	0.06	63559	4389	3807	0.07	7949	349	476	0.04	202	25	12	0.12
10 Barley	Tons	21742	814	0.04	10837	496	406	0.05	1054	142	39	0.13	15164	2341	567	0.15
11 Corn	Tons	39266	9524	0.24	39224	6345	9514	0.16	63	138	15	2.18	1326	439	322	0.33
12 Rice	Tons	3016	535	0.18	4048	1764	718	0.44	7895	3652	1401	0.46	18642	7416	3308	0.40
13 Malt	Tons	350	74	0.21	4310	859	912	0.20	3693	1556	782	0.42	5215	2253	1104	0.43
14 Margarine	Tons	98	48	0.49	659	683	320	1.04	729	815	354	1.12	1209	1287	587	1.06
15 Sugar	Tons	4085	1168	0.29	9184	3510	2626	0.38	59000	23224	16872	0.39	21000	7373	6005	0.35
16 Cocoa	Tons	536	831	1.55	607	990	941	1.63	519	882	804	1.70	640	1304	993	2.04
17 Fruit juice	Tons	1139	478	0.42	1138	702	478	0.62	1768	884	742	0.50	3379	2959	1419	0.88
18 Natural wine	Thou deciliters	83	479	5.79	614	4191	3559	6.82	1351	7458	7827	5.52	1457	7211	8441	4.95
19 Sparklin wine	Thou deciliters	90	834	9.29	385	3411	3575	8.86	443	3291	4117	7.43	234	1884	2178	8.04
20 Alcohol ethilic	Thou deciliters	714	4167	5.84	828	5149	4830	6.22	1500	12266	8758	8.17	1655	12750	9661	7.70
21 Brandy ans liquors	Thou deciliters	32	746	23.54	114	3148	2688	27.57	43	2278	1015	52.86	17	1214	405	70.58
22 Cogniac	Thou deciliters	2	170	100.01	0	39	40	97.75	10	418	1040	40.17	16	1110	1580	70.27
23 Tobacco (raw)	Tons	1921	2240	1.17	1307	1241	1524	0.95	2342	3991	2731	1.70	876	1899	1021	1.94
24 Salt	Tons	31382	978	0.03	39502	964	1231	0.02	46849	1267	1460	0.03	52166	1650	1625	0.03
25 Cements hydraulic	Tons	57308	1237	0.02	46164	996	996	0.02	12740	573	275	0.04	9993	575	216	0.06
26 Asbestos	Tons	52	3	0.06	2804	539	160	0.19	1537	364	88	0.24	3190	695	182	0.22
27 Coal	Thou Tons	2445	54185	22.16	1315	48905	29135	37.20	1079	47483	23906	44.02	372	17577	8250	47.21
28 Cocs si semicocs	Tons	3453	255	0.07	14139	1368	1045	0.10	12653	1645	935	0.13	8839	1010	653	0.11
29 Aviation gasoline	Tons	7976	1452	0.18	10403	2040	1894	0.20	6890	1565	1254	0.23	34	15	6	0.43
30 Gasoline	Thou Tons	200	34380	172.25	250	52170	43027	208.85	220	48599	37894	220.91	271	64185	46644	237.02
31 Diesel	Tons	264	36010	136.61	375	69523	51269	185.25	354	72602	48318	205.27	338	75636	46187	223.71
32 Fuel, mazut	Thou Tons	492	40850	82.96	482	41095	39979	85.28	310	33907	25701	109.45	271	29907	22449	110.52
33 Natural gas	Thou m3	1897	147153	77.58	1762	102187	136687	58.00	2038	118209	158124	58.00	2076	120764	161087	58.16
34 Electric power	Thou kWh	615	9447	15.35	1997	47577	30651	23.83	1806	39624	24646	24.68	1978	61915	30364	31.30
35 Mineral fertilizer	Tons	2139	366	0.17	2144	901	367	0.42	2149	585	368	0.27	14317	6065	2451	0.42
36 Synthetical cautchouc	Thou pieces	703	473	0.67	615	945	414	1.54	319	644	215	2.02	279	559	188	2.01
37 Tyres	Thou pieces	38	2115	55.23	4383	19771	242070	4.51	101	12037	5601	118.71	148	13526	8186	91.27
38 Beef skin	Thou pieces	2025	1624	0.80	991	1232	795	1.24	418	608	335	1.46	210	252	169	1.20
39 Beef leather	Thou m2	113	389	3.45	84	1400	290	16.66	127	1638	436	12.95	102	1773	351	17.42
40 Timber	Thou m2	285	613	2.15	108	443	232	4.11	132	729	285	5.51	93	303	200	3.26

**Evolution of nominal and real imports of the Republic of Moldova  
(1994-1997) base year - 1994 (continuation)**

	Unity of measure	1994			1995				1996				1997			
		Quantity	Thou \$	price	Quantity	Thou \$	Thou \$(1994)	price	Quantity	Thou \$	Thou \$(1994)	price	Quantity	Thou \$	Thou \$(1994)	price
41 Wood particul board	Thou m3	17	1149	68.40	21	1635	1457	76.78	27	2246	1833	83.80	18	2235	1211	126.26
42 Wool	Tons	1438	2191	1.52	772	1866	1177	2.42	915	2201	1394	2.41	897	2072	1367	2.31
43 Raw cotton	Tons	368	340	0.92	656	1091	605	1.66	165	299	152	1.81	0	0	0	0.00
44 Cotton fabric	Thou m2	6088	3278	0.54	4475	3083	2409	0.69	5344	4774	2877	0.89	3669	2779	1975	0.76
45 Flax	Tons	1005	1196	1.19	570	1004	679	1.76	653	1214	777	1.86	279	528	332	1.89
46 Flax fabric	Thou m2	300	849	2.83	755	1180	2141	1.56	234	423	664	1.80	265	365	752	1.37
47 Linoleum	Thou m2	160	388	2.43	60	300	146	5.00	43	179	104	4.18	61	227	149	3.72
48 Other footwear	Thou.pairs	235	1032	4.39	137	630	603	4.59	271	1229	1190	4.54	359	1049	1577	2.92
49 Footwear from genuin leather	Thou.pairs	304	1568	5.16	106	861	547	8.12	148	1101	765	7.42	361	1560	1861	4.32
50 Waste cast iron	Tons	409	10	0.02	1324	249	32	0.19	584	313	14	0.54	188	111	5	0.59
51 Waste copper	Tons	767	591	0.77	2843	2922	2192	1.03	1317	1381	1015	1.05	1298	1381	1001	1.06
52 Refrigerators	Pieces	3883	806	0.21	8427	2897	1750	0.34	11600	4343	2409	0.37	15400	5444	3198	0.35
53 Electric accumulators	Thou pieces	49186	2159	0.04	35301	2359	1549	0.07	26657	1838	1170	0.07	34066	1806	1495	0.05
54 TV sets	Pieces	5679	950	0.17	1727	392	289	0.23	2965	659	496	0.22	22825	5140	3818	0.23
55 Tractor	Pieces	318	830	2.61	115	522	300	4.54	229	2944	598	12.86	528	5754	1379	10.90
56 Cars	Pieces	1060	5375	5.07	1817	7964	9214	4.38	1606	8615	8144	5.36	1013	7936	5137	7.83
Total in the selection	Thou \$		387849.7		473124.1	659957.44		508443.8	423368.715		503920.1	407115.303				
IMPORT -TOTAL (nominal)	Thou \$		640998.5		840713.4			1072258			1171718					
Share of the selection in total imports	%		60.50711		56.2765			47.41807			43.00694					
IMPORT in real terms			640998.5		1172705			892842.6			946626.9					
Deflator of imports		1	1		0.716901			1.200948			1.237782					

#### 4. Real sector: official and underground economy

**Evolution of nominal and real exports of the Republic of Moldova  
(1994-1997) base year - 1994**

	Unit of measure	1994			1995				1996				1997			
		Quantity	Thou \$	price	Quantity	Thou \$	Thou \$(1994)	price	Quantity	Thou \$	Thou \$(1994)	price	Quantity	Thou \$	Thou \$(1994)	price
1 Beef meat	Tons	23235	23627	1.02	29578	34967	30076	1.18	13609	18803	13838	1.38	18029	27040	18332	1.50
2 Pork meat	Tons	5682	7738	1.36	4948	7461	6739	1.51	10005	19394	13626	1.94	15786	32352	21499	2.05
3 Lamb	Tons	239	205	0.86	511	631	438	1.23	898	1060	769	1.18	1506	1999	1290	1.33
4 Comestible organs	Tons	802	305	0.38	1492	526	567	0.35	424	216	161	0.51	384	321	146	0.84
5 Poultry	Tons	19	20	1.08	573	1113	618	1.94	2185	4567	2358	2.09	3311	5295	3574	1.60
6 Milk, sour cream	Tons	2274	462	0.20	2687	539	546	0.20	4550	6990	925	1.54	2452	3687	499	1.50
7 Butter and dairy products	Tons	3496	6697	1.92	1739	5186	3332	2.98	1372	3844	2628	2.80	58	194	111	3.33
8 Eggs	Milion pcs	2	101	45.89	6	388	271	65.81	21	1241	945	60.22	15	1185	670	81.19
9 Honey	Tons	198	259	1.31	123	263	161	2.15	232	388	304	1.67	378	627	496	1.66
10 Tomatoes	Tons	12849	2623	0.20	6989	8598	1427	1.23	6346	1972	1296	0.31	2026	730	414	0.36
11 Cucumbers	Tons	2457	555	0.23	911	491	206	0.54	411	208	93	0.50	718	305	162	0.42
12 Grapes	Tons	137014	24539	0.18	13703	3606	2454	0.26	12790	3169	2291	0.25	2451	735	439	0.30
13 Apples, quince	Thou Tons	100	24241	243.38	68	19176	16550	282.00	37	13915	9054	374.05	62	18295	15163	293.65
14 Wheat	Tons	665	39	0.06	110529	12706	6473	0.11	56646	7725	3317	0.14	10946	1148	641	0.10
15 Corn	Thou Tons	39	30357	772.45	28	12323	21320	446.49	39	10714	30048	275.43	60	19866	46038	333.32
16 Wheat flour	Tons	78	16	0.20	12698	3686	2590	0.29	11594	3786	2364	0.33	1958	712	399	0.36
17 Sun-flower seeds	Tons	20600	4199	0.20	24988	6506	5093	0.26	40961	9400	8348	0.23	68169	13624	13894	0.20
18 Vegetable oil	Tons	16031	8463	0.53	13606	10537	7183	0.77	3764	3001	1987	0.80	11470	7944	6055	0.69
19 Sausages	Tons	1108	1936	1.75	1830	4301	3197	2.35	1657	4469	2895	2.70	3045	8094	5320	2.66
20 Sugar	Thou Tons	101	31173	310.18	135	58907	41812	436.99	108	51273	33499	474.75	159	61180	49287	385.02
21 Molasses	Thou Tons	37	2471	66.96	44	3820	2960	86.42	43	4290	2852	100.71	16	1574	1085	97.14
22 Jams	Tons	5628	2912	0.52	7476	4917	3968	0.66	5855	6066	3030	1.04	6837	9332	3538	1.36
23 Fruit juices	Thou Tons	53	21265	399.72	61	48179	24423	788.52	54	42843	21465	797.82	67	47603	26661	713.69
24 Natural wine	Thou deciliters	11585	45380	3.92	15096	73978	59135	4.90	13628	99860	53385	7.33	18078	185761	70815	10.28
25 Sparkling wines	Thou deciliters	2113	13123	6.21	1459	17303	9063	11.86	2393	31568	14860	13.19	1720	28113	10681	16.35

**Evolution of nominal and real exports of the Republic of Moldova  
(1994-1997) base year - 1994 (continuation)**

	Unit of measure	1994			1995				1996				1997			
		Quantity	TH. \$	price	Quantity	TH. \$	Th. \$(1994)	price	Quantity	TH. \$	Th. \$(1994)	price	Quantity	TH. \$	Th. \$(1994)	price
26 Wine raw materials	Thou deciliters	1654	3613	2.12	9346	20861	19854	2.23	12560	45892	26679	3.66	9407	41207	19902	4.30
27 Vermut	Thou deciliters	82	503	6.12	74	954	451	12.92	189	1980	1158	6.34	176.3	1774	1078	10.06
28 Ethilic alcohol	Thou deciliters	416	3066	7.38	202	1565	1488	7.76	603	5388	4447	8.94	195.5	1792	1442	9.16
29 Brandy, liqueurs	Thou deciliters	612	16399	26.80	1080	29209	28930	27.72	795	24061	21308	30.26	57.6	2419	1544	41.99
30 Cogniac	Thou deciliters	239	16914	70.98	325	29953	23046	92.26	189	14869	13401	78.76	129.6	15065	9199	116.24
31 Tobacco (raw)	Tones	17370	13902	0.80	17804	15542	14249	0.87	11239	13902	8995	1.24	7318.2	12226	5857	1.67
32 Grawel, sand	Th. Tones	230	330	1.44	237	967	341	4.08	130	1039	187	7.97	51	615	73	10.11
33 Beef skin	Tones	4893	4424	0.90	5788	8838	5233	1.18	2638	4086	2586	1.44	3150.4	4497	2848	1.43
34 Lamb skin	Th. Tones	367	810	1.71	615	1688	1050	2.74	570	2272	974	3.98	302.5	1349	516	4.46
35 Beef leather	Th. m2	243	1347	5.54	313	3347	1735	10.70	240	2941	1330	12.26	317.9	3687	1763	11.28
36 Wool (raw)	Tones	329	169	0.51	2629	1611	1348	0.89	2044	1505	1045	0.74	1678	1516	963	0.81
37 Cotton fabric	Th. m2	2134	1181	0.55	274	385	151	1.41	620	536	454	0.66	1206.7	385	688	0.30
38 Carpets	Th. m2	1211	11995	9.90	724	9147	7166	12.64	641	10241	6349	16.97	634.1	11409	6279	17.89
39 Other footwear	Th. pairs	260	695	2.68	221	1053	691	4.77	380	1650	1016	4.35	210.5	1401	563	6.65
40 Footwear from genuin leather	Th. pairs	203	792	3.91	95	744	372	7.91	106	1210	416	11.38	200.6	3450	784	17.20
41 Footwear from textiles	Th. pairs	748	813	1.09	543	875	590	1.61	296	615	279	2.40	67.2	214	73	3.19
42 Refrigerators	Pieces	47000	5441	0.12	20600	2738	2385	0.13	653	156	75	0.24	140	49	16	0.25
43 Washing machines	Th. pieces	72	6203	86.63	33	2959	2833	90.47	31	3854	2703	123.54	27.2	3644	2366	130.30
44 Electric accumulators	Pieces	4196	563	0.14	6700	367	908	0.05	23707	725	3214	0.03	45116	1743	6116	0.04
45 TV sets	Th. pieces	94	13400	143.16	29	4191	4080	147.06	16	2747	2248	174.99	6.3	1254	502	199.08
46 Tractoars	Pieces	1463	7034	4.81	1035	6630	4976	6.41	535	6151	2572	11.50	481	6628	2313	13.78
47 Cars	Pieces	76	322	4.23	191	1055	808	5.53	42	263	178	6.26	49	383	207	7.82
Total in the selection	Thou \$		362323			483704.2	373085.79			496446.8	327937.439			594087.2	362752.702	
EXPORT -TOTAL	Thou \$		565501.7			746529.7				796187				874444.6		
Share of the selection in total export	%		64.07107			64.88061				62.43145				67.93095		
EXPORT in real terms	Thou \$		665502			675034.4				625276				533691.4		
Deflator of exports	1		0.999999			1.296496				1.613846				1.637747		
NET EXPORT (prices 1994)	Thou \$		-75486.5			-587671				-367967				-412696		

*Conclusion:* It is certain that the NBM is able to manipulate the leu exchange rate both towards appreciation and depreciation in order to stabilize the banking system. However, the positive effects of these measures at the macroeconomic level would not be significant.

A range of measures directed towards the improvement of trade balance and foreign trade is required. The following series of action are essential:

- cancellation of fiscal facilities for *imported* goods which are substitute the locally produces ones, even in the free enterprise zones;
- concluding of only of only dollar denominated contracts for all import-export transactions;
- obligatory diversification of energy resources imports by fixing the maximum allowed share of specific countries in total imports and creating a really competitive environment in energy sector;
- an immediate dislocation of the customs along Transnistria border aiming at stopping smuggling, accomplishing the customs reform, and attracting to the decision making positions in customs of foreign specialists paid out of technical assistance, funds;
- Monitoring and informing population regarding bad quality of imported goods, introduction of non-economic barriers for the imported goods of bad quality<sup>1</sup>;
- Elimination of all fiscal, procedural (licensing) and organizational barriers for exports;
- Development of marketing studies, especially in placing publicity abroad for local goods as being healthy and natural. A deduction from the taxable amount of the expenditures for publicity;
- Wide informing of population regarding prices on other markets, including the distant ones, as well as prices for transportation services;
- Privatization, restructuring and retechnologization of enterprises for improving their competitiveness;
- Promotion on the foreign markets of such less traditional goods, as walnut, packed honey, peeled sun-flower seeds, healthy confectionery from soy (bean), raisins, dried prunes and apricots, vacuum-processed fruits, mushrooms, mollusks, astrakhan and nutria furs;
- A study of the possibilities to direct Moldovan exports toward the non-traditional markets of the Afro-Asian countries, where the growth of population is expected to exceed the growth in food sector of economy;
- Evaluation of the efficiency of export-import operations, taking into account the comparative and absolute advantages of Moldova in comparison with EU and CIS countries for a number of goods (according to the existing methods), and on the basis of these evaluations – elaboration of a list of strategic goods for export, negotiation of facilities and establishing quotas for exports and imports for countries – members of economic agreements.

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<sup>1</sup> The bad quality of imported goods is of certain concern. The frequency of negative results during the quality controls of imported goods was 79% in 1997, and 86% in 1996. The Republic of Moldova, being a small open economy, implements a policy of trade liberalization. Often the imported goods create a serious competition for locally produced goods, frequently easily substituting them, and reducing the local production. Informing the population about the quality of imported goods protect somehow the local producers.

#### 4.6 Private sector

*Privatization.* Establishment of a viable private sector is a primary condition for the transition to the market economy. At the beginning of '90 it was believed that privatization process would last 3-4 years, and, as a result, a new class of owners would be formed: owners vitally interested in the intensification of the economic activity, in rising its efficiency, capable to make sufficient investments in production, flexible and competitive in the domestic and foreign markets. Since the beginning of the '90s, three privatization programs were adopted and implemented, the first one - for Patrimonial Bonds - in 1994, the second - mixed privatization for Bonds and cash - in 1995-1996, and, finally, privatization for cash exclusively in 1997. At present a possibility of extension of the last program till 1999-2000 is examined.

The stage of privatization for Patrimonial Bonds, as a formal way of avoiding possible social conflicts caused by unfair distribution of public property, should have been accomplished in minimal terms. But the lack of experience in elaboration and adoption of the legislation regarding privatization, the need to compile the lists of potential owners, numerous faults in the evaluation of property's cost, and, lastly, lack of interest in privatization process from a part of population caused an inadmissible delay of privatization for Patrimonial Bonds.

As a result of this, former public property was dispersed among a huge number of Patrimonial Bonds owners, not capable to collect (save) funds for investments in re-technologization of the private enterprises. That practically showed an absence of real owners. A big part of equipment was dismantled, de-completed, stolen, and this diminished the attractiveness of the enterprises subjected to privatization.

The representatives of the state became incapable and not interested to really influence the enterprise's management, share of the state were used without any control, the private sector has been rapidly sliding to the underground zone.

The stages of mixed privatization – for Patrimonial Bonds and for cash, as well as of privatization for cash, evolved quite slow. Causes of delays in privatization, and low participation of the population in privatization lack of property rights protection because of a weak juridical system, huge debts of enterprises, overestimation of privatized enterprises, corruption, mass poverty among population, unfavorable legal framework for the development of private sector.

Taking into consideration the need to increase the budget income, and the fact that the realization of the privatization program was slowed down, in October, 1998, the Government and the Department for Privatization made efforts to accelerate the privatization for cash. Thus, since the beginning of 1998 (January-September), the Department of Privatization held 11 investment and commercial tenders, having put up for sale 85 enterprises. However, only 7 objects were traded, the total worth being 13.5 million lei. Of this sum, 8.4 million lei have already been received by the State Budget. The sales of state property during October amounted to 9.2 million lei and 13.18 million lei were received by the State Budget.

Unfortunately, the procedures of privatization of some enterprises have long lasting histories (Cement factory, MoldTelecom, Tutun company). However, the situation is changing: after the Russian companies the Western ones followed (Lafarge, Voxel – France, Kulkony – Germany), etc.



**Energy sector.** The situation in the energy sector threatens the whole economy of the country. On the 13th of October there was proposed to declare an emergency situation in this sector, which could have resulted in suspension of the legislation in this area, and a takeover of the entire financial administration of the sector by a special governmental commission.

By October 1998 Moldova accrued 1.3 billion lei (\$ 260 million) in gas debts, some 471 million lei in electricity and thermal energy debts and 165 million lei in fuel debts. Moldova owes Russia \$175 million in debts and \$75.3 million in fines. Regarded as a whole, the Moldovan energy sector works under extremely unfavorable conditions. For example, the electric sub-sector is constantly close to a bankruptcy state.

The major causes of this situation are: lack of a real owner, consumers' insolvency, extension of barter deals and mutual payments, freezing and rescheduling of debts, energy facilities for the agricultural sector, incorrect tax policy and high commercial and technical losses, thefts of energy.

For a normal development, Moldova must repair the electric equipment, gas and thermal installations, and purchase some 360,000 tons of coal (13.6 million dollars) and 214,000 tons of fuel oil (21.5 million dollars). The total cost of energy supplies for electricity and thermal energy is estimated at 107 million dollars. At the same time additional 900 kW of electricity costing 32 million dollars are required.

By October 8, Moldova acquired only 62,000 tons of coal, 41,000 tons of fuel oil, 5,900 tons of diesel and 10,200 tons of petrol. The reserves of natural gas also constitute 69 percent of requirements.

In order to improve this situation it should be found a real owner with decision-making rights and responsibilities in this sector through its privatization. By now, individual privatization projects have been prepared for energy sector enterprises, namely for 3 electricity-heating generating plants and 5 regional electricity distribution networks.

**Gas sector.** On October, 26, 1998, Russia, Moldova and Transnistria signed an agreement on setting up an open-type joint-stock company, MoldovaGas. The equity was distributed as follows: 50% will belong to Gazprom of Russia, 36 % to Moldova, and 14 % - to Transnistria. The company has thus become the owner of the entire gas transportation and distribution system of Moldova and Transnistria having a total worth of \$290 million.

At present, the Republic of Moldova owes some \$600 million to Gazprom for the fuel consumed, of which \$400 million is the debt of Transnistrian part. By cession of 50% of the shares to Gazprom, Chişinău is counting to cut its indebtedness to Moscow by \$47.3 million, and Transnistria - by \$12.7 million.

The Moldovan Government has approved the plan of restructuring a part of its debt through passing over to Gazprom a package of state bonds worth \$90 million payable in 7 years at an interest rate of 7.5 % p.a. In 1996, Moldova supplied Moscow with similar securities worth \$140 million.

*However, it is not quite clear, how it is possible, that the cession to Russia of 50% of a US\$ 290 million venture reduces Moldova's debt to Russia by only \$47million. Besides, Transnistria, having two thirds of the debt for gas, will receive almost half of Moldovan's share - \$78 million, or 27% of the total.*

**MoldTelecom.** One of the reasons of MoldTelecom's failure to be privatized is the inability to recover its own money. By September, 1989, MoldTelecom's accounts

receivable soared to 47 million lei (9.5 million dollars), of which 31 % is to be repaid by businesses, and the other 31% by individual users. State-run institutions owe 26 percent of the total debts, while the share of collective agricultural enterprises was 12%. Among the largest debtors are the Ministry of Internal Affairs with 1.3 million lei (267,000 dollars) in debts, the Chişinău City Hall - over 1 million lei, the Ministry of National Security and the Ministry of Education - over 700,000 lei each.

On October 10, MoldTelecom has been authorized by the Ministry of Transports and Communications to disconnect the lines in ministries which fail to pay in time for telephone services. On October 15, MoldTelecom has announced new charges for a series of home services, starting 1999.

On October 14, the Government has approved a legislative plan of reorganization and privatization of the state-run MoldTelecom company.

An initial privatization plan approved by Parliament in July 1996 stated that a foreign partner must offer at least \$120 million for a 40% stake in the company, of which \$18 million would pay for a seven-year operating license. The remaining \$102 million was earmarked for capital investment in MoldTelecom. In a tender set up by Western consultants with the backing of the European Bank for Reconstruction and Development, two companies decided to participate in the sale – a French-Danish consortium incorporating France Telecom and GN Store Nord, and Greece's state telecom company OTE Telecom. But OTE Telecom offered only \$46.4 million for the stake, and this offer was rejected by the Government, while the French-Danish consortium withdrew from the tender for unspecified reasons.

The new plan of MoldTelecom privatization includes three stages. In the first stage, the enterprise is supposed to be converted into a joint-stock entity. In the second, the Government will hold an international tender to select a strategic investor who will receive 51% shares. Three percent of shares will be sold to MoldTelecom employees. In the third stage heavy investment in the enterprise modernization is foreseen.

The plan targets to raise the number of telephone lines in Moldova from the current 14 to 24 per 100 people in the next five years. According to the plan, the investor would have an exclusive license for international and local telephone communications for five years, as well as a priority right to buy the next license for mobile telephones in Moldova. During the first two years after the sale the current tariff structure would remain unchanged, the plan says, with further consideration of the official rate of inflation. The plan, announced at the government meeting, still has to be approved by the Parliament.

**Cement factory.** Previously, the Rezina factory was put up for sale three times, but unsuccessfully. The Moldovan cabinet was blamed for charging a too high price. The enterprise also tried to obtain fiscal facilities in order to avoid bankruptcy, but it was unable to improve the situation with its own forces.

The Government announced that Lafarge (Finarge-26) has won the tender for foreign investors who intended to buy the control stock in the Rezina factory, and thus obtained the State owned package of shares of 52%.

To rehabilitate the cement production at the big cement mills, it is necessary to invest in modern packaging lines, to introduce energy-saving measures, and modernize the main kiln. The minimal investment program will require no less than \$5 million. The factory's projected capacity is over one million tons of cement a year. State received \$ 200 thousand

for its 52% share. The factory's payables are approximately 30 million lei. At present, annual cement consumption in Moldova is about 500 thousand tons.

The package is worth \$200,000. Besides, Lafarge shall pay all huge enterprise's debts (about \$ 6.1 million), and invest \$12.7 million in production development. At present, Lafarge and the Government are negotiating to sign the contract.

**Carpet maker "Floare".** On the 20th of October the German company Kulkony has put off an agreement to buy the 58% state share in the Moldova-largest carpet maker Floare-Carpet for the first decade of November.

Previously, the agreement was scheduled to be signed on October 10-15. Kulkony reportedly intended to offer 1 million lei for the state's share in Floare-Carpet and further invest in the enterprise 80,000-90,000 Deutsche marks. The conditions also read that the German side would pay off all the debts of the Moldovan company, which are estimated at 3 million lei (over \$526,000).

**Moldovan wineries located in Russia.** The Department of Privatization and State Property Administration of the Ministry of Economy and Reform has put up for a commercial tender the State-owned parcels in 3 Moldovan wineries located on the Russian territory - in Oryol, Votkinsk, and Tver cities. The Votkinsk Winery's statutory fund equals to RUR (Russian rubles) 9.1 million, with 49% shares belonging to the Moldovan Government. The object's starting price is 1.5 million lei. The Oriol Winery's statutory fund equals to RUR 80 million, with 49% shares belonging to the Moldovan Government. The object's starting price is 1.5 million lei. The Tver Winery's statutory fund equals to RUR 41.6 million, with 49% shares belonging to the Moldovan Government. The object's starting price is 3.8 million lei. All these three wineries specialize in processing wine materials delivered from Moldova and other grape growing regions and in bottling wines and vodkas.

It is strange, that in the conditions of a high inflation in Russia (expected to reach more than 250% by the end of 1998), the statutory capital of Moldovan wineries is estimated in Russian rubles. Thus, the sale of Moldovan wineries to Russia is going to be more likely a donation.

**Tobacco sector.** Preparatory work is under way now to privatize the tobacco sector enterprises, including the biggest of them, "Tutun" joint-stock company. Assistance in finding strategic investors and in preparing the units for privatization is rendered by Raiffeisen Investment A.G. of Austria. According to Mr. Pierre Heidebroek, Raiffeisen Project manager, the company will render assistance in organizing 20 transactions (international tenders), in the restructuring and attraction of foreign investors for companies under the Conversia Holding.

The first stage of tobacco sector restructuring will include privatization of tobacco fermentation factories. It is expected they will become private already by the end of this year or in January 1999. Upon completion of this work, the Department will proceed to the privatization of "Tutun".

As a first step, the Department intends to announce a tender next spring for selecting a foreign consultant for preparing "Tutun" for privatization.

**Other enterprises.** The Moldovan Department of Privatization and State Property Administration has also put up for sale State-owned blocks of shares in the following enterprises:

Moldcarton – the main producer of packages made of flat and corrugated cardboard. Its statutory fund accounts for 119 million lei, the state holding 89% of shares.

Faprochim - the country's biggest producer of paints, detergents and domestic chemical items. Statutory Fund - 9.1 million lei. The State holds 61.7% shares.

Codru - the country's leading manufacturer of furniture. Statutory fund - 21.7 million lei. The State holds 65.5% shares.

Zorile - the country's biggest footwear and leather item producer. Statutory fund - 21.7 million lei. The State holds 60 % shares.

The Balti biochemical plant, with a statutory fund of 3.6 million lei. The State holds 74.7 % shares.

The Ozyorny mine/quarry enterprise - a known producer of construction raw materials. Statutory fund - 4.7 million lei. The State holds 62 % shares.

Moldagrotehnica - manufacturer of equipment and machinery for agrarian product processing. Statutory capital - 1.5 million lei. The State holds 96 % shares.

Protos - a pipe manufacturer. Statutory fund - 8.9 million lei. The State holds 98% shares.

Avicola-Drochia - duck breeder and duck egg and meat producer. Statutory fund - 1.9 million lei. The State holds 89% shares.

#### *Functioning of private sector*

The analysis of data regarding the contribution of private sector to the total economy displays different tendencies depending on the branch. Thus, during 1994 – 1997 the share of private sector in the output of industry has diminished. This can be explained by many reasons. Hence, one of the reasons is that the Department of Statistics estimates data regarding

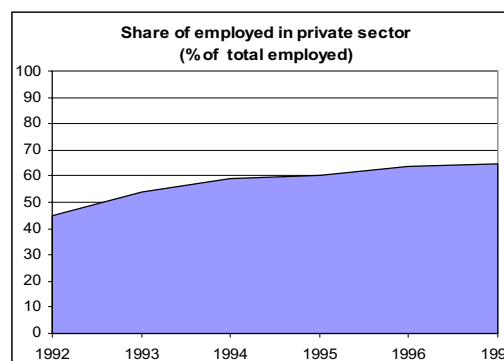
Share of private sector in economy

		1994	1995	1996	1997
<b>Industry</b>	total	3747	4265	4690	5889
	private	1723	1972	1868	2246
	private (%)	46	46	40	38
<b>Agriculture</b>	total	4106	4218	4463	4480
	private	1725	1839	2276	2330
	private (%)	42	44	51	52
<b>Retail sale</b>	total	1363	1692	1904	1956
	private	651	880	1209	1374
	private (%)	48	52	64	70
<b>Rendering of services</b>	total	424	606	757	988
	private	61	87	110	139
	private (%)	14	14	15	14
<b>Capital investments</b>	total	712	845	987	1202
	private	328	461	494	525
	private (%)	46	55	50	44
<b>Fixed assets put into operation</b>	total	405	624	858	1093
	private	207	384	457	532
	private (%)	51	62	53	49
<b>Number of employees</b>	total	1688	1673	1660	1646
	private	995	997	1047	1064
	private (%)	59	60	64	65

the development of industry based on a selection of enterprises. As the time passes, the structure by forms of property of this selection changes, and this could introduce distortions in indicators. Another reason is unfavorable conditions for private sector development within the formal economy. The share of private sector in agriculture is growing continuously (from 42% in 1994 to 52% in 1997). Private sector has developed most quickly in the retail sale (48–70%), and this is normal, taking into consideration the fact that this economic sector needs a relatively small initial capital, it is more profitable, and recovers rapidly. Rendering of services by private sector

remained at a relatively constant level - 14% of the total volume. The share of private sector in investments, as well as the process of putting into operation of fixed assets, were growing till 1995, and afterwards started to diminish. The number of employees in private sector accounted for about 60% of the total in 1997.

During first nine months of 1998 the share of private sector in GDP forms 40%. Statistical data regarding private sector development are confusing. The scarcity of information regarding the development of private sector makes practically impossible a comprehensive analysis here. Thus, official statistic says that the productivity of labor in private sector is 3.5- 4.7 times smaller than in the public sector (incredibly), although it grows faster. An analysis of the efficiency of private sector in agriculture and services, using statistical information is impossible to be made. Seeing the widespread individual constructions, it is difficult to believe the statistical data, which shows that the living space put in commission in private sector diminished 2.67 times in 1990-1997, those in rural area – 3.8 times.



#### Productivity of labor in industry by types of property

		Public sector	Private sector	Private-collective sector
Output in industry (million lei)	1995 curent prices	1610.8	22.3	1938.6
	1996 curent prices	1537.1	8.4	1844.4
	1996 comparable prices	1192.1	6.5	1430.4
Number of employees (1000 persons)	1995	37.2	2.4	85.8
	1996	25.8	0.5	65.9
Productivity of labor (thou. lei per pers.)	1995 curent prices	43.3	9.3	22.6
	1996 curent prices	59.6	16.8	28.0
	1996 comparable prices	46.2	13.0	21.7
Rate of growth of productivity of labor (%)		6.7	40.2	-3.9

#### *Actions aimed at private sector development* include:

- Approval of the Program for Entrepreneurship and Small Business Support;
- Selling the supplementary spaces rented to the small scale enterprises (500 more enterprises), as well as of the adjacent lands (about 470 parcels);
- Improvement of the terms of payment for privatized premises – 25 % to be paid immediately upon signing of the contract and 75% over three years;
- Taking effective measures towards making the privatized enterprises pay the land rent to local administrations instead of paying land taxes, as it is now;
- Converting the old deposits with state Savings Bank into shares remained after privatization; launching privatization through a repayment of state's debts with assets or shares of the privatized;
- Launch of privatization of energy and telecommunications sectors involving foreign investment in these sectors; privatization of tobacco factories, wineries located in the Russian Federation, as well as of electronics manufacturing industry;
- Acceleration of privatization of agricultural enterprises, promotion of farmers'

associations and allotment of land plots according to the National Program “Pământ”;

- Speeding up of housing privatization and promotion of private housing owners’ associations;
- Supporting greater involvement of Moldovan citizenry in the domestic stock market through measures such as Public Offers;
- Establishment of an integrated system of registration of various types of property;
- Effecting inventories of unfinished enterprises subject to privatization for their further sale for a symbolic price;
- Compilation of a unified information database of public property to ensure its privatization in conformity with the state program;
- Allocation of at least half of the revenues from privatization of public property to restructuring and further modernization of privatized enterprises;
- Improving administration of state-owned property, including those with 100% state capital and those of mixed ownership managed by private partners; establishment of a State Property Fund endowed with legal authority.

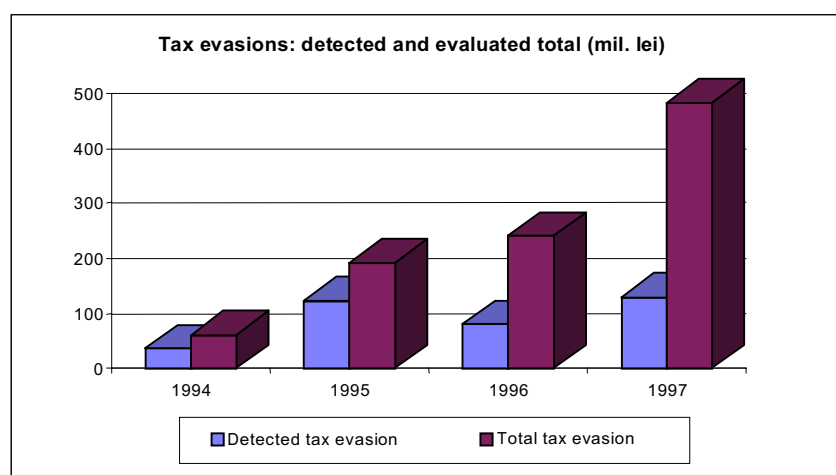
#### **4.7 Economic collapse or the informalization of the economy?**

The economic evolution of the Republic of Moldova, similar to other countries in transition, may be characterized by a deep decline. Even if 1997 marked a small growth in GDP, formed about 37% of the level of 1990. The accuracy of this almost three-fold decline, accompanied by an extension of constructions, of the private fleet, of durable goods sales, rises doubts. Undeclared incomes, tax evasion and shadow economy are discussed more and more.

The shadow (underground, informal, second, unofficial, invisible) economy “smooths” the impact of economic shocks in the transition countries. We can not characterize it unambiguously as being negative or positive. As a complex phenomenon shadow economy includes negative, parasitic, counter-productive aspects, which need to be eradicated, as well as positive, productive aspects. Thus, shadow economy causes losses for the state budget due to tax evasion, it is one of the reasons of the decline of economic discipline and hence of the people’s decreased respect towards state institutions. Being out of the state control, the shadow economy can be one of the potential sources of economic shocks, economic and political instability, in many cases it is closely related to the organized crime. At the same time, the shadow economy brings additional revenues for its operators and members of their families, being sometimes their only source of income, and diminishing the unemployment rate. Shadow economy increases the competitiveness of production, often being cheaper, it can be more elastic, more adjustable to the new conditions, bypassing the bureaucratic obstacles faced by the formal economy, it can serve as a factor of market stability and balance, often offering exactly those goods and services which are in demand in the formal economy. In a way, shadow economy can be a factor of financial stability due to the transactions performed in national currency, covering the monetary excess with goods and services.

In this chapter we will discuss the shadow transactions only in a couple of sectors of the economy, negative aspects of the studied phenomenon will be examined.

**Tax evasion** is a kind of the underground activity, which actually as a more notable impact on the stability in the economy. The society is tensioned, in a big part, by the failure in the payment of pensions and wages for the budget workers, growth of the state budget deficit and debt. On the other side, the supply of free of charge public services to the whole population, including those not paying taxes, worsens the situation in the budget. Our calculations show that during 1994-1997 the volume of tax evasion grew up very quickly – from 65 million lei till about 500 million lei (from 4% of the consolidated budget income till more than 20%). We should mention that this is a minimal estimation, because there is a assumption of the a perfect honesty of tax inspectors in the base of the estimation.



The reasons for the extension of tax evasions include the weakness and corruption of fiscal control institutions, an overdriven system of tax facilities, a heavy tax burden.

The indicator of tax burden being calculated as the ratio of tax incomes (including payments into the social fund) to GDP varies during 1994 –1997 between 30 – 33%. This indicator, in principle, doesn't exceed too much the average per OECD - 28.5%. This figure has emerged as a result, that a part of economic agents do not pay any tax and the other – carries a much bigger burden.

**Tax burden (excluding excise)**

	1996	1997
VAT (mil. lei)	613.9	800
Profit tax (mil. lei)	358.6	380
Individual income tax (mil. lei)	219.1	230
Payrole tax (mil. lei)	765	920
Sum (mil. lei)	1956.6	2330
GDP (mil. lei)	7317	8280
Share of taxes in GDP(%)	26.74047	28.1401

An evaluation of the tax burden in the real sector of economy for 1992-1997 was done on the base of information derived from the form N2 “Financial results’ statement” of all enterprises which submitted this form to the Department for the Statistics.

## Average tax evasion per taxpayer

	1994	1995	1996	1997
<b>Total legal entities and individuals</b>	1.58	4.92	3.41	7.68
<b>Recorded individuals</b>	<b>3.09</b>	<b>9.50</b>	<b>7.37</b>	<b>12.01</b>
state enterprises	11.53	48.98	11.30	22.00
collective enterprises	6.07	7.68	53.07	33.38
rented enterprises	5.57	9.12	0.94	5.23
all kinds of cooperatives including colchozes	3.08	9.06	14.74	19.13
L.T.D.	7.18	23.90	43.18	54.10
joint stock companies	0.41	1.00	3.25	9.60
enterprises with foreign investments	7.82	10.39	18.09	12.39
social organizations	1.82	1.40	18.07	62.08
insurance companies	0.78	0.16	0.85	1.78
associations, concerns	0.08	2.41	47.62	7.13
farmers	1.97	1.78	19.19	1.85
budget institutions	0.00	0.01	0.06	0.02
other legal entities	0.05	0.08	0.43	0.44
	0.18	-0.85	5.93	17.00
<b>Individuals - total</b>	<b>0.02</b>	<b>0.06</b>	<b>0.18</b>	<b>0.91</b>
individual enterprises	0.02	0.06	0.21	1.19
collectiv societies	0.12	0.02	1.64	2.00
socien.with unlim.responsib.	-0.10	0.00	1.63	0.35
other	0.03	0.08	0.00	0.10

The calculations showed that the tax burden reached much bigger values (the total in 1997 – 45%, in industry – 50%, in agriculture – 40%, constructions – 38%).

The tax burden is, evidently, much heavier in the Republic of Moldova and it suppresses the economic development. This burden “pushes out” a bigger part of economic agents to the shadow sector of the economy, reduces the tax base in the future and aggravates the problem of budget deficit.

Our calculations show, that in average, the rise of the tax burden by one per cent entails a rise of the “tax evasion/consolidated budget income” ratio by 2.5 per cent. However, diminishing of the tax burden will not be followed sine qua non by the growth of tax collections.



Evolution of tax burden in real sector of economy

		Total taxes (million lei)	GDP (million lei)	Tax burden (%)
1992 (including cooperatives)	Total	60.8	176.1	34.5
	Industry	28.3	60.6	46.7
	Agriculture	13.7	59.6	23.0
	Constructions	2.8	9.5	29.5
	Trade	1.9	5.8	32.8
	Communications	0.6	1.6	37.5
1993 (including cooperatives)	Total	456.3	1183.6	38.6
	Industry	183.8	452.9	40.6
	Agriculture	99.7	494.0	20.2
	Constructions	23.2	69.6	33.3
	Trade	19.9	53.7	37.1
	Communications	3.7	11.0	33.6
1994 (including cooperatives)	Total	1484.6	3520.9	42.2
	Industry	751.8	1365.8	55.0
	Agriculture	229.0	980.8	23.3
	Constructions	84.5	193.5	43.7
	Trade	80.0	155.8	51.3
	Communications	22.9	56.1	40.8
1995 (excluding cooperatives)	Total	1782.0	3976.6	44.8
	Industry	638.1	1221.4	52.2
	Agriculture	389.1	1233.9	31.5
	Constructions	97.7	221.0	44.2
	Trade	172.9	353.1	49.0
	Communications	107.5	174.7	61.5
1996 (excluding cooperatives)	Total	1924.5	3751.8	51.3
	Industry	742.2	1186.9	62.5
	Agriculture	412.7	725.6	56.9
	Constructions	96.0	288.1	33.3
	Trade	280.6	566.1	49.6
	Communications	108.8	292.4	37.2
1997	Total	2227.3	4957.2	44.9
	Nonresidents	223.7	329.3	67.9
	Industry	683.3	1369.4	49.9
	Nonresidents	43.9	79.6	55.2
	Energetics	262.7	-235.1	z
	Agriculture	468.3	1188.3	39.4
	Nonresidents	0.9	3.8	23.7
	Constructions	106.3	276.8	38.4
	Nonresidents	1.2	5.8	20.7

The policy of diminishing the tax burden with the aim of stimulating production output is a gradual process and has to comprise a set of measures as follows:

- explanation to the population of the need to adjust budget expenditures along with the temporary reduction of budget incomes;
- preparation of a training program targeted at explaining the impact of tax evasion on the society's welfare, cultivating a negative attitude towards tax evasion;
- psychological preparation of the economic agents through all possible means of information (mass-media), concerning tougher fiscal controls, and explaining the expected positive effects of these measures, including the diminution of tax burden;
- creation of a unique body vested with sufficient power and rights in fighting tax evasion, including the right to apply administrative sanctions, which would promote

an integral and consistent policy of investigating, detecting and penalizing the tax evaders;

- toughening the fiscal controls (rising penalty rates and frequency of controls to the level that makes the tax evasion economically inefficient);
- as the last step – diminishing the tax burden.

**Illegal import-export transactions.** Basic forms of illegal transactions in Moldova are: smuggling, “pseudo-barter”, “pseudo-export”, “pseudo-transits”, import-export operations with unjustified unproved modification of prices and “sharing” the benefits among the partners, obviously non-equivalent exchange operations, and finally exceeding the export quotas.

According to the Romanian data (“Curierul National”), the volume of sugar exports from Moldova to Romania exceeded in 1997 the produced volume on the territory of Moldova 1.8 times. Generally speaking, a big part of this sugar is made in the Ukraine, but the certificates of origin of production are faked with the intention of taking advantage from the free trade agreement between Romania and Moldova.

Within the investigation a comparative analysis of Moldovan and Russian sources of information regarding export-import operations was accomplished. The data was compared on a selected number of goods accounting for 47 % of Moldova’s imports and 54 % of its exports. The analysis disclosed essential discrepancies. Thus, the discrepancy reached 55% for imports and 93 % for exports. It is evident, that this degree of deviations cannot be explained by Transnistria’s share in Moldova’s international trade. In terms of this selected group of goods, the budget losses accounted for 35 million lei, resulting from nonpayment of VAT; losses caused by nonpayment of excises, only for wines, accounted for 48 million lei. It is important to notice that a series of goods registered in Moldova as exported (cigarettes, champagne) were not registered in Russia, which allowed the exporters to avoid payment of excises.

According to Moldovan sources, the price but of exported “vodka” practically coincides with the price of the imported “vodka”. Russian sources show a tripled price. The import of Moldovan wine in Russia, according to the Russian source of data, is almost twice bigger than that recorded in Moldovan source, the price “increasing” by 30%.

The absence of temporary customs between Transnistria and the other part of Moldova, and existence of two fiscal systems on this territory, generate considerable losses for the Moldovan budget. The absence of VAT levying on the territory of Transnistria implies the fact that many imported goods pass the customs at Transnistria, then transit to the right bank of the river Nistru then being shown as produced on the territory of Moldova. Thus, these goods are avoiding payment of VAT and are engendering an unfair competition to local goods.

*Tobacco complex.* As an approach of measuring the scale of the black market, can be used the analysis of discrepancy between production and distribution of tobacco products. This method was proposed by the Norwegian Institute of Social Applied Sciences and was used by the Central Statistical Bureau of Latvia. Within our

investigation an attempt has been made to estimate the minimal volume of shaded transactions in the tobacco industry.

According to the official statistics of Moldova, 9.6 billion cigarettes were produced in 1996. From them there were exported \$ 49.7 billion of tobacco products (\$ 20.89 million to NIS, or 2 billion cigarettes, and to other countries - \$ 28.85 million, or 5.8 billion cigarettes). There were registered as imported \$ 0.42 million (0.04 billion cigarettes). Statistical data in a long run show that the consumption of cigarettes in the Republic Moldova reaches 5 billion cigarettes. The balance is the following:

$$9.6 \text{ billion pieces} + 0.04 \text{ billion pieces} < 5 \text{ billion pieces} + 7.8 \text{ billion pieces.}$$
$$9.64 \text{ billion pieces} < 12.8 \text{ billion pieces by } 3.16 \text{ billion pieces.}$$

These more than 3 billion cigarettes may mean either unrecorded import, or undeclared production. In both cases this means that the budget of Moldova incurred about 110 million lei in losses. This is a minimal estimation, because, according to some sources, the import of cigarettes amounts to about 2 billion pieces. In this case the discrepancy could constitute 5 billion of cigarettes, and income, consequently, bigger.

From the other side, according to the official statistics of Moldova, the retail sale of cigarettes in 1996 amounted to 17.3 million lei (about 350 million cigarettes). This means that the recorded sale of cigarettes equals to only 7% of the total amount.

On October 15, 1998 a common agreement for fighting smuggling between the custom service of Moldova and Cernauti region (the Ukraine) was signed. Even if this is a positive moment, still about 30-40% of the state border are not under control. In the Republic of Moldova practically two custom territories exist. An adjusting of the existing institutional system to the current situation in the country is needed. The territory of the right bank of r. Nistru should become a distinct custom territory for the flows of goods (but allowing free movement of population).

A solution of the problem of illicit export-import demands a set of measures adjusted to the real situation:

- immediate dislocation of a temporary customs service between Transnistria and the other part of Moldova;
- customs' reform;
- attracting of foreign specialists, paid out of technical assistance, funds, assigned to decision making positions in customs structure.

## 4. Real sector: official and underground economy

Deviation in information regarding Moldo- Russian import and export in 1996													
	Unit	I M P O R T S						E X P O R T					
		Russian source			Moldovan source			Russian source			Moldovan source		
		Quantity	\$ th.	Price \$ th./un.	Quantity	\$ th.	Price \$ th./un.	Quantity	\$ th.	Price \$ th./un.	Quantity	\$ th.	Price \$ th./un.
Vegetable oil	thou tons							2.02	1894.7	936.12	1.20	1051.3	874.63
Sugar	thou tons							66.96	35423.3	529.02	60.70	29760.8	490.29
Canned vegetable	thou tons							38.38	28931.3	753.79	25.09	20261	807.40
Fruit juice	thou tons							9.63	6040.3	627.11	27.00	16213.4	600.50
Jam	thou tons							3.66	4478.5	1223.30	3.16	4173.6	1322.64
Champagne	thou dcliters	2.40	49.9	20.84				1739.25	31888.5	18.33	2342.80	30684.7	13.10
Vermut	thou dcliters	3.37	73	21.68				286.24	4757.6	16.62	153.30	1355.9	8.84
Other wines	thou dcliters	7.26	70.3	9.68	51.60	416	8.06	21774.54	231633.8	10.64	12178.90	92643.4	7.61
Alcohol ethilic	thou dcliters							239.00	2931	12.26	86.70	719.5	8.30
Vodka	thou liters	28.86	90.8	3.15	4.00	49.6	12.40	4133.83	17185.2	4.16	4063.00	14050.9	3.46
Tobaco raw materials	thou tons	0.05	83.2	1733.33	0.03	59.3	1912.90	13.79	19611.5	1422.46	8.46	11084.6	1309.79
Cigarettes	thou \$		191.8						2927			6697.5	
Coal	thou tons	137.38	6231.9	45.36	106.10	6518.6	61.44						
Fuel	thou tons	38.85	2937.2	75.61	119.70	13041	108.95						
Natural gas	million m3	3154.00	182947	58.00	2038.10	118209	58.00						
Footwear	thou payrs	57.39	759.9	13.24	25.80	318.5	12.34	4178.73	28651.9	6.86	304.30	1308	4.30
Total deviation	thou \$		76246			76246			214237.2			214237	
Share of deviations in the sum imp.(exp)	%		40			55			52			93	
Share of goods in total export (imp)	%					46.99						53.49	

**Power-energy complex.** The lack of a competitive environment and existing system of granting compensations to producers, implies the growth of shadow transactions in this complex, as well as over-pricing. The growth of electricity losses share can be considered as a signal of expansion of embezzlement. Losses of electricity in the Republic of Moldova are comparable and sometimes exceed their production in the territory of the right bank of r. Nistru. The share of losses and embezzlements grew up from 10 % of the total consumption in 1990 to 30 % in 1997, amounting to about 300 thousand lei per day, based on some estimates, or 100 million lei annually. According to international standards, average losses in the power distribution network accounts for 9-12 % of the total consumption. In the Republic of Moldova this share cannot be explained just by the obsolete equipment; it is caused also by spread of embezzlements. These losses can be observed in geographical differentiation. Thus, in the first semester of 1998 the share of losses in the electric power network amounted to 14.6% in Chişinău, 43.8% in the center of Moldova, 41% in the North, 40.7 – North-West and 46.8% in the South of Moldova.

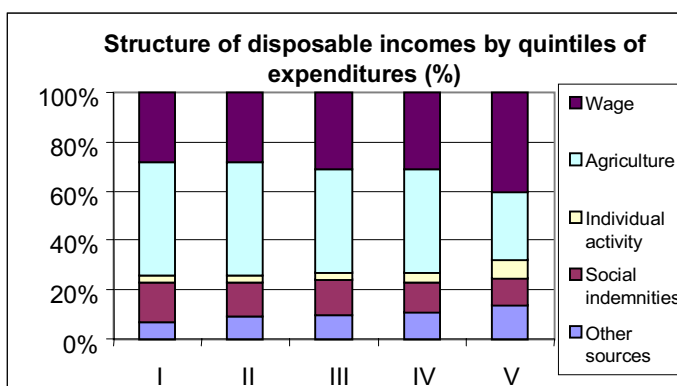
If the growth in prices for energy during the Great Economic Depression implied a restructuring of the economy towards production of less energy-intensive goods, and, as a result, a two-fold decrease of consumption of energy per unit of GDP, then in the Republic of Moldova the consumption of energy per unit of GDP increased during the last three years by 21%. The debts of the energy sector grew quickly.

Solution of the energy complex problems implies such measures as:

- restructuring of the complex, including enhancing debts collection, disconnection of consumers, who are not paying for energy usage;
- privatization of the enterprises of the energy complex;
- elaboration and approval of a set of clear, exact, transparent and predictable rules regarding the operations of the enterprises of the energy complex considered natural monopolist;
- after privatization it is necessary that the state assumes debts of the sector and reschedules them in such a way, so that they do not impact on the future pricing in the complex;
- shifting from the system of subsidizing energy producers to the system of direct subsidizing for the vulnerable parts of population.

A broad material for the analysis is contained in Households' Budget Survey made by the Department of Statistical and Sociological Analysis under the technical and financial assistance of the World Bank. According to the data of the opinion poll, in 1997 the decile ratio (but, better say, quintile ratio) of

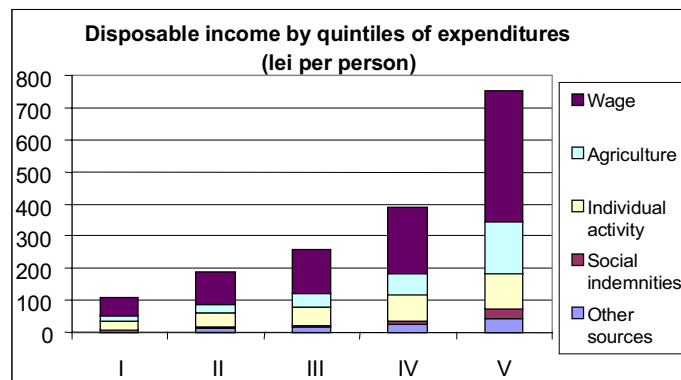
the incomes of 20% of the richest population is more than 7 times bigger than the incomes of the poorest 20% of the population (7.34 – by incomes, and 6.24 by disposable income). The structure of these incomes shows that as the income grows, the share of incomes from agriculture diminishes, and this sounds logical. If we apply absolute values, and take these data in lei per person, the picture changes essentially. Thus, incomes from agriculture in the fifths quintile (the richest one) exceed the same indicator for the first quintile (the poorest



one) by more than 4.4 times. That is to say, in most part, incomes of the richest population come especially from the work in agriculture. This is doubtful.

More suspicious is the situation in the social indemnities. As soon as income grows, the share of social indemnities diminishes, and this makes sense. At the same time, the sum of the social indemnities per person is almost 5 times bigger in families with the maximum level of incomes. The most social benefits enjoys the richest population which is an unfair social system. The situation is especially difficult in the case of failure of the fiscal policy in the Republic of Moldova.

According to the methodology of the Households Budget Survey, the respondents must complete the files regarding incomes and expenditures of the household in order to balance the incomes and expenditures of the household. And the initial discrepancy between incomes and expenditures shall be explained by gifts and loans.



All respondents of the survey were grouped in quintiles (from I till V). There were selected all households which receive incomes from the agricultural sector and they were divided in the public and private sector, and the same was done with the non-agricultural sector.

In the picture we can clearly see the growth of expenditures for every good simultaneously with the increase of incomes. The comparison of expenditures per capita shows that the expenditures for the primary goods (foods, clothes, shoes) are almost the same. Nevertheless, the expenditures for the consumption of meat and vegetables in the private agricultural sector are, on average, 64-65% greater than in the public one.

The expenditures for clothes and shoes in the non-agricultural private sector are on average 38% smaller than in the public sector. The situation changes radically, when on compared the living standards (more specific, the presence of new video- audio consumer goods, refrigerators). Thus, there are on average 19% more color TV, 25% more video-recorders and players, 15% more refrigerators per capita in the private non agricultural sector than in the public one. An exception makes the availability of private cars and minibuses in households due to the widespread practice to register these goods under the possession of retired parents, who belong to inferior quintiles according to their incomes.

Even if it is supposed that the employees of the public sector, unlike those from the private one, do not have any undeclared incomes, these from the private sector, having formally the same incomes, possess approximately 20% more durable goods, or in reality belong to superior quintiles by their incomes. If we suppose that those from the private sector do have undeclared income, the discrepancy will be even larger. Possibly, this is one of the reasons of unfairness in the social sector.

4. Real sector: official and underground economy

**Expenditures for basic goods of households from  
public and private sectors (lei/month)**

Bread

	I	II	III	IV	V	Total
Public sector in agriculture	7.05	10.26	18.21	20	27.95	14.74
Private sector in agriculture	11.56	17.06	18.41	23.06	30.97	20.8
Public non-agricultural sector	14.05	17.06	17.85	20	24	21.4
Private non-agricultural sector	11.19	17.31	19.27	20.12	25.62	22.78

Milk

	I	II	III	IV	V	Total
Public sector in agriculture	3.99	13.26	21.12	28.97	32.23	20.77
Private sector in agriculture	4.77	12.77	20.62	22.42	36.49	20.31
Public non-agricultural sector	1.33	5.31	7.17	11.35	17.73	13.34
Private non-agricultural sector	1.92	5.48	6.65	10.32	17.73	13.64

Meat

	I	II	III	IV	V	Total
Public sector in agriculture	5.28	6.97	11.21	17.48	31.97	14.23
Private sector in agriculture	5.6	11.95	16.28	29.42	47.12	23.02
Public non-agricultural sector	1.63	6.29	8.3	15.17	33.06	22.65
Private non-agricultural sector	1	5.97	8.07	16.91	29.68	22.11

Vegetables

	I	II	III	IV	V	Total
Public sector in agriculture	10.29	23.04	34.31	37.04	47.41	31.23
Private sector in agriculture	14.01	20.16	25.57	27.78	34.92	25.12
Public non-agricultural sector	7.87	12.01	15.52	18.29	26.83	21.61
Private non-agricultural sector	5.22	12.19	13.5	16.3	25.73	20.89

Fruits

	I	II	III	IV	V	Total
Public sector in agriculture	1.26	2.03	4.89	7.77	12.68	5.69
Private sector in agriculture	3.44	7.99	10	15.63	11.34	9.43
Public non-agricultural sector	0.93	1.99	2.77	5.97	8.33	6.27
Private non-agricultural sector	0.1	1.17	2.36	3.05	7.14	5.13

Clothes and shoes

	I	II	III	IV	V	Total
Public sector in agriculture	0.04	3.55	6	14.04	47.64	12.34
Private sector in agriculture	0.53	3.46	6.29	11.2	29.43	10.78
Public non-agricultural sector	2.15	3.25	3.54	9.47	40.1	24.47
Private non-agricultural sector	0	2.03	5.44	9.96	53.32	33.84

### Durable goods in private and public sectors (pieces per capita)

#### Cars, vans

	I	II	III	IV	V	Total
Public sector in agriculture	0.1	0.0588	0.1667	0	0.2308	0.1026
Private sector in agriculture	0.012	0.0563	0.0902	0.1382	0.1221	0.0872
Public non-agricultural sector	0.1	0.0845	0.1759	0.1973	0.2928	0.2213
Private non-agricultural sector	0	0.1333	0.0444	0.1333	0.2018	0.1551

#### New color TV sets

	I	II	III	IV	V	Total
Public sector in agriculture	0	0.0588	0.1667	0.15	0.0769	0.0769
Private sector in agriculture	0.0482	0.0875	0.0574	0.122	0.1679	0.1002
Public non-agricultural sector	0.05	0.1268	0.0741	0.1769	0.2025	0.1601
Private non-agricultural sector	0.0625	0.2222	0.2	0.2111	0.1973	0.1981

#### New video recorders, players

	I	II	III	IV	V	Total
Public sector in agriculture	0	0.0588	0	0.05	0.0769	0.0385
Private sector in agriculture	0.012	0	0.0328	0.0569	0.0458	0.0291
Public non-agricultural sector	0.025	0.0423	0.093	0.884	0.0685	0.05872
Private non-agricultural sector	0.0625	0.111	0.0222	0.0333	0.0942	0.074

#### New TV sets

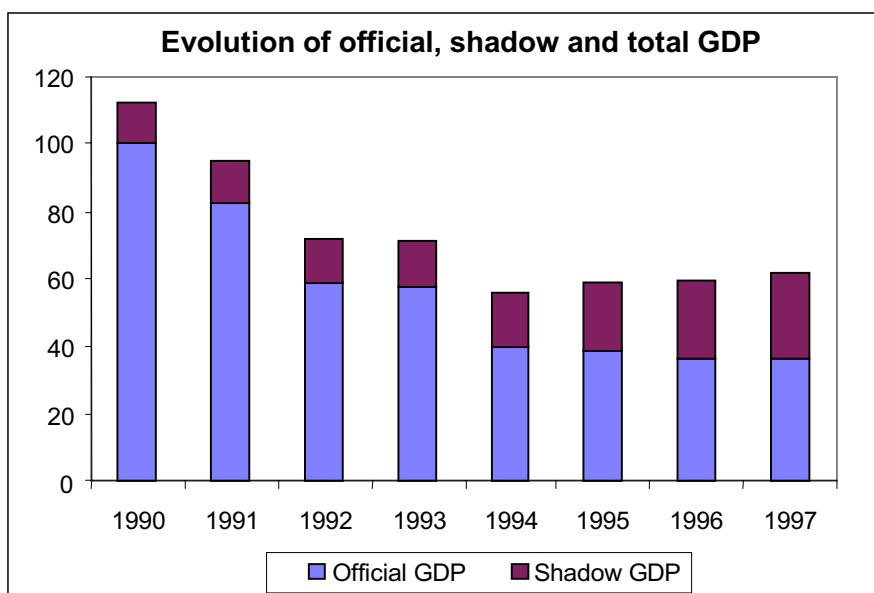
	I	II	III	IV	V	Total
Public sector in agriculture	0	0.2353	0.2222	0.1	0.0769	0.141
Private sector in agriculture	0.1084	0.15	0.1393	0.1626	0.1908	0.1535
Public non-agricultural sector	0.125	0.169	0.1019	0.2041	0.271	0.2111
Private non-agricultural sector	0.0625	0.3333	0.3111	0.2667	0.2242	0.2482

#### New refrigerators

	I	II	III	IV	V	Total
Public sector in agriculture	0	0.0588	0.1111	0.1	0.1538	0.0897
Private sector in agriculture	0.0241	0.0063	0.0328	0.0325	0.0687	0.0323
Public non-agricultural sector	0.1	0.0282	0.0741	0.0748	0.0779	0.0728
Private non-agricultural sector	0	0.0444	0.0889	0.1	0.0817	0.0788



The evaluation of the proportion of the shadow economy in the Republic of Moldova on the basis of a set of methods, showed that the share of shadow economy compared to that of the formal economy reached up to 60%. Starting with 1994-1995 the national economy, including both, official and shadow parts, started to grow. The real economic decline in the Republic of Moldova is relatively less deep, and it reaches not 63%, as the official statistic says, but a bit more than 40%.



According to the information of the Department of Fighting Economic and Financial Crimes, during the first nine months of 1998 only it registered 2406 economic crimes (174 more than during the same period of last year), the volume of losses is evaluated up to 66 million lei, 27 million lei being reimbursed. There were committed 1321 property violations (4.5% more in comparison with the same period of 1997), 554 financial crimes, 65 cases of tax evasion. The major share of economic crimes took place in the agricultural sector (435 cases) and in the railway system (154 cases).

On October 23, 1998 the Presidents of Moldova, Romania and the Ukraine – Petru Lucinschi, Emil Constantinescu and Leonid Kucima signed a Memorandum for Crime Prevention, which foresees taking common measures for fighting terrorism and international crime, illegal operations with weapons, explosives, toxic and radioactive substances, illegal drug traffic, faking money and certificates, economic crimes. Still, this is not sufficient. The shadow economy is a complex problem, which needs a detailed study by experts in different fields. Elaboration of a methodology of a state strategy regarding the shadow economy, using the international experience in this field, and a real, not declarative, intention to fight the economic crime are needed.