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**Working Paper**

## The impact of the global financial crisis on education and healthcare in the economies of the former Soviet Union: The case of Moldova

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# CASE Network Reports

## The Impact of the Global Financial Crisis on Education and Healthcare in the Economies of the Former Soviet Union – the case of Moldova

Nina Cainarean  
Eugenia Veverita  
Petru Veverita

No. 99/2011



Warsaw Bishkek Kyiv Tbilisi Chisinau Minsk

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## Contents

<b>Executive Summary</b> .....	<b>9</b>
<b>1. Country Profile</b> .....	<b>12</b>
<b>2. Fiscal situation</b> .....	<b>18</b>
2.1. Background for development.....	18
2.2. Economic development and the fiscal situation during the crisis.....	21
2.3. Impact of crisis on services provided by local public authorities.....	25
2.4. Managing the impact of the economic crisis.....	27
2.5. Overcoming the economic crisis.....	29
<b>3. Education</b> .....	<b>32</b>
3.1. Organization of educational system.....	32
3.2. The quality of education.....	37
3.3. Policy reforms and achievements.....	38
3.4. Education spending.....	43
<b>4. Healthcare</b> .....	<b>47</b>
4.1. Key sector indicators.....	47
4.2. Policy reforms in the sector.....	51
4.3. Mandatory health insurance system and its role in the sector funding.....	55
4.4. Spending trends and efficiency of spending in healthcare.....	57
4.5. Developments during the crisis.....	63
4.6. Mid-term outlook for the sector in terms of spending, policies and health status of the population.....	63
<b>5. Conclusions</b> .....	<b>66</b>
Education.....	67
Healthcare.....	68
<b>Sources and References</b> .....	<b>70</b>
<b>ANNEXES</b> .....	<b>73</b>
Annex 1. Main macroeconomic indicators of the Republic of Moldova.....	73
Annex 2. National Public Budget of the Republic of Moldova.....	74
Annex 3. Education.....	79
Annex 4. Healthcare.....	85

## **List of Figures and Tables**

Figure 1. Population growth rate in the Republic of Moldova .....	13
Figure 2. Birth Rate, Republic of Moldova (per 1000 inhabitants) .....	14
Figure 3. Death rates (per 1000 population) .....	15
Figure 4. Causes of death in 2009, Republic of Moldova (per 100,000 population).....	15
Figure 5. Life expectancy at birth, country comparison .....	16
Figure 6. Population Pyramid on January 1, 2009, Republic of Moldova.....	17
Figure 7. Annual GDP growth and contribution of economic activity by sector (% , versus previous year) .....	22
Figure 8. Share of public expenditures for education in GDP, %.....	43
Figure 9. Medical care evaluations of delivered services, number of treated cases.....	49
Figure 10. Staffing in medical care institutions, for 100,000 populations.....	50
Figure 11. Healthcare reform implementation 1991-2006, with 2009 as a base line.....	51
Figure 12. Healthcare consolidated budget.....	57
Figure 13. Trend of MMIF expenditure and state budget transfers to the funds as a share of GDP .....	60
Figure 14. Expenditure evolution for compensated drugs for insured persons.....	61
Figure 15. Administrative costs structure, 2009 executed budget .....	62
Figure 16. Administrative costs share in total MMIF revenues.....	62
Figure 17. Structure and evolution of contracted medical institution actual expenditures.....	62
Table 1. National Public Budget by components, 2006-2010 (% GDP).....	19
Table 2. Share of Education and Health expenditures in the Growth Domestic Product (GDP) and National Public Budget (NPB), 2006-2010 (in %) .....	24
Table 3. Local budget expenditures by functions in 2006-2010, share in total (%)	25
Table 4. Total expenditure on education .....	44
Table 5. Number of delivered medical services to the population per medical service provider in 2004-2009 (in thousands) .....	48
Table 6. Spending trends of the Main medical care Fund, MDL million.....	48
Table 7. MMIF revenues by source (share in total) for the period 2004-2009.....	59

## **Abbreviations**

CEE	Central and Eastern European countries
CIS	Commonwealth Independent States
DFID	Department for International Development (United Kingdom)
EFA/FTI	Education for All – Fast Track Initiative
EGPRSP	Economic Growth and Poverty Reduction Strategy Paper
EMAP	EU-Moldova Action Plan
EU	European Union
EUR	Euro
FDI	Foreign Direct Investments
GDP	Gross Domestic Product
HFA-DB	Health for All Database
IDA	International Development Agency
IMF	International Monetary Fund
MDL	Moldovan Leu
MMI	Mandatory Medical Insurance
MMIF	Mandatory Medical Insurance Funds
NBM	National Bank of Moldova
NBS	National Bureau of Statistics
NMIC	National Medical Insurance Company
NPB	National Public Budget
OECD	Organization for Economic Co-operation and Development
PHS	Primary Healthcare System
PIRLS	Progress in International Reading Literacy Study
PISA	Program for International Students Assessment
SIDA	Swedish International Development Cooperation Agency
TACIS	Technical Assistance to the Commonwealth of Independent States
TIMSS	Trends in International Mathematics and Science Study
UN	United Nations
UNDP	United Nations Development Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNGASS	United Nations General Assembly Special Session
UNICEF	The United Nations Children's Fund
USD	USA dollars

## **The authors**

**Nina Cainarean** has extensive consultancy and research experience. Her interests include macroeconomic issues and social policies. She participated in the elaboration and publication of the Moldovan Economic Trends and contributed to the development of the National Development Strategy for 2008-2011. Currently she is involved in the implementation of the new financing methodology in primary and lower secondary education.

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## **Abstract**

This study reviews the impact of the global financial crisis on public service delivery in the Republic of Moldova<sup>1</sup>. It provides a background of the country's development in the period prior to the crisis (2000 to 2007/2008) and presents the factors which determined the country's fiscal performance during the crisis (2008-2010).

The main aim of the study is to describe the changes in education and health financing and the associated changes in service delivery during the crisis. The presentation of the reforms in the social sector is necessary to set the stage for discussion and is not a primary goal of this study.

In particular, the study analyzes the size and dynamics of public financing of education and healthcare and their intra-sector structure, as well as crisis management. It measures the impact the financial crisis had on the quality and reliability of public services and analyzes policy measures undertaken by the government to mitigate crisis' impact.

Conclusions and recommendations derived from the study should enable national policy-makers and international institutions supporting public finance reforms to improve the targeting of limited public resources both between and within individual sectors.

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<sup>1</sup> This paper has been prepared with the editorial assistance of Paulina Szyrmer.

## **Executive Summary**

After a period of considerable growth from 2003 to 2008, which was mostly externally driven, the international crisis hit Moldova in late 2008. From an economic point of view, the country suffered a triple shock: (1) a recession in the industrialized countries; (2) a severe drop in commodity prices and in the terms of trade; and (3) a growing financial vulnerability. A triple shock like this would be enough to affect any economy severely, but in the case of Moldova, remittances, which represented some 36% of GDP in 2007, started to fall rapidly. In other words, all the factors of economic growth were turned off one by one.

The global financial crisis hit the Moldovan economy hard, and represents the first hurdle on the country's path towards joining the European Union. The situation was further complicated by the political motivations of the previous administration, which continued with business as usual until the end of its mandate rather than addressing the crisis.

However, financial instability has been less severe in Moldova than in other countries of the region. The instability did not pose an immediate threat to the banking system. Nevertheless, credit growth slowed and more recently, there seem to be problems with non-performing loans and a contraction in credit provision by banks, of over 50% in some cases, can be observed.

The consequences of the crisis were partially diminished by the monetary policy conducted by the National Bank of Moldova (NBM), which was aimed at reducing the level of inflation, maintaining a competitive exchange rate, and accumulating international reserves. Under these circumstances, the NBM intervened on the foreign exchange market, contributing to an increase in the country's international reserves. On the other hand, the increased sterilization effort slowed down money growth which was offset by inflationary pressure.

A response also came with the Economic Stabilization and Recovery Programme of the new government backed by the IMF. The Program focuses on public expenditure rationalization, the enhancement of targeted social safety nets, and a liberalization of the overregulated economy.

The Economic Stabilization and Recovery Programme should put Moldova back on a sustainable macroeconomic path but it cannot bring the living standards of Moldavians closer to the levels enjoyed by citizens of EU countries. This can only be achieved through dramatic improvements in public service provision, massive investments in infrastructure, a shift towards an export-focused economy, and deep reforms of the judiciary and education systems. This transformation requires

a level of resources and expertise that can only be put in place through in partnership with Moldova's development partners, including the private sector.

The Moldovan authorities ensured that consistently increasing resources were allocated to the education sector during 2001 – 2010. As a share of GDP, education expenditures increased from 6.0% in 2001 to 9.4% in 2009. The government has protected the education budget from the impact of the financial crisis. The increased resources contributed to considerable changes in the education system; however the system has not adjusted to a decreasing student-age population, resulting in low levels of capacity utilization and a declining efficiency in the use of physical facilities, human resources and financial resources.

One of the basic problems in the education sector is the inefficient use of public finances. The global economic crisis has provided an opportunity to pause and reflect on the Moldovan education system, how it is funded and what the priorities should be. The crisis can provide a drive to optimize the efficiency of available resources in order to continue the efforts without any compromises or reductions to quality: money has to be channeled to the most problematic areas.

In the past, the health care system in Moldova was based on inpatient medical care being inefficient and costly. In response to the socio-economic crisis during the transition period, the Government was forced to ensure a decent level of medical services and improve trust in the system. The healthcare sector became a burden for the state budget, and health indicators were declining. The level of system financing was dependent on private and unofficial payments. In such a situation, the poorest segment of the population was the most negatively affected.

In such conditions, the best solution was to reform the healthcare system via redefining the financial mechanisms, redirecting financial resources to the most important and efficient areas of medical care. One of the main changes was a financial reform of medical care by putting into operation a system of mandatory medical insurance. It began in 2004 in one administrative territorial unit and in 2005 it was implemented in the whole country. A National Medical Insurance Company (NMIC) was created and it is responsible for contracting medical care delivery institutions by managing the Mandatory Medical Insurance Funds (MMIF). Alongside this, a number of inpatient services (hospitals) are still financed from the state budget.

The progress made by Moldova toward implementing healthcare reform has not been uniform since 2004, when the reform started. Domestic economic and political crises are likely to undermine the achievement of several health goals, including coverage of a larger part of the population by health insurance.

The share of the health budget in GDP (including all budget levels and Mandatory Medical Insurance Funds) was around 6% in 2009. It grew from 4%, an indicator registered before the start of the reform.

Revenues collected in the Mandatory Medical Insurance Funds are basically used for medical services delivery. Only 1.2% of budget funds are used for administrative purposes. A shortfall in revenue collection was not observed, because in absolute terms, the budget increased, albeit slower than during the 2004-2008 periods. The same situation could be seen on the expenditures side. The budget is increasing, but the growth rate is smaller – only 17% in comparison to 30% in 2008. Still, the share of medical insurance funds (Base fund 94% + Preventive medical care fund 2% + Reserve fund 2% + Administration costs 2%) remains unchanged and primary medical care and hospital care use up the largest part of the budget as they are the top priorities in the health sector reform.

The spending from local budgets in the health sector decreased since mandatory health insurance was implemented. The legal framework (law on healthcare and annual compulsory medical insurance funds) encourages local authorities to participate in the implementation of National Programs, but due to insufficient money in the local budgets, their role is confined to participating in statutory capital of the health institutions located in their regions (as owner of the property). Local budgets are also responsible for the current repairs of medical care institution buildings. Very few local authorities support expenses for the procurement of new medical equipment.

An important role for primary medical care development is played by the donors' community. Donors support very costly projects connected with the procurement of high performance equipment, capital renovation, and staff training.

# 1. Country Profile

The Republic of Moldova is a country situated in South-Eastern Europe which shares a border with Ukraine in the North and the East and with Romania in the West. Moldova is the most densely populated country of the former Soviet Union (118 people per km<sup>2</sup>)<sup>2</sup> with a population of around 3.6 million<sup>3</sup> (as of January 1, 2010; population from Transnistria region not included), and about 786 thousand (22%) living in the capital city of Chisinau. Approximately 59% of the population lives in rural areas, with agricultural and food-processing activities dominating the economy. The proportion of the population living in urban areas has been consistently decreasing since independence (from 47% in 1991 to 41% in 2010<sup>[2]</sup>).

At independence, the country faced serious socio-economic challenges and underwent an important economic crisis that had a negative impact on the health sector. The country's per capita real GDP is still the lowest in Europe and Moldova is classified as a low-income country by the World Bank. The country suffers from a high incidence of poverty, particularly in rural areas.

The **Population growth rate** in Moldova has been consistently decreasing since independence, when it was positive. Currently the population growth rate has a negative value and according to data provided by the National Bureau of Statistics in 2010 it was 0.11%<sup>4</sup>. It has had a clearly increasing trend since 2006, but remains below zero (Figure 1).

We should not confuse the term “rate of natural increase” with the description of the population growth rate. The rate of natural increase is a standard indicator used and systematically published by the National Bureau of Statistics and represents the crude birth rate minus the crude death rate of a population, excluding migration. At the same time the population growth rate indicator is the average annual percent change in the population resulting from a surplus (or deficit) of births over deaths and the balance of migrants entering and leaving a country<sup>5</sup>. It is

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<sup>2</sup> National Bureau of Statistics. 2010. Moldova in figures. Statistical pocket-book.

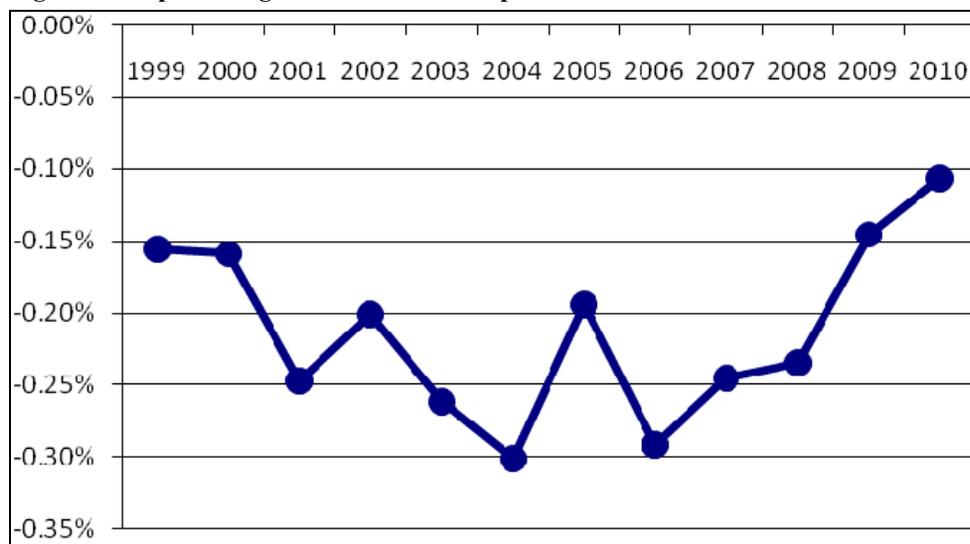
<sup>3</sup> National Bureau of Statistics. See <http://www.statistica.md/>.

<sup>4</sup> The indicator has been computed based on the available data and does not represent the population on the left bank of Nistru River.

<sup>5</sup> People Statistics by country [cited on September 28, 2010] <http://www.nationmaster.com/cat/peo-people>.

necessary to mention here that the unofficial migration flow is not included in the data above.

**Figure 1. Population growth rate in the Republic of Moldova**



Source: National Bureau of Statistics.

The last available official data from the Ministry of Health indicates that the **birth rate** in the Republic of Moldova is 11.4 live-births per 1000 population in 2009<sup>6</sup>. A decrease in the birth rate occurred from independence until 2002, and a consistent increase has been noted over the last 7 years (Figure 2). Nevertheless the rate is still below the level registered in 1990 of 17.7 births per 1000 inhabitants.

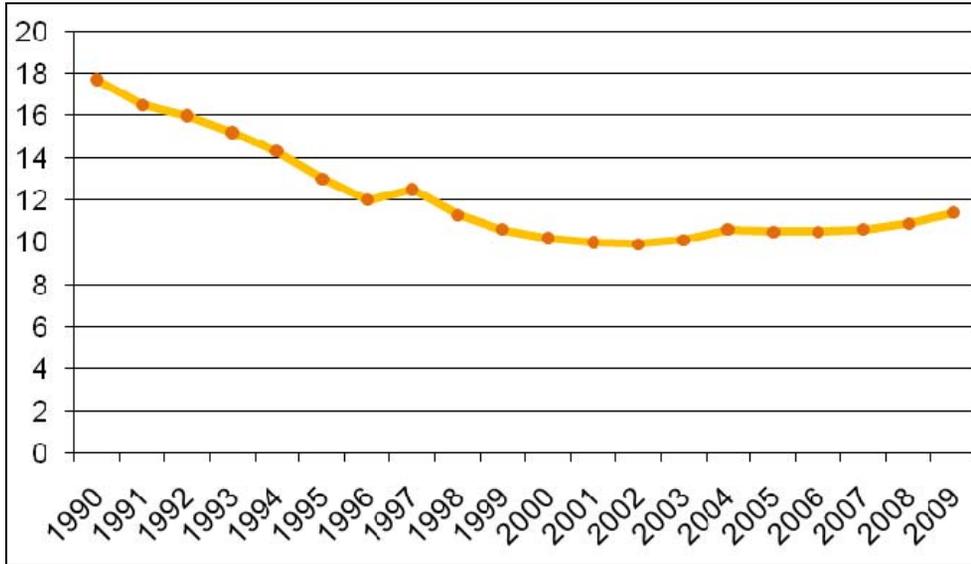
The factors which influenced the decline of this indicator could be poverty and the high emigration rates of the population of child-producing age. In 2009, although the national absolute poverty rate<sup>7</sup> did not increase, data analysis by residence shows a continuous increase in poverty in rural areas. Thus, rural poverty in 2009 was been registered at the level of 36.3% in comparison to 34.6% in 2008, or 10 percent more than the national average. Unlike in rural areas, urban areas have seen a steady decline in poverty. In cities, the poverty level decreased from 15.2%

<sup>6</sup> Ministry of Health, National Center for Health Management, 2010. The Public Health in Moldova 2009.

<sup>7</sup> Poverty and policy impact assessment report, 2009, <http://mec.gov.md/sector/241/378>.

in 2008 to 12.6% in 2009. The small increase in birthrates could be a result of the government policy on social welfare: financial support for a family after the birth of a child increases. The current benefit is equivalent to USD 150 paid as a one-off payment per child at birth.

**Figure 2. Birth Rate, Republic of Moldova (per 1000 inhabitants)**



Source: The Public Health in Moldova 2009. Ministry of Health, National Center for Health Management, 2010.

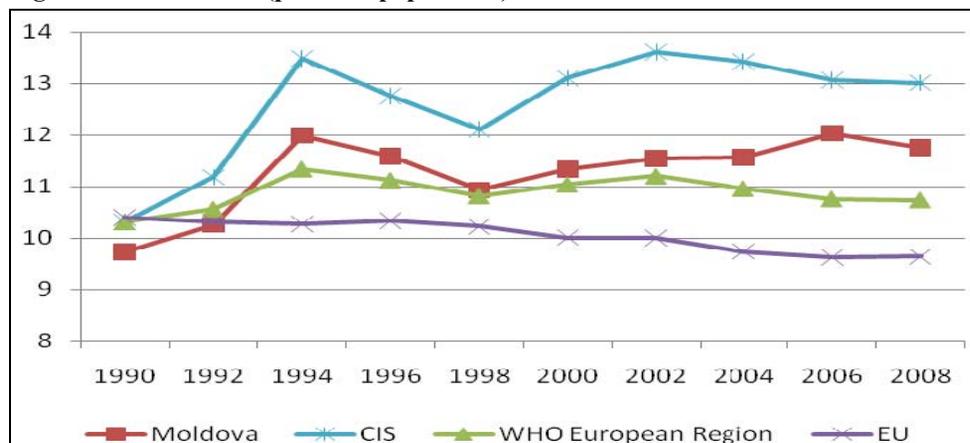
The Ministry of Health’s annual public health report identified a crude **death rate** of 11.8 per 1000 population in 2009<sup>8</sup>. There has been a gradual increase in the death rate over the past decade. The rate is lower than the average in CIS countries and is higher than in South European countries (Figure 3). Among all countries presented in the European Health for All database, Moldova occupies a middle position with respect to the death rate indicator.

The leading causes of death are cardiovascular diseases followed by malignant neoplasm and gastrointestinal diseases, trauma and poisoning, and respiratory diseases<sup>9</sup> (Figure 4).

<sup>8</sup> Ministry of Health, National Center for Health Management, 2010. The Public Health in Moldova 2009.

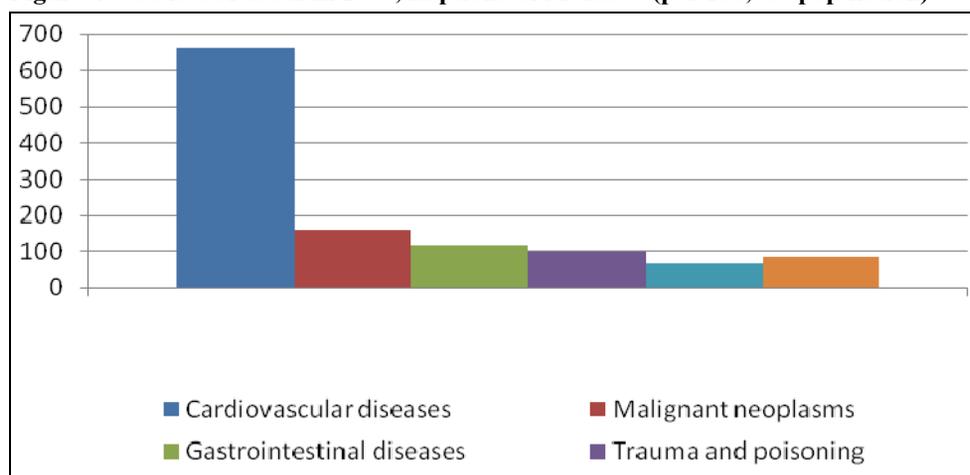
<sup>9</sup> National Bureau of Statistics. 2010. Moldova in figures. Statistical pocket-book.

**Figure 3. Death rates (per 1000 population)**



Source: European health for all database (HFA-DB). World Health Organization Regional Office for Europe, available at: <http://www.euro.who.int/HFADB>.

**Figure 4. Causes of death in 2009, Republic of Moldova (per 100,000 population)**



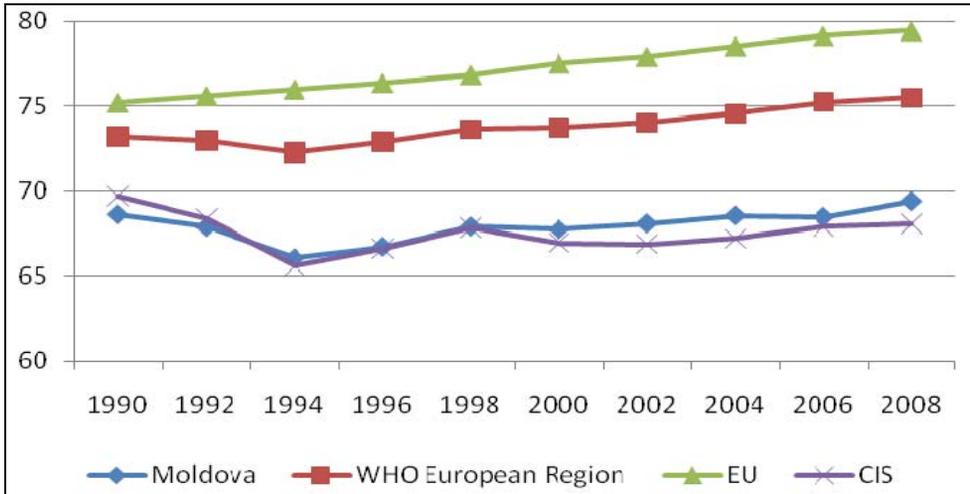
Source: European health for all database (HFA-DB). World Health Organization Regional Office for Europe, available at: <http://www.euro.who.int/HFADB>.

**Life expectancy at birth** in Moldova for 2008, as reported by the National Bureau of Statistics (NBS), was 69.4 years<sup>10</sup>. Figures presented by UN sources corre-

<sup>10</sup> National Bureau of Statistics. 2009. Population and demographic processes in the Republic of Moldova. Statistical compilation.

spond with those of NBS<sup>11</sup>. A constant increase in life expectancy could be observed in recent decades. The trend is similar to other countries in South-Eastern Europe. Nevertheless, Moldova's trend line lies below those of other neighboring countries, as shown in Figure 5.

**Figure 5. Life expectancy at birth, country comparison**



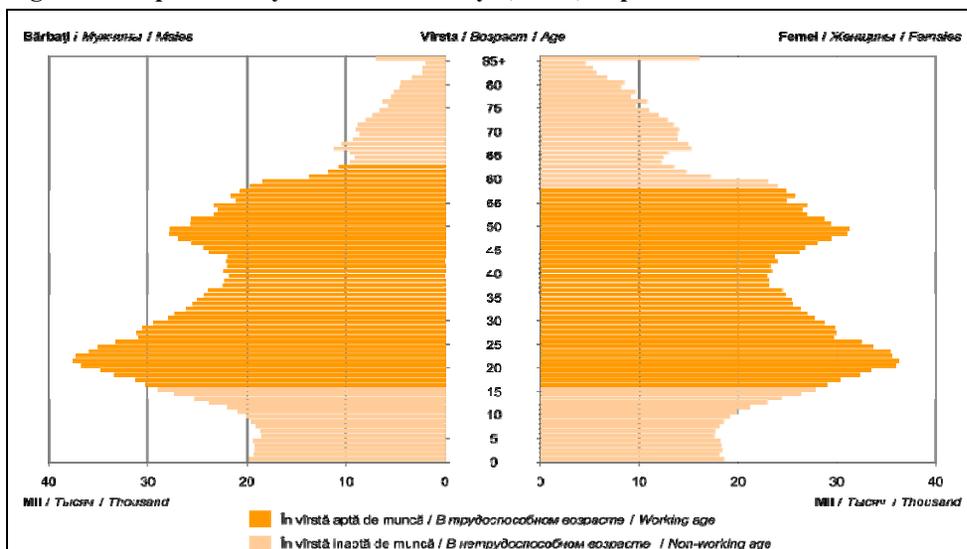
Source: European health for all database (HFA-DB). World Health Organization Regional Office for Europe, available at: <http://www.euro.who.int/HFADB>.

Males have a lower live expectancy at birth (65.6 years) than females (73.2 years). Approximately 18% of the total population is in aged 0-14 years. The proportion of the population 65+ is very low as compared to other WHO member states included in the Heath for all database and constitutes 10% of the total population.

The population pyramid (Figure 6) has an irregular form with three indentations. The first one at the bottom is influenced mainly by a reduced birth rate while the next two are most probably a result of the emigration of the working-age population and the birth cohort effect of a low nativity indicator after the Second World War and a famine which affected the population currently aged 60-65.

<sup>11</sup> UNICEF Online Statistics Database. Republic of Moldova [cited on September, 2010]; Available at: <http://www.unicef.org/statistics/>.

**Figure 6. Population Pyramid on January 1, 2009, Republic of Moldova**



Source: National Bureau of Statistics, available at: <http://www.statistica.md/>.

## **2. Fiscal situation**

### **2.1. Background for development**

Beginning in 2000, Moldova's economy resumed economic growth, reversing a decade of output decline and deteriorating living standards. Real GDP grew on average by 6% annually during 2000-2007, with a cumulative growth of about 50% versus 1999.

Household consumption was the main source of growth, funded mostly by increased domestic revenues (the real salary increased approximately 2.3 times during 2000-2007) and remittances sent from abroad. Investments in fixed capital had a lesser contribution to growth (an increase by 81.5% versus 2000 levels and accounting for 15.7% of GDP on average).

Securing macroeconomic stability played an important role in revitalizing and sustaining economic growth. The monetary policy conducted by the National Bank of Moldova (NBM) had several objectives, including a reduced level of inflation, maintaining a competitive exchange rate, and accumulating international reserves. The huge inflow of remittances put greater pressure on the national currency, which contributed to its appreciation. Under these circumstances, the NBM intervened on the foreign exchange market, contributing to an increase in the country's international reserves. On the other hand, the increased sterilization effort slowed down money growth and offset inflationary pressure.

The changes of the main macroeconomic indicators and of the National Public Budget (NPB)<sup>12</sup> of the Republic of Moldova for 2006-2010 are shown correspondingly in Annexes 1 and 2.

Economic growth was accompanied by a significant improvement in the fiscal situation. There was a considerable growth of general government revenues up to 41.7% of GDP in 2007 from 33.9% in 2000, and the state budget reported a surplus of 0.2% of GDP in 2006 as compared to a 2.5% GDP budget deficit in 2000.

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<sup>12</sup> National Public Budget includes: state budget, budget of the social insurance, budget of mandatory medical insurance funds, local public authorities budgets.

**Table 1. National Public Budget by components, 2006-2010 (% GDP)**

	2006	2007	2008	2009	2010
	Executed				Ap- proved
<b>Total revenue</b>	<b>39.9</b>	<b>41.7</b>	<b>40.6</b>	<b>39.2</b>	<b>39.0</b>
State budget	24.6	26.2	25.4	23.1	23.8
Local budgets	5.9	5.7	4.6	4.4	4.0
State social insurance budget	8.2	8.2	8.7	9.3	8.9
Mandatory medical insurance funds	1.2	1.6	1.9	2.4	2.3
<b>Total expenditure</b>	<b>40.2</b>	<b>42.0</b>	<b>41.6</b>	<b>45.6</b>	<b>46.2</b>
State budget (without inter-budgetary transfers)	15.8	18.2	17.3	16.9	16.9
Local budgets	11.3	10.5	10.2	10.9	11.2
State social insurance budget	9.8	9.8	10.0	12.7	12.9
Mandatory medical insurance funds	3.3	3.5	4.1	5.1	5.2
<b>Deficit (-)/ Surplus (+)</b>	<b>-0.3</b>	<b>-0.3</b>	<b>-1.0</b>	<b>-6.4</b>	<b>-7.2</b>
State budget	0.2	-0.4	-0.8	-5.7	-6.4
Local budgets	-0.6	-	-0.5	-0.4	-0.4
State social insurance budget	-0.1	-0.2	0.1	0.0	-0.4
Mandatory medical insurance funds	0.2	0.3	0.2	-0.3	-
<b>Nominal GDP, in MDL million</b>	<b>44,754</b>	<b>53,429</b>	<b>62,922</b>	<b>60,043</b>	<b>64,300</b>

Source: Ministry of Finance.

Indirect taxation accounted for the largest part of the upsurge in revenues, and made up approximately 45.4% of all revenues in 2006. Lower rates of income taxes paid by individuals and legal entities kept these revenues at 5% of GDP. Due to the increase in revenues and decrease in service costs of public debt and publicly guaranteed debt, it became possible to increase public spending. The social sectors benefited most from this growth (almost 90%); social-related expenditures accounted for 63.2% of all national public budget expenditures in 2006. At the same time, growth of consumption expenditures limited the fiscal space for public investments, and the high share of public revenues and expenditures in GDP is generally indicative of a rapid expansion of the public sector – a situation that could limit economic growth prospects.

Economic growth and prudent debt management, as well national currency appreciation, contributed to a significant improvement in foreign debt indicators. The total foreign debt to GDP ratio dropped from 133% in 2000 to 74% in 2006. The public and publicly guaranteed debt was 26% of GDP at the end of 2006 (versus 79% of GDP in 2000). Also, there was a moderate growth in foreign direct in-

vestments (FDI) reported during the reference period. The total stock of FDI into the national economy represented USD 1,300 million (USD 363 per capita) at the end of 2006 (versus USD 123 per capita in 2000). However, the amount of foreign investments is still much smaller than in South-East European countries, and is insufficient to ensure the sustainable development of the economy.

In cooperation with international donors, Moldova improved its debt sustainability. In 2004, Moldova adopted its Economic Growth and Poverty Reduction Strategy Paper (EGPRSP), the first full poverty reduction strategy developed in consultation with broad based stakeholders and civil society. Moldova further strengthened its links with the EU through the EU-Moldova Action Plan (EMAP), signed in 2005. Together, the EGPRSP and EMAP provided a framework for increased harmonization of donor activities. In early 2008, Moldova approved a National Development Strategy for 2008 to 2011 in close consultation with development partners.

The economic recovery was accompanied by the increased external vulnerability of the economy. Rapid import growth and only a modest export growth resulted in an increase in the trade deficit from 23% of GDP in 2000 up to 53% in 2007. At the same time, remittances accounted for more than 30% of GDP. The current account deficit was on the rise too, although at a lower pace than the trade deficit, due to the massive inflows of remittances.

The external vulnerability has been exacerbated by a high concentration of exports of a limited number of products to a limited number of countries. Despite a shift in geographical orientation of exports over the last years towards the European Union, most exports are still targeting the CIS and the Russian Federation in particular. At the same time, approximately 45% (in 2006) of Moldovan exports are food products (including the food processing industry), with alcoholic beverages dominating.

The true picture of external vulnerability was revealed by the 2006 shocks. A doubling of natural gas prices and export restrictions on certain categories of products resulted in a number of negative trends – economic growth slowed (4%) and inflation went up (14.1% at the end of the year), whereas the trade deficit and the current account deficit reported considerable growth (by 34% and 65%, respectively). These trends posed threats to growth sustainability and were evidence of the low competitiveness of Moldovan companies on regional and world markets.

In 2007, with the support of the Millennium Challenge Corporation, the Government conducted an analysis of growth obstacles. According to this analysis, the following critical constraints were revealed: (i) poor physical infrastructure as

demonstrated by energy losses and poor quality of roads; (ii) a weak investment climate with a burdensome license and permit issuance regime; (iii) labor market rigidity, and (iv) poor performance of the judiciary system. Less critical but equally important is geographical location, and macroeconomic risks such as inflation. Access to finance, human capital, innovations and competitiveness were also considered critical constraints.

These conclusions, together with already existing government and donors' analyses, served as a background for elaborating the National Development Strategy for 2008-2011.

## **2.2. Economic development and the fiscal situation during the crisis**

Moldova experienced a number of adverse economic shocks over the last few years. However, despite substantially higher energy prices, export bans on wine (the country's main export item), and a devastating drought in 2007 that crippled the agricultural sector, economic growth continued at an average annual rate exceeding 6% from 2000 to 2008, reaching 7.8% in 2008, given that monetary and fiscal balances were kept in check.

The general government deficit amounted to 1% in 2008 and efforts were made to bring inflation down. However, vulnerabilities existed: economic growth was fuelled by private consumption, mostly of imported goods which, in turn, was financed by remittances of labor migrants which grew at rapid pace: they accounted for 30% of GDP in 2008, one of the highest in the world.

In June 2009 the IMF characterized Moldova's macroeconomic situation as follows: "Like most countries in the region, Moldova has been hit hard by the global economic crisis. Real GDP is projected to shrink by at least 9 per cent in 2009, and there are worrying signs of deflation. Export markets have shrunk and foreign direct investments and remittances have fallen sharply. The current account deficit is expected to remain large despite the rapid import contraction. A large external financing shortfall is emerging due to low capital inflows."<sup>13</sup>

Having originally been seen as a problem that could be tackled later, the global economic crisis had a major and abrupt impact on the Moldovan economy. In

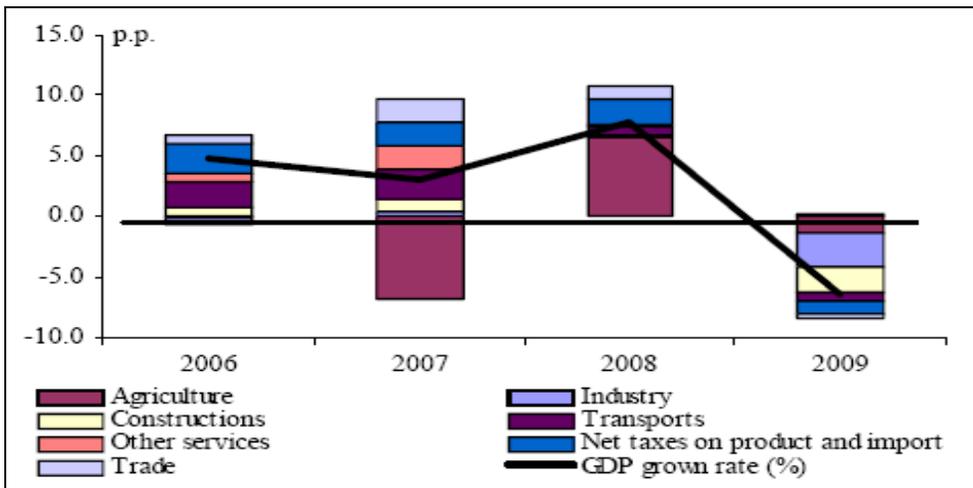
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<sup>13</sup> United Nations in Moldova and the World Bank (2009): Impact of the Economic Crisis on Poverty and Social Exclusion in the Republic of Moldova.

2009, real GDP shrank by 6.5%, which was in sharp contrast with the 7.8% GDP growth in 2008.

The crisis's impact on different production sectors was not uniform in 2009 (Figure 7). A significant decrease was registered in construction – by 27.6%, industry – 19.4%, agriculture – 10.9% and transport and communication – 7%. The downturn in industry was higher than in trade and agriculture. Also, export-oriented activities were affected more seriously than domestically-oriented ones. The share of services increased from 61.7% of GDP in 2008 to 64.2% of GDP in 2009. At the same time, the industry's share fell by 0.9 percentage points and accounted for 13.0% in 2009. The share of agriculture has decreased by 0.3 percentage points, getting the level of 8.5%.

**Figure 7. Annual GDP growth and contribution of economic activity by sector (% , versus previous year)**



Source: National Bureau of Statistics and National Bank of Moldova.

Falling remittances and FDI inflows and the recession experienced by Moldova's main trading partners (Russia, Ukraine, Belarus and the EU) were the main transmission channels through which the global crisis hit Moldova. It started to be felt already in the last months of 2008. In 2009, a broad-based downturn occurred. Private consumption declined by 7.9% and fixed capital formation – by 31.3%. Exports also fell substantially while imports decreased even more sharply, in line with the slump in domestic demand. With the trade balance improving due to imports contracting faster than exports, the current account deficit decreased markedly, from around 16% of GDP in 2008 to 9% of GDP in 2009. In 2009, industrial

production declined by around 22%. The ensuing fall in real growth was partly cushioned by the rapid deceleration in prices. The 12-month consumer price index (CPI) inflation decreased from around 16% in the second quarter of 2008 to -2.3% in August 2009, before picking up again to 3.0% in February 2010.

The *fiscal situation* has deteriorated rapidly since the middle of 2008, despite expenditure cuts of around 20% across the board decided in spring 2009. A strong reduction in imports led to a deep fall in indirect tax collection (the key source of budget revenue), which was only partly offset by lower-than-budgeted expenditures and sequestrations implemented by the new government.

According to the Ministry of Finance data, revenues of the national public budget during January – December 2009 amounted to MDL 23.2 billion, which indicates a slump by 8.9 percent as compared to the same period of the previous year. In recent years, the state budget's dependence on household consumption continued to grow, due to increase of the share of indirect taxes in total public revenues.

Tax revenues continued to make up a major part of budget revenues; similar to previous years, the main source of revenues was from taxes on goods and services. The share of direct taxation in tax revenues kept decreasing from 2008 due to the “zero” rate on corporate income tax for reinvested profit. This applied to legal entities, peasants' farms as well as to individual entrepreneurs. The government used this strategy to stimulate domestic business. Ministry of Finance data shows that corporate income tax revenue decreased by 13.2% in 2009 as compared to 2008 while taxes on goods and services decreased by 16.4%. As a result, the total tax revenue declined by 9.4%.

Following a meeting of the Consultative Group of Donors for Moldova in December 2006, budget support grants and externally financed projects increased substantially.

In 2007-2009, the total amount of public spending was increasing. In 2009, total national public budget spending amounted to MDL 27.3 billion, i.e. 4.6% more than in 2008. The growth in spending was caused by wage increases in education and health as well as by an increase in pensions.

The analysis of the expenditure structure by functional classification shows that the largest share of public resources, from 63.2% in 2006 to 70.7% in 2010, continues to be allocated to the social sectors, followed by the expenditure of the economic sectors –from 15.1% in 2006 to 12.0% in 2010. The share of education and health expenditures in GDP and NPB can be observed in Table 2.

**Table 2. Share of Education and Health expenditures in the Growth Domestic Product (GDP) and National Public Budget (NPB), 2006-2010 (in %)**

	2006	2007	2008	2009	2010 Approved
<b>Education</b>					
Share in GDP	8.1	8.0	8.2	9.4	10.0
Share in NPB	20.1	19.0	19.8	20.7	21.6
<b>Health</b>					
Share in GDP	4.7	4.9	5.4	6.4	6.3
Share in NPB	11.7	11.7	13.0	14.1	13.6

Source: Ministry of Finance.

The execution of a consolidated budget in 2009 resulted in the highest deficit amounting to negative MDL 3.8 billion as compared to negative MDL 0.6 billion in 2008. In 2009 the stock of government external debt decreased by USD 4.6 million and amounted to USD 773.7 million at the end of the year. The internal debt increased by MDL 1,595.0 million, amounting to MDL 5,104.9 million. The increase of the domestic debt was financed exclusively by government securities.

As a result of the double external shock (on trade and remittances), pressures on the national currency built up. The National Bank of Moldova was able, however, to somewhat resist these pressures by using some of the country's official reserves. They were reduced by nearly 40% between September 2008 and April 2009. The bulk of the intervention took place in the first part of 2009. Subsequently, the exchange rate of the Moldovan Leu versus the US dollar (the traditional anchor currency) stabilized and reserve levels gradually started increasing again. After a soft spell in September 2009, the exchange rate against the dollar weakened again by around 15% from early December 2009 onwards.

In order to cushion the impact of crisis, monetary policy was eased substantially, despite concerns about the exchange rate. Between September 2008 and September 2009, the NBM cut its main refinancing rate from 18.5% to 5.0% while reserve requirements were also reduced drastically. However, in late January 2010, the NBM raised the base rate to 6%, due to an increased risk of overshooting the inflation target.

Disputed parliamentary elections in April 2009 brought democracy issues to the fore. Early elections were held in July 2009, bringing the current Government to power on September 25th, 2009. Both the crisis and pre-election increase in spending (like wage and pension increases) resulted in a large fiscal gap.

### **2.3. Impact of crisis on services provided by local public authorities**

The Constitution of the Republic of Moldova, as a supreme law, lays down the basic principles of the local public administration. These principles are also legislated in two laws: the Law on Administrative Decentralization and the Law on Local Public Finance. These documents also stipulate the responsibilities for providing local government services.

One of the preconditions of a successful decentralization of public finance is a precise statement of the tasks and powers of the various levels of the local administration. The last reform of 2002, under which the current local administrative units were created, failed to bring about an effective competence division on various levels of local governments. Currently, it is difficult to specify which tasks are allocated to the first level of local public administration (communes), and which are the responsibility of the second level (municipalities and rayons). The lack of a clear competence division results in vague principles of funding “public goods” services in Moldova. Therefore, it is not easy to embark on public finance decentralization.

In general, the local governments are mainly responsible for financing the types of activities shown in Table 3.

**Table 3. Local budget expenditures by functions in 2006-2010, share in total (%)**

<b>Total expenditures</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010 Approved</b>
1. General services	6.6	6.8	7.3	6.8	5.7
2. National defense (enrolment in the army)	0.1	0.1	0.1	0.1	0.1
3. Public order	3.1	3.6	3.2	3.7	3.5
4. Education	46.2	49.7	53.1	59.9	62.6
5. Culture, art, sport and youth activities	5.2	4.8	5.2	4.8	4.9
6. Healthcare	1.7	1.6	2.3	1.1	1.2
7. Social welfare	4.1	8.3	10.1	8.1	7.8
8. Agriculture, forestry, fishing	1.2	1.4	1.5	0.2	0.2
9. Environmental protection	0.0	0.0	0.0	0.0	0.0
10. Industry and construction	0.2	0.2	0.2	0.2	0.2
11. Transport and communication	2.8	3.9	4.1	3.3	2.4
12. Communal services and housing	17.8	11.4	8.7	7.4	7.9
13. Fuel and energy sector	5.5	5.0	1.4	1.4	0.2
14. Other economic activities	0.1	0.1	0.1	0.1	0.1
15. Expenses not distributed elsewhere	5.4	3.1	2.7	2.9	3.2
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

Source: Ministry of Finance and own calculations.

Local government expenditure made up about 24% of general government consolidated expenditure in recent years. In the last two years, most local government expenditures have been made in education (about 60% of total local budget expenditures, which were increased by about 15% in comparison to 2006). Administrative costs (about 6% of total local budgets) and social protection (up to 8%) are the next the largest items in the local budgets. At the same time, during the crisis, spending on communal services and housing decreased from 17.8% in 2006 to 7.9% in 2010. The healthcare function is exercised mostly by compulsory medical insurance. Local authorities as owners of the medical institution real estate (buildings, land, etc.) provide funds to medical institutions located in their regions only for current repairs and capital renovation. Service delivery is the subject of the contract with the territorial branch of the National Medical Insurance Company.

The analysis of the current system of local finances proved that the financing of local public tasks is dependent on major transfers from the state budget (in 2009 – 58% of total local expenditures, including Chisinau and Balti, and 70%, excluding these two municipalities), making them financially weak in performing their responsibilities. The crisis' influence on local budgets could be seen in the trend of transfers from the state budget to local ones. Their share in total consolidated budget revenues increased from 45% in 2007 to 62% in 2010.

Under the current budgeting system, a fundamental role is played by so called normative expenses, defined by the Ministry of Finance and included in the amount of expenditures during budget equalization. They are used to determine the resources for local authorities to perform specific public tasks – education, culture or social assistance, etc. The system used to determine the normative expenses appears to be based on a historical approach rather than on real costs of service provision incurred by the local government. Another remark applies to the method used to calculate the revenues of local government units, which is based on the Ministry of Finance's forecast indicators (population, salary level, and economic activity in the territories). While such forecasting is purposeful at the level of the central budget, it is difficult to accept in the case of local government units.

The Moldovan tax system has been relatively stable since 1998. The share of local government revenues in general government revenues has been less than 30% in recent years. Personal income tax is 24% of local government total revenues. Amongst taxes, land tax forms quite a small share – 3%. Revenue from local taxes represents only 3% of the local budget. The share of local taxes, own revenues and shared revenues is very small in most of the local public administration budgets, with the exception of large municipalities such as Chisinau and Balti.

Moldovan local governments have a relatively limited direct influence on local economic development. The only instruments at hand for stimulating investments

and creating a competitive environment are setting local taxes and levies (with the maximal threshold established by the Parliament), offering facilities, land or buildings, promoting strategies, or using planning and zoning tools. As the share of own local revenues in local budgets is small (10%), there is limited fiscal and financial decentralization, and grants (transfers) from the central government are conditional, i.e. have to be spent on delivering specific public services (education, social assistance etc.)<sup>14</sup>.

## **2.4. Managing the impact of the economic crisis**

The new Government of Moldova succeeded in managing the impact of the economic and financial crisis in a competent way. It developed dialogue and cooperation with the IMF, World Bank, European Bank for Reconstruction and Development (EBRD) and European Investment Bank.

In October 2009, it negotiated a new agreement with the IMF for 2010-2012, which was approved by the IMF Executive Board on 29 January 2010. The three-year arrangement for Moldova under the Extended Credit and Extended Fund facilities of the total amount of around USD 574 million is intended to help restore fiscal and external sustainability, preserve financial stability, and support growth.

According to this program, the country's macroeconomic policies will be built around four pillars: (i) reversing the 2008–2009 structural deterioration of fiscal policies over the next three years while safeguarding public investment and social spending priorities; (ii) maintaining flexible monetary and exchange rate policies to keep inflation under control, facilitate adjustment to shocks, and rebuild foreign reserves; (iii) ensuring financial stability by strengthening the legal framework for bank resolution and close monitoring of the financial sector, accompanied by swift actions if and when necessary; and (iv) structural reforms to unlock and raise the economy's potential.

The Memorandum with the IMF unblocked the previously frozen financial assistance to the country from foreign donors to finance budgetary needs. For example, the European Commission granted the first disbursement of financial assistance amounting to EUR 15 million for implementing reforms in the water supply

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<sup>14</sup> Expert Group (2010). Analytical study on optimal administrative-territorial structure for Republic of Moldova.

and sanitation sector; the EU provided EUR 12 million for the modernization of roads and a third disbursement of EUR 6 million for social sector budget support.

Moldova has made progress towards strengthening economic integration with the EU as well, including the negotiation with the EU on a Deep and Comprehensive Free Trade Agreement, the signing of which will facilitate Moldovan exports to the EU. In the first six months of 2010, Moldova's economy grew by 5.6% and this positive trend will enable full exploitation of the openness with the EU.

The Moldovan Government has presented its vision of transforming the country to the Donor Consultative Group Meeting – Moldova Partnership Forum, held in Brussels on March 24, 2010. The meeting was attended by donor countries and international organizations, including the European Commission, World Bank, UN, DFID, SIDA and European financial institutions. As a result, development partners have pledged financial support to Moldova in the amount of approximately USD 2.6 billion for the years 2010-2013, of which 52% are grants. In accordance with agreements reached at the meeting, the European Community was willing to provide assistance worth 550 million Euros, EU countries worth 187.6 million Euros (including 100 million Euros which is a grant from the Government of Romania), USA – 227.4 million Euros, international financial institutions (IMF, World Bank, UN, EBRD and European Investment Bank) – 957.52 million Euros<sup>15</sup>.

Financial assistance provided by donors shall be used to implement projects in the following sectors: road rehabilitation, agriculture, water supply and sanitation, health, energy, efficient public service, regional development, social protection, education, decentralization reform, business development and e-government.

The government has committed to use this assistance for economic recovery, economic reforms, and political and social modernization to achieve the objectives defined in the strategic document “Rethink Moldova” in an effective and transparent way. This document highlights the reform priorities and financing needs for the period of 2010-2013, based on the five pillars: European integration, economic recovery, rule of law, administrative and fiscal decentralization and country reintegration.

In consultation with the business community, civil society and development partners, the Government has developed and implemented the Stabilization and Economic Recovery Plan for 2009-2011. The plan represents the policy and action platform to stabilize public finances, restore economic growth and ensure an effective and fair social protection of the citizens.

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<sup>15</sup> Government Newsletter Nr.1/2010.

The incoming government announced an ambitious reform program of deregulation to support economic recovery and boost potential growth. The 2010 budget includes several adjustment measures aimed at reducing the deficit. On the revenues side, taxes were increased for gambling and diesel-powered and luxury cars, the road tax was increased and excise duties were raised substantially for petrol (+50%), beer (+25%) other alcoholic beverages (+3.1%), and cosmetics. Local taxes will also be higher, whereas the real estate tax will be levied on the market value of properties, not on the book value. In addition, utility tariffs were raised to bring them to cost recovery levels. This entailed sharp price increases of natural gas to households (by 16.5%), heating (by 29%) and electricity (by 20%) from January 2010. On the expenditure side, several measures were implemented too. Public employment was to be reduced and early retirement options curtailed for civil servants, while public sector wages were set to increase less than had been originally planned by the previous government.

The announced reforms also include simplifying the procedures to register, launch and close a business and to obtain construction permits. The intended overhaul of the pension and social security schemes includes the extension of the obligation to pay social security contributions to all employees. The statutory pension age (currently 62 for men and 57 for women) will not be raised, however.

As regards monetary and exchange rate policy, the National Bank of Moldova announced a redefinition of its medium-term strategy for the 2010-2012 period, with price stability as its chief objective. For 2010, the central bank announced an inflation target of 5.0% with a deviation band of  $\pm 1$  percentage point. The National Bank of Moldova's policies will be gauged in quarterly Monetary Policy Reports, the first of which was published in February 2010.

## **2.5. Overcoming the economic crisis**

The measures taken so far by the Moldovan authorities ensure a sustainable basis to achieve economic growth in 2010.

The Moldovan economy entered a recovery phase in the first quarter of 2010, largely due to the economic stabilization of the country's main trading partners. This led, on the one hand, to the increase of transfers from abroad and restored people's expectations, thus increasing private consumption and imports. On the other hand, the demand for domestic products has recovered, registering an increase of exports compared to the first quarter of 2009. The value added increased

in both industry and agriculture. Also, the gross value added in services increased due to positive developments in trade, transport and communications, while construction continued its negative trend which was also observed in the previous year. These tendencies were confirmed by the operative data on the industry, internal and external trade for the period of January to June 2010.

At present, Moldova has a stable budget with growing revenues, which will allow for increased spending next year, mainly in social expenditures. Moldova's budget deficit is also expected to decrease from the more than 7% of GDP that was initially approved to 5.4%. Along with budgetary and fiscal policies, new laws and regulations were promoted improving public procurement, simplifying customs and tax procedures, and creating favorable conditions for business.

In the field of fiscal management, the activities are aimed at diversifying and increasing the quality of taxpayer services, enhancing the effectiveness and efficiency of collecting outstanding debts formed in previous years, and combating tax evasion by promoting quality tax controls. In addition, customs management improved due to internal controls and supervision, strategic planning to prevent and counteract the cases of decreases in customs valuations, and developing the partnership between customs and business.

According to information from the Ministry of Finance, from January to September 2010, the national public budget revenues were accumulated in the amount of MDL 19,111.7 million, which represents 14.7% more than in the same period last year<sup>16</sup>. Tax revenues continue to constitute the major share (84.2%) of total revenues with a key role of taxes in goods and services, which increased by 23.0% compared with the same period of the previous year; the state compulsory social insurance contributions, which recorded a modest increase of 4.9% compared to the same period in 2009 and income taxes, which rose by 3.8% compared with the period of January-September 2009. As a result of changes in these indicators, tax revenues were 14% higher than in the previous year.

General government expenditure from January to June 2010 amounted to MDL 20,608.1 million, which represents 6.2% more than in the same period in 2009. The expenditure growth was caused mainly by the increase in spending on social assistance and welfare (by 11.3%) and education (by 17.9%). The deficit amounted to MDL 1,496.4 million, which represents 54.4% of the level recorded in the same period in 2009.

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<sup>16</sup> In September 2010, the inflation rate for the last 12 months, as measured by consumer price index, was 8 percent.

The public debt structure at the end of September was as follows: 29.2% of the domestic debt and 70.8% of the external debt. The domestic public debt increased by MDL 310.7 million compared to the beginning of the year and amounted to MDL 5415.6 million. The external public debt amounted to MDL 13,147.1 million, the equivalent of USD 1,094.1 million, increasing by about USD 320.5 million compared to the level of January 1, 2010.

It should be mentioned that the process of drafting and executing the budget in the Republic of Moldova has been considerably improved in recent years. In particular,

- the law on the budget system and budget process, regulating the mode of drafting, analyzing, adopting and executing the budget was modified;
- the Ministry of Finance overtook control of the majority of public expenses, manifested in the gradual incorporation of special means and funds in the budget;
- an advanced treasury system was created, designed to ensure the realization of expenses in accordance with the approved budget stipulations.

Also, the Ministry of Finance started the process of budget planning based on programs and performance and developed the Medium-term expenditures framework, which is a tool for strategically planning public finances in relation to the governmental policies and strategies for the following three years.

Nevertheless, the budgets approved in the previous years contain many pages with figures in the matter of means proposed for different necessities. However, even the annual budget laws specify the budgets based on programs; there is no well-determined system of monitoring and implementing them nor is there a good system for their valuation.

In this context, an important role is played by the application of the principle of transparency within the public sector, which can be defined as an opening of the society towards the state's structure and public institutions, with fiscal policy purposes, public accounts and budget forecasts. Transparency stands for free access to veritable, exhaustive and topical information about public transactions, in conformance with international standards. In the budget field, transparency is necessary for objectively assessing the current and future financial situation of the state. Transparency in the area of fiscal policy is a compulsory demand required to be met for drafting and promoting a balanced and foreseeable economic policy. A transparent system of fiscal accounting also allows the markets to establish opportunities in the Government's activities, to make comparisons between the financial transactions foreseen by the budgets with the ones efficiently realized.

## 3. Education

Education is the foundation of the knowledge-based economy. It is indispensable to economic development and plays an essential role in poverty reduction. Education improves the quality of people's lives and brings social benefits to both individuals and society. It raises labour productivity and creativity and promotes entrepreneurship and technological advances. No country can achieve economic sustainable development without substantial investment in human capital.

### 3.1. Organization of educational system

The education system<sup>17</sup> in Moldova includes pre-school, primary, secondary and higher education. Compulsory education lasts for nine years and comprises primary school (grades 1–4) and lower general secondary education, called gymnasium (grades 5–9). Students pass graduation exams at the end of gymnasium studies, obtaining a Certificate of Studies. Then they can opt for upper general education in the lyceums (grades 10–12), which leads to a Baccalaureate examination and diploma, or alternatively they may continue with professional colleges, or professional schools offering vocational training. Higher education consists of two stages, short-term college education and university education. Private education providers are permitted in the country and are concentrated mainly at the higher levels of education.

*Pre-school education* constitutes the first level of the educational system. It is compulsory from the age of 5 and it is carried out in the preparatory classes (at kindergarten or school), or in the family. Parents can request to prepare their children for school using special elaborated recommendations and guidelines. Pre-school education is provided by a system of different types of institutions – state and private, with different programs, which correspond to the state educational standards. The local public administrations are obliged to ensure the functionality of pre-school

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<sup>17</sup> Main education indicators by level are presented in Annex 3.

institutions. The state guarantees the care and education of pre-school age children with mental and physical handicaps as well as of orphan children.

Enrolment in pre-school education has evolved significantly<sup>18</sup>. It decreased in the early transition period due to the economic decline and increasing poverty rates. The closing of pre-school institutions reduced access to early childhood education. A decade of decline in pre-school enrolment (from 61% in 1989 to 42.4% in 2001) caused considerable damage to child socialization, peer interaction and school readiness. Only after 2001 did pre-school enrolment increase due to efforts by the government and international partners to increase access to early education programs (in 2008 the enrolment was 72.7%)<sup>19</sup>. In the 2008/2009 school-year, there were 123.9 thousand children in 1,349 preschool institutions, compared to only 96.5 thousand children in 1,128 institutions in 2001/2002. The number of teaching staff was about 11.2 thousand in 2008 as compared to 9.0 thousand in 2001.

The enrolment rate in the *primary and lower secondary education* (grades 1-9) developed in quite a complex way in recent years<sup>20</sup>. The country entered the transition period with relatively high enrolment rates due to compulsory enrolment for these grade levels during the Soviet period. After a decline in 1993-1994, enrolment steadily grew until 1998. A steep decline followed again in 1999-2000 as the result of the increasing poverty rate in the aftermath of the Russian financial crisis. The falling level of net enrolment in primary education (from 92.4% in 2001 to 87.5% in 2008) can be partly explained by the unofficial migration of children whose parents work permanently abroad, as well as by the financial difficulties that many families face when the time comes to send their children to school.

The lower secondary education net enrolment rate increased during 2000 – 2004. This indicator started to decline again in 2005 (from 88.5% in 2004 to 84.6% in 2008). This situation can be explained by the reduction in primary education enrolment, as well as by changes in the government education policies adopted in 2006/2007 that unsuccessfully aimed to divert more students from higher education to vocational and professional education and to colleges. However, an increasing number of young people preferred to leave education for good.

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<sup>18</sup> Expert Group (2010). Country Report. Overview of the relationship between Human Capital Development and Equity in the Republic of Moldova.

<sup>19</sup> According to Claire O'Brien (2010). Country Desk Study: Moldova. Mid-Term Evaluation of the EFA Fast Track Initiative, a strong note of caution should be expressed about the validity of the official figures related to net enrolment in pre-school education. This highlights the need for improvements in monitoring the education sector.

<sup>20</sup> UNDP (2009). National Human Development Report.

In the 2008/2009 school year, the primary and general secondary education (grades 1-12) involved 436.1 thousand pupils and 1,526 institutions, including 35 special schools and 7 evening schools. Private schools comprised only 0.9% of school population. As compared to the 2001-2002 school year, the number of institutions decreased only by 3.7%, while the number of pupils declined by 30%, including those in primary school (grades 1-4) by 35.2%, lower secondary education (grades 5-9) by 30.1% and upper secondary general education (lyceums, grades 10-12) by 11.1%. The drop in the number of pupils led to a decline in the average number per school (from 391.6 pupils in 2001/2002 to 285.8 pupils 2008/2009) and average number of pupils per class (from 23 in 2001/2002 to 19 pupils in 2008/2009; in urban areas it was 22 pupils and in rural areas it was 18 pupils)<sup>21</sup>. However, there are many classes with only 8-15 pupils, which generate inefficient public spending. Excess space is registered in most schools leading to very low rates of use of school capacities, especially in rural areas. The total capacity of school institutions is 730.2 thousand places, and the capacity exploitation rate is about 60%.

The significant decline in pupil numbers was not accompanied by reductions in teaching and non-teaching staff. The average number of pupils per teacher has declined from 14.6 in 2001-2002 to 11.8 in 2008-2009 while in some schools this indicator is only 4:1 (the European average is 18). Moreover, according to the 'Country Report on the Overview of the relationship between Human Capital Development and Equity in the Republic of Moldova', the respondents of the 'Survey on Initial Education' indicated that the quality of education is lower in rural areas. This was also confirmed by the focus groups that were conducted. One of the possible explanations is the aging teaching staff and unwillingness of young graduates to work in rural areas because of poor physical and social infrastructure. Also, since school directors have the final say over teaching staff recruitment, they often obstruct the entrance of fresh graduates and retain older staff members, who are not always better qualified. Therefore, the level of knowledge of graduates from rural and urban area differs and the opportunities for further education also vary because of these discrepancies<sup>22</sup>.

A shrinking school-age population is attributable to the birth rate decline, as well as to emigration. Between 2000 and 2008 there was a decline of the 0-14 age group from 23.8% to 17.6% in total population. The demographic developments

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<sup>21</sup> Institute for Public Policy – UNICEF (2009), Baseline Study on Basic Education in the Republic of Moldova from the perspective of Child-Friendly Schools.

<sup>22</sup> Expert Group (2010). Country Report. Overview of the relationship between Human Capital Development and Equity in the Republic of Moldova.

have had a deep impact on the sector, affecting both efficiency aspects and those related to the quality of education.

*Secondary vocational education* consists of 73 vocational schools, including 21 trade school (2 of which are private) and 52 professional schools (polyvalent schools) with about 24.2 thousand students enrolled in the 2009-2010 school year (4.2% of them paying annual tuition fees ranging from MDL 2,400 to MDL 4,300<sup>23</sup> – by the 1<sup>st</sup> of September 2010 the official exchange rate stood at 12,1714 MDL per 1 USD), a decrease of approximately two thirds since Moldova gained its independence. This decline can be partly explained by demographic trends, the emigration of young people, the increasing preference for lyceums and the high drop-out rate after completing compulsory education. There has been a clear shift from vocational education to general education in recent years<sup>24</sup>. Participation in vocational education has decreased considerably to 22 thousand students in 2009, or 8% of the population in secondary education. Currently, the number of students enrolled in vocational education is five times smaller than the number of students enrolled in higher education while these figures were equal during the Soviet period. With hardly any investment in this sector, obsolete equipment, old curricula and aging teaching staff, the sector is no longer attractive to students and their parents.

*Secondary specialized education* includes 46 colleges (5 of which are private) with 32.2 thousand students enrolled in the 2009-2010 school year, which is 92.2% more than in the 2001-2003 school year. Some 56% of students from colleges are financed by the state budget and the others pay an annual tuition fee (from 2,000 lei to 6,900 lei). 7% of the total number of students study in private colleges.

*Higher education* consists of 33 higher education institutions (19 are public and 14 are private) with 109.9 thousand enrolled students, which is 27.2% more than in the 2001-2002 school year. Admission to university is contingent on the receipt of a Baccalaureate diploma. 29% of students are financed by the state budget and the remaining 71% pay annual tuition fees (from 3,650 lei to 10,000 lei). Some 18% of students are enrolled in private institutions. Enrolment in higher education has increased over the last decade and there are several factors that contributed to this situation<sup>25</sup>. Firstly, the fact that fee-based enrolment in higher education was

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<sup>23</sup> Government Decree No 196, February 22, 2007 “Nomenclatorul lucrărilor și serviciilor contra plată prestate de către instituțiile de învățământ”, Annex 3.

<sup>24</sup> Republic of Moldova: Country Information Note 2009-2010 (update February 2010).

<sup>25</sup> Expert Group (2010). Country Report. Overview of the relationship between Human Capital Development and Equity in the Republic of Moldova.

almost unlimited after 2000 increased the opportunities to enroll in higher education. About 80% of students were paying tuition fees, which became more affordable to many families as the migration flows increased and the state-based enrolment in higher education represented only 20-25% of total. However, the rate of enrolment in higher education is still considered low as it is not affordable for a large share of the population. Depending on the size, the annual tuition represents 30-70% of national annual average disposable income. Also, it should be noted that 60% of the total population receive less than the national average income.

According to UNICEF data<sup>26</sup>, Moldova's primary school net enrolment rates are the second lowest in the CEE/CIS region, after Azerbaijan; secondary school enrolment rates are the third lowest in the region (after Albania and Turkey), and tertiary education rates are far below the regional average and less than half of the average enrolment rate in OECD countries. Only pre-primary enrolment is higher than the regional average due to progress achieved in recent years.

One of Moldova's problems is ensuring access to schools for children with special educational needs, whose number is constantly increasing<sup>27</sup>. The share of this category in the total number of children has almost doubled, from 10.5 per 1,000 children in 1995, to 17.9 per 1000 children in 2008. The increase was caused by adverse social and environmental factors, as well as by the authorities' efforts to improve the tools for identification and keeping track of this category which was previously overlooked by official statistics.

The education of children with special educational needs is carried out in special institutions or in the home. Most children with special educational needs are enrolled in residential educational institutions. There were 42 schools for mentally or physically disabled children operating in 1995 and 33 such institutions in 2008. Despite the considerable efforts on the part of the government and international donors to enhance inclusive education, many obstacles still hinder its development. Only 18.6% of the total number of general secondary institutions possesses the required space to open rehabilitation rooms; only 51.5% can provide rooms for opening medical centers; and in only 1.5% of institutions can lifts be installed for pupils with locomotive disabilities.

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<sup>26</sup> UNICEF (2009). Country profile. Education in Moldova.

<sup>27</sup> Institute for Public Policy – UNICEF (2009), Baseline Study on Basic Education in the Republic of Moldova from the perspective of Child-Friendly Schools.

### **3.2. The quality of education**

Quality is the heart of education and is fundamentally important to the future well-being of children, young people and adults<sup>28</sup>. The evaluation of various components of the education system, such as material conditions, the education process, the professional level of teaching staff and school/academic performance plays a significant role in quality improvement. In Moldova, evaluation is performed at each level of education, in accordance with the objectives and targets of the curriculum. Gradual improvements in the quality of education are measured by student performance in tests. According to the official data, the results of internal tests have been encouraging in recent years. However, the important evaluation problem is its relevance, or, in other words, whether the evaluation results represent the degree of achievement of educational objectives<sup>29</sup>. For example, the analysis of results obtained in the 2008 baccalaureate exams raised some questions. In urban areas the average baccalaureate marks were significantly lower compared to those in rural areas, where, as a rule, the educational conditions are much lower than in urban areas.

Moldova has taken part in international tests and assessments of school performance, including Trends in International Mathematics and Science Study (TIMSS) and Progress in International Reading Literacy Study (PIRLS). The implementation of PIRLS (2001 and 2003), TIMSS (1999 and 2003 and 2007), PISA 2009 and PISA 2009+ Projects (Program for International Students Assessment) was a good experience for educational institutions and provided a model for the organization and conducting of school assessments. The results of the international tests (1999 – 2003) showed that in mathematics, Moldova scored second to last in the CEE/CIS region, just above FYR Macedonia; and in science, it scored fifth to last. In reading, Moldova scored the third from the bottom in the region, surpassing only FYR Macedonia and Romania. Over time, between tests, Moldova's average scores increased slightly both in reading and science; however, between 1999 and 2003 its average mathematics score decreased considerably (by nine points).

Activities within the TIMSS 2007 project and its tentative results (the finalization of this project was delayed and final test results were not included in the Final International Report) helped education policymakers realize that Moldova's national tests and assessments have not yet been established in line with modern

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<sup>28</sup> <http://www.unescobkk.org/education/efa/efa-goals/quality-education/>.

<sup>29</sup> Institute for Public Policy (2010). Policy paper. Education and Human Development: Actual and Future Challenges.

international standards. Continued participation in international testing will help Moldovan schools adjust their performance to international standards.

### **3.3. Policy reforms and achievements**

The reforms in education were initiated after Moldova gained independence in 1991. The education system inherited from central planning was largely inadequate to the needs of a market economy, especially in respect to training the future labor force.

The official government vision of the education system was expressed in the “Concept of the Development of Education in the Republic of Moldova” adopted in 1994. Based on this, the Parliament adopted the Law on Education in 1995, which still regulates the educational system in Moldova<sup>30</sup>. Education was declared a national priority based on the principles of democratization, humanization, humanity, accessibility and adaptability, unity and diversity. These documents and the National Program for Educational Development (1995-2005) laid the grounds for a new approach to education, bringing it closer to the European education systems.

*The first phase of Moldova’s education sector reforms were focused on compulsory education.* The World Bank supported primary and lower secondary education through the “Moldova General Education” project implemented during 1997-2004 (USD 16.67 million)<sup>31</sup>. This program supported the Government in revising the curriculum (grades 1-9), upgrading the assessment and examination system, providing teacher training and developing a sustainable system of textbook financing.

As the first education project did not target the quality of educational services for all stages of secondary education, this task was addressed by the second World Bank project on “Quality Education in Rural Areas of Moldova” (USD 10 million), which started in 2006. Its main objectives were to improve the quality of education, increase access to education, and increase the efficiency of financial resources. This international assistance became possible due to Moldova’s commitment to continue its education reform and to improve quality, access and efficiency, the goals formulated in the Economic Growth and Poverty Reduction

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<sup>30</sup> The Government is now elaborating a new Education Code.

<sup>31</sup> Moldova. General Education Project (2005). Implementation Completion Report.

Strategy (2004), the first Consolidated Education Strategy and Action Plan for the period of 2006-2008 (2005), and the National Development Strategy for 2008-2011 (2007).

Beginning in 1998, new subject curricula were gradually developed and implemented, reaching grade 9 in 2004-2005. By September 2010, the curricula for lyceums (grades 10-12) were also revised and modernized. Also, a set of curriculum guidelines for teachers was produced for the first time in Moldova. The in-service teacher training was conducted in order to effectively implement the new curricula and assessment methods and to improve the quality of classroom teaching (training on implementing the new lyceum curricula was provided in July – August 2010).

Significant efforts were made in order to upgrade the assessment and examinations system into a national system of assessment and evaluation capable of monitoring and providing feedback on the quality of the education system. Therefore, in 1998, the Department of Evaluation and Examination was established within the Ministry of Education, which was mandated with the design, administration and analysis of all testing and examination. In 2006, a Concept of School Results Evaluation was elaborated. Moldova started to have a coherent vision and a national model of student assessment and examination, and in order to improve the national capacity in educational measurement, the Agency for Evaluation and Examination was established in December 2006. Currently, the agency runs the entire set of national testing and examinations, including the Baccalaureate exam (grade 12). Another of its important tasks is overseeing the country's participation in international tests and assessments of school performance. International technical assistance was offered for the development of modern instruments of assessment, and personnel was trained on the major problems of tests development. The Agency launched a web page and created a database of candidates for examinations. On-line access to the database has been provided for any candidate with the possibility to review the data and the regulatory framework of the examination sessions was made public.

In order to ensure students' access to the adequate number of textbooks in line with the new curricula, a cost recovery system of textbook financing has been developed: money collected through the textbook rental scheme is deposited in the extra-budgetary Textbook Fund aimed at financing the purchase of further copies of textbooks for distribution to schools. The Fund started its activity in 1999 with only 2 titles in the rental scheme and all schools were included in the system. In 2003, textbook procurement became the responsibility of the National Agency for Public Acquisitions which works in close collaboration with the Textbook Fund manager. Given the country's economic conditions, it is admirable that the imple-

mentation of the rental scheme and the Textbook Fund was successful in ensuring all pupils have access to appropriate textbooks.

The reform of *pre-school education* started after a decade of decline in pre-school enrolment. In 2001, the Government launched the “Education for all” (EFA) program following the International Conference in Dakar where all countries were called to prepare or strengthen their national education development plans by incorporating EFA goals and strategies. The National “Education for All” Conference held in December 2001 in Chisinau examined the EFA International Goals in the national context and established the priorities for Moldova.

The preparation of the EFA National Strategy and action plan for 2004-2008 (adopted in 2003) was supported by a project jointly funded by UNESCO, UNICEF and UNDP, which helped to study, identify and prioritize Moldova's education needs, better define target areas for their development policies in regard to EFA, as well as to better communicate the country's needs to donors, international and regional organizations and NGOs when seeking technical and financial assistance. The core of the strategy consists of enhancing children's access to high-quality early education, paying extra attention to children from at-risk families and children with disabilities. Early education was also one of the priorities of the Consolidated Education Strategy for the period of 2006-2008.

Significant progress in pre-school education has been achieved since the Education for All – Fast Track Initiative (EFA/FTI) launch in 2006 (USD 8.8 million). The project (2006-2010) was supported by a grant offered by the Catalytic Trust Fund under the EFA/FTI global project administrated by the World Bank. The project was implemented by the Ministry of Education in partnership with UNICEF and UNESCO. It helped in elaborating policy documents in the field of early and preschool education (Standards of learning and development for children aged 5 to 7; Early childhood education curriculum; National professional standards for teaching staff; Early and pre-school education guide for teaching staff) and training teaching staff and managers.

Also, the FTI grant supported the renovation of 65 pre-school institutions and equipped about 600 pre-schools, including centers for children with special needs. Communities were mobilized and local partnerships were built to enroll children from vulnerable families in pre-school programs. Overall, in project-covered localities, 1,662 children from vulnerable families not enrolled in the early education system were identified and 818 children from vulnerable families were enrolled in the rehabilitated kindergartens and community centers.

According to the Centre for Sociological, Politological and Psychological Analysis and Research (CIVIS) assessment study<sup>32</sup>, the EFA/FTI project contributed to increasing the number of children enrolled in pre-school education, improving the quality of services provided by kindergartens as well as to the sharing of knowledge, attitudes and practices of managers and teachers from preschool institutions. However, the research revealed that many pre-school institutions still face pressing problems that need to be addressed (scarcity of teaching materials, insufficient teacher training, low awareness in implementing standards, lack of furniture and equipment as a barrier to the implementation of new curricula and education standards).

Analyzing *the access equity issues*, according to the published sources, the rate of inclusion of children aged 1-7 with disabilities in education programs has increased from 28% in 2005-2006 up to 36% in 2008-2009, and those aged 5-7 years – from 45% in 2005-2006 up to 58% in 2008-2009. However, disabled children's access to preschool education is still low, given that most mayor's offices lack statistics on these children, many of whom are sent to residential institutions. Children with disabilities cannot attend kindergarten because the rooms and educational services are not adapted to their needs. This information corresponds to the main findings of the "Assessment study of knowledge, attitudes and practices at institutional level related to early childhood education" carried out in 2009 by CIVIS at the request of the Ministry of Education (EFA/FTI project).

In the first years of independence, reforms of *higher education*<sup>33</sup> were inconsistent, with a decrease in the quality of education, an erosion of institutional autonomy and the over-centralization of the decision-making process. By the mid-1990s, the number of private universities had significantly increased but the quality of education in these institutions remained unsatisfactory. It appeared necessary to develop a legal filter to regulate such institutions. As a result, the Law on Evaluation and Accreditation of Educational Institutions was adopted in 1997. It was followed by the Law on the Endorsement of the Regulations on the Evaluation and Accreditation of Educational Institutions in 1999.

Furthermore, the Law of Education adopted in 1995 started to be seen as contradicting the current tendencies in the European educational system. During pre-

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<sup>32</sup> Centre for Sociological, Politological and Psychological Analysis and Research CIVIS (2009). Assessment study of knowledge, attitudes and practices at institutional level related to early childhood education.

<sup>33</sup> N. Toderas, National School for Political and Administrative Studies from Bucharest (2007). Educational policy two years since the beginning of the European Union – Republic of Moldova Action Plan: A New Direction for 2008 – 2011.

adherence and post-adherence to the Bologna Process, both the content and the methodology of the Law were revised in order to meet the requirements. A set of documents were elaborated to adjust the national legislation to the international requirements, including those recommended by the Bologna Process. They helped the legislation to meet minimal requirements and, as a result, Moldova joined the Bologna Process as a full member in May 2005. Complying with the legislative amendments of 2005, all higher education institutions have implemented a two-stage system starting with the 2005-2006 academic year. Most legal reforms in higher education were adopted in 2005; however, it is important to continue these reforms in order to create a comprehensive legal framework for the autonomy of universities in such areas as management, elaboration curricula, admission policies, institutional funding, etc.

Reforms in *vocational education* have started and then have been cancelled, experiments and pilot attempts have not been properly evaluated, and there is no clear continuity of efforts. Since independence, the main change has been the introduction of the polyvalent school.<sup>34</sup> The Law on Education (1995) introduced a new structure of polyvalent schools and trade schools. The aim of the polyvalent schools is to provide a high-level general and professional education. The Law stipulates that companies should pay 2% of their wage bill for education but they do not do so. Another significant problem is that the law does not provide a legal basis for students' practical training which has to be done at workplaces in what are nowadays privatized or private companies.

Recent reforms have mainly aimed at increasing participation in education.<sup>35</sup> Reforms in the vocational education system have received some support from the EU TACIS project implemented in 1998-2000. This led to experiments with more decentralized schools. The government was attempting to reverse the demise of vocational schools with the idea of abolishing vocational schools and introducing a new type of full-secondary vocational schools, the professional lyceum. This idea is part of a new vocational education strategy (drafted with the support of the SIDA-funded project) that has been under discussion for some time and also includes the proposal of turning groups of schools into regional training centres that can better respond to regional needs, initiating the decentralization process of vocational education and increasing the role of stakeholders. These activities have been mostly driven by donors (Sweden, Austria, Switzerland and Lichtenstein) and coordinated by the Ministry of Education.

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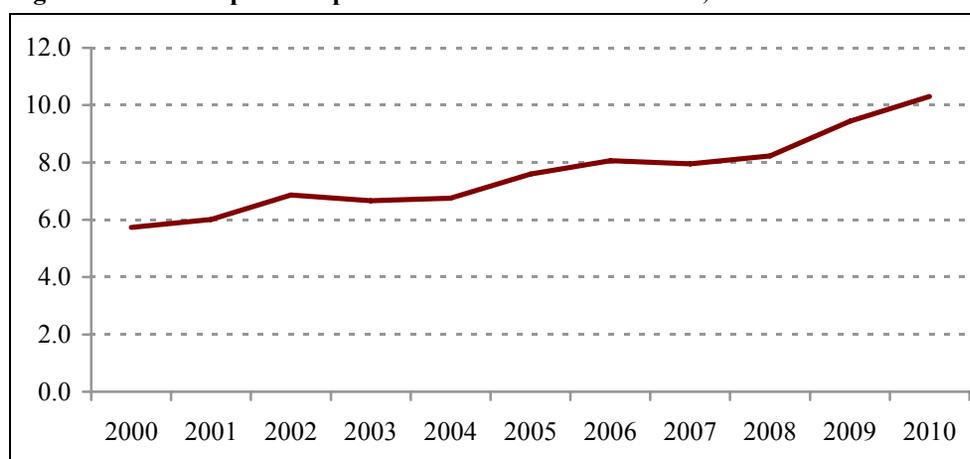
<sup>34</sup> Under the old system vocational schools were attached to enterprises.

<sup>35</sup> Republic of Moldova: Country Information Note 2009-2010 (update February 2010).

### **3.4. Education spending**

Access to education and its quality depend, to a great extent, on financing. Over the 2001 – 2009 periods, the Moldovan authorities ensured a constant increase of resources allocated to education (the sector public expenditure increased annually from 17.5% to 35.3% and only by 9.4% in 2009). As a share of GDP, education expenditure increased from 6.0% in 2001 to 9.4% in 2009 (Figure 8), which is higher than in many other developing countries. Moldova is an absolute leader among CIS countries in public education expenditures as a % of GDP.

**Figure 8. Share of public expenditures for education in GDP, %**



*Source:* Ministry of Finance, own calculations.

In 2009, education benefited from MDL 5,665.9 million, which is MDL 487.6 million more than in 2008. Similarly to many other countries, secondary education consumes the biggest share of total sector expenditure (about 53%), due to the greater number of school years and enrolled pupils. Preschool education accounts for about 1/5 of total expenditure, higher education – for some 12-13% and secondary vocational education – for about 5% of the total (Table 4).

The average expenditures per capita consistently increased over the last few years (public expenditures per student in vocational education are the highest, while in higher education – public expenditures are lower due to a high share of student contributions). The increased public spending was possible due to higher budgetary revenues which allowed the government to redirect additional resources

to education (state budget spending for education increased by more than 2 times from 2005 to 2009), in particular, to increase teachers' salaries.

**Table 4. Total expenditure on education**

	Thousand MDL			Structure, % of total		
	2008	2009	2010 approved	2008	2009	2010 approved
Preschool education	942982	1119353	1289187	18.2	19.8	19.5
Secondary education	2759577	2956309	3545958	53.3	52.2	53.6
Secondary specialized education	218382	284647	307127	4.2	5.0	4.6
Higher education	642448	781333	848738	12.4	13.8	12.8
Post graduation education	63656	73525	78338	1.2	1.3	1.2
Professional education	13800	15158	16551	0.3	0.3	0.3
Extra-curricular education	255578	404160	501114	4.9	7.1	7.6
<b>Total for sector</b>	<b>5178300</b>	<b>5665946</b>	<b>6618730</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
% share of total budget expenditure	19.8	20.7	22.3			
% share of GDP	8.2	9.4	10.3			

Source: Ministry of Finance, own calculations.

Data on education spending shows that expenditures on salaries for 2009 increased by 33.2% as compared to 2008 and those approved for 2010 are higher by 17% as compared to 2009. Expenditures on goods and services declined by 5.8% in 2009 as compared to 2008 and showed a 20% annual increase in 2010. High rates of increases were approved in 2010 for building current repairs (56.7%), meals (39.6%) and gas (27.1%), as well as for fixed assets procurement (60.7%).

However, it is still insufficient to ensure decent salaries for the teaching staff, proper infrastructure in all educational institutions, and thus the needed quality of education. It is no surprise therefore that, in addition to funding from the state budget, other financial sources also play a role in supporting the education sector. Local governments should finance the maintenance of education infrastructure but difficulties faced in collecting local taxes make them highly dependent on targeted transfers from the state budget. In most cases, this supplementary financing hardly meets school needs; therefore, school managers regularly ask parents to make contributions. It is important to note that means collected from other sources – tuition-fees, rents, investments projects, grants and donations – account for 12% of the total financing of education. In 2009, due to the financial crisis they stood at the level of only 10% (see Annex 3).

According to the Law on Education, the Ministry of Education is the central body responsible for the implementation of government policy in this sector but it has no authority to decide on its budget. The Ministry of Finance has the responsibility of allocating resources while the Ministry of Education is the recipient and supplier of information. Most public educational institutions are the responsibility of local governments, except for vocational schools, colleges and universities financed from the state budget. In 2009, some 70% of public expenditure was budgeted at the local level and 30% at the central level. Legislation does not stipulate the competences of each administrative level; neither does it guarantee financing from the state, nor – the ‘minimum package of educational services’, as well as financing, which will be provided to every school-age child, regardless of their preference for public or private schooling<sup>36</sup>.

Until 1998, education in Moldova was financed from local budgets and allocations were performed on the basis of expenditures provisions. Since 1999, in order to strengthen local self-governance, the financing of education began to be based upon a single normative – per capita<sup>37</sup>. According to the actual methodology, all rayons get allocations depending on the number of children included in the group of 7-16 year olds presented by local authorities to the Department of Statistics (by 1<sup>st</sup> of January) and the average quarterly number (third quarter) for pupils from grades 10-12 and normative per capita, presented in Annex 3. The same methodology is used for the calculation of allocations for pre-school education. The rayon will get allocations depending on the number of 3-6 years-old children submitted by local authorities to the National Bureau of Statistics (by the 1<sup>st</sup> of January).

However, the final expenditure per pupil differs between institutions. This is caused by the situation at the rayon level, where allocations are either increased or diminished, as the formation of local budgets is based on negotiations with each mayor who tries to get the largest possible amount of revenues transferred. Thus, the amounts transferred to pre-school institutions and schools, which are mainly financed via local government budgets, display considerable discrepancies. There is insufficient transparency in the budget process, which results in an inefficient allocation. Thus, one of the basic problems in the education sector is the inefficient use of public resources.

With the World Bank’s support, a new financing mechanism for primary and lower secondary education and school optimization activities are being piloted in

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<sup>36</sup> Institute for Development and Social Initiatives (IDIS) ”Viitorul” (2008), Moldova: Decentralization of the education reform and spending for education.

<sup>37</sup> Normative per capita (state budget allocation), Moldovan Leu.

two rayons (Causeni and Riscani), which cover all 72 schools from these rayons, or 5.2% of the total number of schools<sup>38</sup>. The new financing methodology is expected to be extended in 9 other rayons beginning in 2012. Also, based on the results from the pilot rayons and the nationwide feasibility study launched this summer, the IMF, in cooperation with the World Bank, aims to prepare a timetable for school optimization. Budget savings will be used to improve the quality of the schools, procure a large fleet of school buses, and repair school bus routes.

In the medium term, the Government plans to optimize the school network, i.e. to use financial resources and the existing technical and material assets more efficiently. This will be achieved through the creation of district schools, the development of school transport, the implementation of a new school financing formula, and the decentralization of financial management to the level of education institutions. The optimization will lead to reduction in teaching and non-teaching staff, costs of running schools, and an improvement in the student/teacher ratio, bringing it closer to international norms. Also, the Government will make efforts to rehabilitate vocational education and consolidate vocational training institutions. In addition, emphasis in professional training will be placed on the professions in high demand in the labour market.

The official document, “Rethink Moldova: Priorities for Medium Term Development”, confirms the major directions of education reform: optimizing public expenditures for education, developing vocational education and training based on demand, and reforming the system of residential care. The current situation in the sector requires an urgent update of the legal framework, which should involve all stakeholders: parents, students, teaching staff, business people, local communities, and civil society organizations.

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<sup>38</sup> Under the new methodology, rayons have to allocate a minimum of 95% of the total allocations for school education based on the number of students enrolled in each school, while the remaining 5% are allocated through a set of factors agreed upon between the schools and rayon authorities.

## **4. Healthcare**

Moldova inherited an inefficient and costly health care system from the Soviet times. It was based on inpatient medical care, which, in combination with the socio-economic crisis during the transition period, forced the Government to ensure a decent level of medical services. The healthcare sector became a burden for the state budget, and health indicators were declining. The level of system financing was dependent on private and unofficial payments. In such a situation, the population with the lowest levels of income was the most negatively affected.

Under such conditions, the best solution was to reform the healthcare system through redefining the financial mechanisms and redirecting financial resources to the most important and efficient areas of medical care. One of the main directions of the reform of medical care financing was putting into operation a system of mandatory medical insurance.

The reform results show that the initial objectives of a new system have been accomplished. Access to medical services has improved, especially for vulnerable people. The quality of services has increased and financing has become more stable. The mandatory health insurance system has had a positive impact on the medical system and its further development and reform. At the same time, the legal framework should be amended in light of lessons learned from the new experience.

A crucial point is to strengthen the system's immunity to external shocks like the recent financial crisis. The crisis did not affect the medical care system in Moldova so much. Being in the process of reform already, it was assured stable financing from the state budget and medical insurance funds and was supported by international donors.

### **4.1. Key sector indicators**

New medical care services – outpatient treatment and family doctors – have changes Moldova's healthcare sector and have become a new type of health service. Table 5 shows that the main target of the system is the development of pri-

mary medical care provided by the family doctors (10,103 thousands visits in comparison with other delivered services in 2009).

**Table 5. Number of delivered medical services to the population per medical service provider in 2004-2009 (in thousands)**

	2004	2005	2006	2007	2008	2009
Ambulance services to insured people	651.9	817.8	834.7	877.9	866.3	891.7
Family doctors visits number	8826.3	9687.6	9482.2	9675.5	9762.9	10103.0
Outpatient case treatments	-	-	156.2	195.4	198.0	228.1
Visits in outpatients clinics	3339.2	4806.2	5137.0	5340.3	5751.9	5929.2
Inpatient case treatment	475.6	499.4	500.6	511.1	538.7	534.7
High performance medical care	12.4	42.7	118.4	200.6	241.9	226.2

Source: National Medical Insurance Company (NMIC) annual report for 2009.

The volume of delivered services has been continuously increasing (Table 5). Only the most expensive service, “high performance medical care,” has increased slowly. The picture is much different when we look at spending for all types of medical care over the last 3 years. Table 6 shows the negative impact of the influence of the economic crisis.

**Table 6. Spending trends of the Main medical care Fund, MDL million**

	2009	2009	2008	2007	Changes		
	approved	actual	actual	actual	actual to approved in 2009	2009 actual to 2008 actual	2008 actual to 2007 actual
Ambulance services to insured people	294.0	269.7	234.0	160.1	-8%	15%	46%
Primary medical care	989.1	924.5	747.9	547.7	-7%	24%	37%
including drug cost compensation	80.6	74.1	55.3	40.9	-8%	34%	35%
Outpatient medical care	243.7	226.4	177.3	126.7	-7%	28%	40%
Inpatient medical care	1,687.1	1,478.4	1,230.9	952.8	-12%	20%	29%
High performance medical care	77.6	65.5	60.5	38.1	-16%	8%	59%
Medical care at home	3.6	2.1	2.0	-	-42%	5%	
<b>Total main medical care fund</b>	<b>3,295</b>	<b>2,965.3</b>	<b>2,572.0</b>	<b>1,894.6</b>	<b>-10%</b>	<b>15%</b>	<b>36%</b>

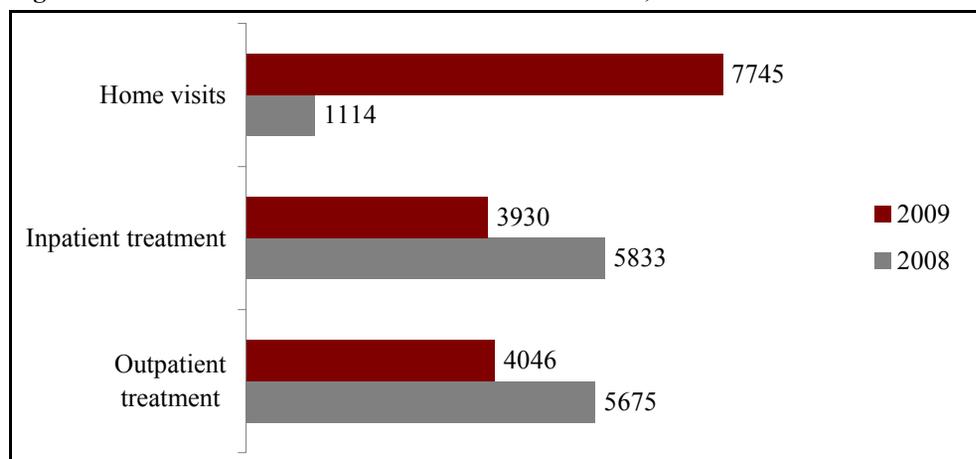
Source: National Medical Insurance Company (NMIC) annual reports for 2007-2009.

The data shows an increase in the nominal number and a considerable drop in growth rates between 2007 and 2009. If in 2008, real spending was 36% higher than in 2007, in 2009 only a 15% increase was registered. We can see a sound drop in 2009, when real spending was 10% lower compared to the approved budget.

The mandatory medical insurance funds for 2009 in Moldova were exposed to a considerable cut in comparison to the optimistic plan, approved in late 2008 by the previous Parliament. After the election, when the opposition came into power, the budget plans were revised to a less optimistic plan.

At the same time the reports show that the low ‘quality of service delivery’ indicator improved. If the medical services are considered low quality, they are not accepted for reimbursement<sup>39</sup>. In comparison with 2008, the non-valid number of inpatient treatment cases decreased by 28.7% and outpatient treatment decreased by 32.6% (Figure 9).

**Figure 9. Medical care evaluations of delivered services, number of treated cases**



Source: National Medical Insurance Company 2009 report.

The data resulted from an evaluation of 98.1% contracted medical institutions and 80% of contracted pharmacies. The main causes for the non-validation of treatment cases are: errors in reports, treated cases without a confirmation of the

<sup>39</sup> The payment for medical care services is done based on services that were actually performed. It is fulfilled after the medical institution’s issued invoices are accepted by the National Medical Insurance Company.

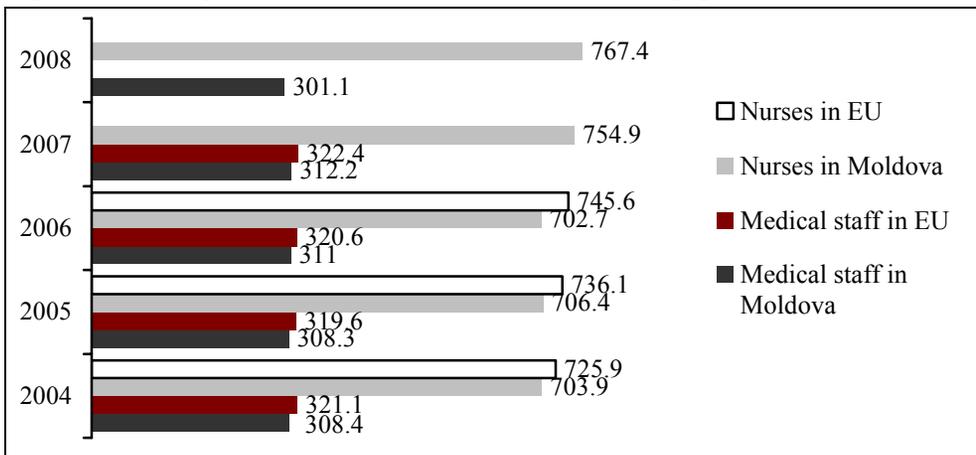
patient’s status, and money used for purposes other than those of the Unified Program of Medical Care.

The quality of the services delivered is verified by the National Medical Insurance Company. The Ministry created a Quality Evaluation Council responsible for assessing the quality of medical services. Medical providers are verified based on approved protocols per different types of medical care.

Medical care service is provided throughout the country. The highest proportion of primary medical care takes place in villages and rayons. At the end of 2009, the system included 49 family doctor centers, 337 medical centers, 575 family doctors’ offices and 364 medical offices. More specialized medical care is concentrated in the cities and in the municipalities. Inpatient services are provided in 73 health care institutions, of which 62 are in the Ministry of Health subordination. The centralized service for emergency medical care has 5 regional stations with 43 substations in rayons and municipalities and 87 stations in rural localities (villages).

A major challenge is employment policy, especially in rural areas. Data shows that the number of physicians in Moldova is equivalent to the level of many European Union countries (Figure 10). The biggest problem here is the dis-unified distribution of employment. It is characterized by diversity in practitioner capacities (an insufficient number of medical staff in rural areas and an excess number in urban areas), staff workload (differences in the quality of medical care), and staff turnover (differences in the development of primary and secondary medical care).

**Figure 10. Staffing in medical care institutions, for 100,000 populations**



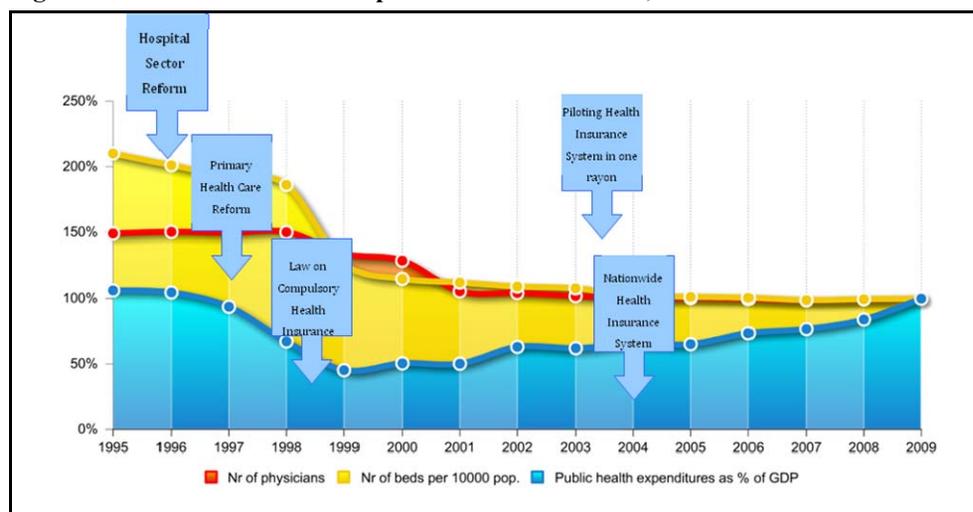
Source: Annual health report for 2009, Ministry of Health.

There is 5.7 medical staff per 10 thousand populations in health institutions in rural areas, which is 5 times less than the country's average. In 2009, family doctors in 200 localities from rural areas have visits 3 times per week only. In 25 vil- lages, the population does not benefit from this type of medical care. These exam- ples explain the insufficient number of family doctors in primary care in compari- son with the exaggerated number of medical staff in hospitals. Both indicators have negatively influenced the performance of medical care in recent years.

## 4.2. Policy reforms in the sector

Policy reforms in the health care sector and, in particular, the implementation of the mandatory Medical Insurance System represents a new experience for Mol- dova. There are many studies prepared by local experts and international organiza- tions on this topic. But unfortunately the materials are not available to all people and are not reflected in mass media. Because of the low level of transparency, the population perception of the reform process is not always positive. It is considered a useless change or an additional burden on the population budget.

**Figure 11. Healthcare reform implementation 1991-2006, with 2009 as a base line**



Source: Impact analysis of the healthcare reforms, Stefan Savin, 2008.

Figure 11 presents the major health reforms which have taken place in Moldova since independence. These include reform of primary care and inpatient care and the implementation of mandatory health insurance. It also represents three key indicators on the impact of the reforms (compared to 2009 as a base line):

- the total expenditures on health as a share of GDP
- the number of hospital beds, and
- the number of physicians (doctors).

The reform concept included reducing the number of hospitals and hospital beds and strengthening the primary healthcare sector. The hospital reform began in 1996, halving the number of beds, reaching the European average (55.4 beds per 10,000 population) by 2007 (Figure 11). However, an immediate increase in the use of remaining beds has not been observed: this indicator got an insignificant increase up to 281 days by 2007. The aim of the reform of the primary health care system (PHS) was to reduce overload of medical institutions at the second and third levels by providing a wider range of quality medical services.

The conceptual plan for the reform for the period of 1997-2003 was prepared in accordance with the objectives of the World Health Organization (WHO). It foresaw full access to quality health services based on primary care. The secondary and tertiary sectors served as support elements of choice.

The main elements of this reform included:

- Development of primary health care and a fundamental reorganization of hospitals (inpatient) and specialized care institutions;
- Redistribution of financial resources to ensure the proper functioning of primary healthcare services;
- Creation of suitable working conditions and financial incentives for employees of PHS based on performance indicators;
- Decentralizing the health system and empowering local authorities with greater decision-making power;
- Developing norms and standards for providing primary health care and determining the methods for interaction with more specialized levels of care, including referral mechanisms;
- Restructuring the hospital (inpatient) system by closing rural hospitals and reducing the number of beds, providing efficient and high quality hospital services by using new treatment standards and modern equipment.

High morbidity and mortality rates call for new approaches to public health issues, involving all social sectors in tackling the root of health problems. Further-

more, there is clear benefit of redirecting the healthcare system towards illness prevention.

The National Development Strategy<sup>40</sup> sets the following three goals:

*Goal 4 – Reduce child mortality:*

- Reduce infant mortality from 18.5 (per 1,000 live births) in 2006 to 16.3 in 2010 and 13.2 in 2015.
- Reduce the under-5 mortality rate from 20.7 (per 1,000 live births) in 2006 to 18.6 in 2010 and 15.3 in 2015.
- Maintain the proportion of children under two years of age vaccinated against measles at least at 96% by 2010 and 2015.

The preliminary results for the set up targets are<sup>41</sup>:

1. The implementation of the new methodology of defining live births has increased the rate of infant mortality for 2008; it reached 12.2 cases for each 1,000 live births, compared to 11.3 cases in 2007. In 2009, the infant mortality rate remained almost unchanged – 12.1 cases per 1,000 live births. At the same time, compared to 2000, when the infant mortality rate was at 21.7 per 1,000 live births, the situation in 2008-2009 has improved considerably. These results place Moldova at the top of the list of countries<sup>42</sup> in reducing the neonatal mortality rate.
2. Mortality rates for children under five continued to decline in 2000-2004, and were generally higher in rural areas than in urban ones. Following a subsequent reduction in 2006, this indicator rose in 2007-2008, reaching 14.4 for each 1,000 children born alive, and remained almost unchanged in 2009 (14.3).
3. Vaccination against measles has not been consistently carried out in Moldova. Starting in 2006-2008, some 12 cases of measles were recorded each year on average. In 2008, the number of registered measles cases fell to zero. This achievement is due to the implementation of the Vaccination Program which has ensured that since 2006, over 95 percent of children up to the age of two receive the initial anti-

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<sup>40</sup> Document can be found on Government of Republic of Moldova site [www.gov.md](http://www.gov.md).

<sup>41</sup> The second Millennium Development Goals Report. Republic of Moldova. September 2010. Available on [www.gov.md](http://www.gov.md).

<sup>42</sup> The situation in the Republic of Moldova has been examined as part of a study analyzing neonatal mortality conducted by the Belagio Working Group concerning the situation in 74 countries as part of the group of countries with low or medium income.

measles vaccination (a combined vaccine against measles, mumps and rubella) and a re-vaccination at the age of seven at a national level.

*Goal 5 – Improve maternal health*

- Reduce the maternal mortality rate from 28.0 (per 100 thousand live births) in 2006 to 15.5 in 2010 and 13.3 in 2015.
- Maintain the number of births assisted by qualified medical staff during 2010 and 2015 at 99%.

The baseline year for establishing targets under these goals is 2006. For the first time in the last five years, maternal mortality rate rose in 2008. Thus, in 2008 the maternal mortality rate rose to 38.4 cases for each 100,000 babies born alive, compared to 15.8 cases for each 100,000 babies born alive in 2007.<sup>43</sup> Although this level of maternal mortality arouses concerns, in absolute terms, the indicator is not very high. Seven cases of maternal mortality were recorded in 2005 as opposed to six such cases in both 2006 and 2007. In 2008, 15 cases of maternal mortality were recorded, including 11 cases in rural areas and four in urban areas. Of these 15, eight women were under primary medical surveillance during their pregnancy, while seven were not, due to their migratory life-style.

The indicator showing the “number of birth deliveries assisted by qualified medical staff” offers not only information regarding the real number of births assisted by qualified medical staff, but also serves as an alternative qualitative indicator which denotes the population’s level of access to health services. In 2008, as in 2007, this indicator was at 99.5 percent, but according to recent data, it reached 99.8 percent in 2009. The fact that such a high rate of births assisted by qualified medical staff has been reached suggests that the targets set for the years 2010 and 2015 will be successfully achieved.

*Goal 6 – Combat HIV/AIDS, tuberculosis and other diseases*

- Stabilize the spread of HIV/AIDS infection by 2015. Reduce HIV/AIDS incidence per 100,000 populations from 10 cases in 2006 to 9.6 by 2010 and to 8 by 2015.
- Reduce HIV/AIDS incidence per 100 thousand populations from 13.3 cases in 2006 down to 11.2 by 2010 and to 11 by 2015 in the 15-24-year age group.

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<sup>43</sup> The second Millennium Development Goals Report. Republic of Moldova. September 2010.

- Begin to reduce tuberculosis and completely eliminate it by 2015. Reduce the rate of mortality associated with tuberculosis from 16.0 (per 100,000 population) in 2002 to 15.0 in 2010 and to 10.0 in 2015.

The incidence of HIV/AIDS is on the rise despite consistent efforts made by the Government and the support of the country's development partners. In the period from 1987 to 2008, 4,996 HIV carriers were officially registered in the country, including 3,461 cases on the western side of the Nistru River and 1,535 cases on the eastern side. According to the relevant UNGASS report, in 2009, 704 new HIV cases were reported, compared with 795 in 2008 and 731 in 2007<sup>44</sup>.

The tuberculosis mortality rate, despite falling in 2008 for the first time in recent years, continues to pose a threat to the population of Moldova, especially in the context of the economic crisis, as the disease mainly affects socially vulnerable groups of people. Mortality from tuberculosis fell in 2008 for the first time in three years. Thus, in 2008 it was 17.4 cases per 100,000 populations, as compared to 20.2 cases in 2007 and 19.3 cases in 2006. But the progress achieved remains quite fragile, as shown by the modest growth in the rate of mortality associated with tuberculosis, which in 2009 reached 18 cases per 100,000 population.

### **4.3. Mandatory health insurance system and its role in the sector funding**

Although the new mechanism of financing the healthcare sector began to be implemented in 2004, the work on preparing this change began much earlier. In 1998, the Moldovan Parliament adopted the Law on Mandatory Medical Insurance (MMI). Because of the deep financial crisis, practical implementation of the law was postponed. Only a few years later, in 2002-2003, did the health insurance reform come back on to the agenda. The system was introduced in 2004 following a six month long pilot project (from July 1 till December 31, 2003) in one rayon. Its results helped to improve the insurance regulatory and legislative requirements. In parallel with the MMI, the legislation allowed for the development of other types of optional medical insurance.

Under the MMI system, each insured person is entitled to receive a set of medical services included in the Unified Program (Basic Benefit Package). Employed

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<sup>44</sup> UNGASS Report, Republic of Moldova Progress Report, January 2008-December 2009, Chisinau 2010.

persons obtain medical insurance through their employers. The Basic Benefit Package is prepared by the Ministry of Health and Social Protection and approved annually by the Government. It includes a list of illnesses, diseases and health conditions to be treated through the MMI.

An insurance contract can be signed with a physical person or/and a legal entity. Providers of medical services under the MMI system are medical institutions that have a contract with the National Medical Insurance Company (NMIC). The NMIC is responsible for contracting and procurement of medical services for insured persons on behalf of the state.

NMIC is a non-profit organization. It has 11 branches throughout the country. One Territorial Agency covers 3 or more rayons. NMIC activities are overseen by the Administrative Council. This body is comprised of the representatives of the Parliament, the President, the Government, the National Confederation of Employers, the National Confederation of Trade Unions, and the Doctors' Union.

All medical services that are included in the MMI policy are considered priority services. The potential patients are considered as insured from risk and can benefit from 7 to 10 days of treatment without additional payment.

The list of services provided under the Unified Program (see Box 1) can be revised and extended each year.

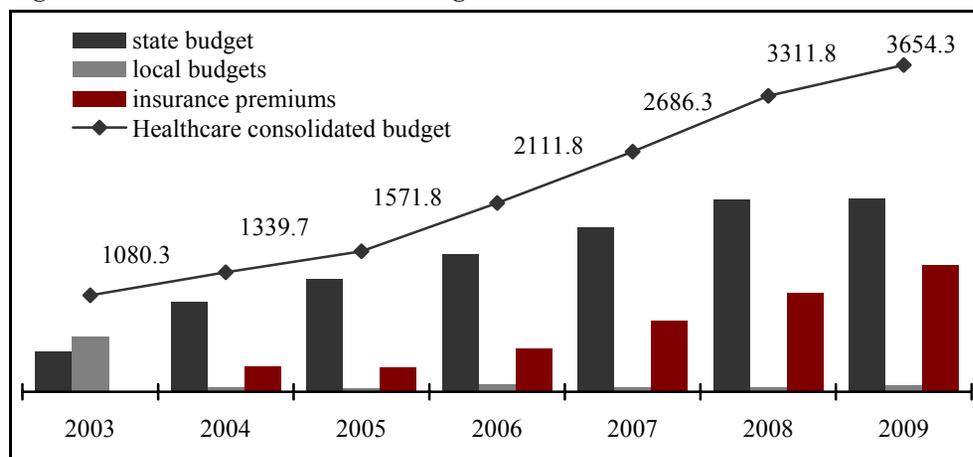
**Box 1. Medical assistance included in the Unified Program**

- *Primary medical assistance* – preventive health care and monitoring and provision of health care to families, registered with family doctors. Medical care includes preventive measures, monitoring and treatment of some illnesses at the level of the primary medical assistance, including prescription of compensated anti-hypertensive medicines, anti-anemic medication for pregnant women and medication for children up to 5 years of age;
- *Outpatient specialized medical assistance* is provided to insured patients by medical specialists (other than family physicians) when a diagnosis or treatment is needed;
- *Expensive laboratory and diagnostic tests* are provided to the insured patients in medical institutions based on a medical referral note from either primary (family) physician or subject specialists;
- *Emergency pre-hospital medical assistance* – extended in cases of life-threatening emergencies caused by acute diseases, accidents, traumas and intoxications, complications during pregnancy and delivery, needing an urgent medical intervention;
- *Inpatient medical assistance (hospitalization)* is provided in cases when patient's condition requires hospital supervision.

#### 4.4. Spending trends and efficiency of spending in healthcare

The healthcare system in Moldova is supported from different sources of financing. The biggest share in total budget (56.12% in 2009) (see Figure 12) belongs to the state budget, followed by premiums for medical insurance (36.97%) and local budgets (1.9% in the total healthcare budget).

**Figure 12. Healthcare consolidated budget**



	2003	2004	2005	2006	2007	2008	2009
State budget	42%	75%	81%	73%	68%	65%	59%
Local budgets	57%	4%	2%	4%	2%	2%	2%
Insurance premiums	1%	21%	17%	23%	30%	34%	39%

Source: Ministry of Health, 2009. Annual report on health.

The role of local budgets (budgets of local public authorities) is very small in medical care service provision. Local authorities are encouraged to participate in financing the National Health Programs (e.g. TB program, blood transfusion program,) within the limits of existing financial resources. In reality the local authority is the co-founder of the medical service provider, created within the responsible territory, and supports mostly the current and partial capital renovation of buildings.

Increasing support for improving the quality of medical care services is coming from the donors' community in Moldova. Official donors' assistance is managed by the Ministry of Healthcare and represents direct financing to the state budget (EU money), investment projects financed via the World Bank project "Healthcare

and social assistance services” (IDA credits, Japan Government grants, etc), and technical assistance for supporting the development of medical care services (UNICEF and other UN agencies, USAID, Swiss Government, etc.). A major role is played by the WHO, which cooperates very fruitfully with the line ministry.

In this context it is necessary to mention that a donors’ coordination committee was created with the secretariat provided by the Ministry of Healthcare. All policy documents are presented and discussed with donors.

The Mandatory Medical Insurance (MMI) implemented in Moldova helped the Government to maintain the level of medical service financing despite the 2009 economic crisis. However, the initial budget approved for medical insurance funds for 2009 was reduced by 17.9% on the revenue side and by 10.7% on the expenditure side. These changes resulted from a revision of the macroeconomic parameters and economic crisis effects, evaluated in the middle of 2009.

In 2009, the Mandatory Medical Insurance Fund (MMIF) registered a deficit in the amount of MDL 192.5 million (equivalent to EUR 12.0 million) for the first time. It was covered by a positive balance registered on January 1<sup>st</sup>, 2009 in the amount of MDL 545.5 million (equivalent of EUR 34.1 million). A positive balance remains to be available for 2010 as well. In the beginning of 2010, it was in the amount of MDL 353.1 million and is considered as a reserve that could minimize the negative impacts of financial and epidemic shocks.

The MMIF is financed from the following sources: insurance premiums paid by employers and employees<sup>45</sup>, sources from the state budget for individuals insured by the government, insurance premiums paid by unemployed individuals, and other sources of income coming from fines, interest on bank deposits, etc (see Table 7).

The biggest portion of resources comes from the state budget as transfers. Note that during the first four years after the introduction of MMI, the share of the state budget in total revenue remained high, amounting to 66.7% in 2004 and 50.6% in 2009 (Table 7) although it demonstrated a continuous slight decrease. The large share of transfers from the state budget can be explained by a large number of persons insured by the government. The Law on MMI foresees the following categories of the population, who are unemployed and living in Moldova, benefiting from free insurance:

- a) pre-school aged children;
- b) pupils in primary schools, gymnasiums, lyceums and general schools;

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<sup>45</sup> Insurance premiums paid by employers (3.5%) and employees (3.5%) are applied to the salary fund (wage bill).

- c) pupils in vocational education;
- d) pupils in collegiums;
- e) students in high education institutions;
- f) children under 18 years not enrolled in an education institution;
- g) pregnant women;
- h) disabled people;
- i) pensioners;
- j) unemployed people, beneficiaries of unemployment benefits;
- k) social care for children with disability (severity level I) or for children who are bedridden and have been disabled since childhood;
- l) mothers with 4 and more children;
- m) beneficiaries of cash benefits.

The list of these persons is regularly updated.

**Table 7. MMIF revenues by source (share in total) for the period 2004-2009**

<b>Type of revenue</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>
State budget transfers	66.7%	65.5%	64.2%	58.7%	54.9%	50.6%
Insurance premiums paid by employed persons and their employers	31.6%	31.8%	32.4%	37.3%	41.7%	46.6%
Insurance premiums paid by self employed or unemployed individuals	1.5%	1.4%	1.2%	1.2%	1.2%	1.3%
Other sources	0.2%	1.3%	2.2%	2.8%	2.2%	1.5%
Total received, million lei	976.9	1,281.7	1,559.0	2,036.4	2,693.6	2,878.9
% increase in comparison with previous year	X	+31.2%	+21.6%	+30.6%	+32.0%	+7.1%

Source: Report on MMIF execution in 2009, Chisinau 2010.

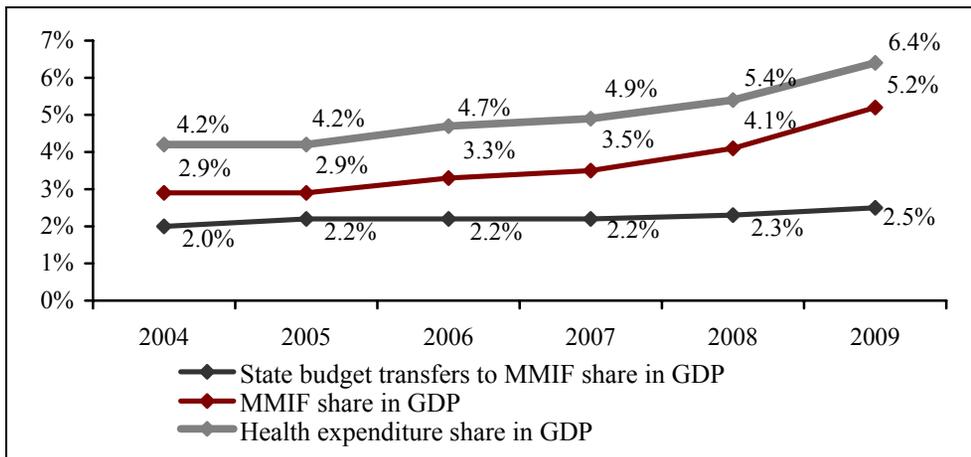
The level of MMIF revenues and expenditures is in direct correlation with the national economy evolution. During the last years of MMI implementation, a positive tendency between expenditures and GDP was registered (Figure 13).

The National Public Budget health expenditure share in GDP is increasing constantly. It increased by 2.2 points over the last 6 years, after the health insurance system was implemented.

Stability in contributions from the state budget is a positive aspect of the MMIF revenues portion. Health expenditures in the state budget during the period 1995-

2003 were unstable and erratic (Figure 13). With the implementation of MMI and appropriate legislation, the Government became obliged to pay for a large group of people, playing the role of the insurer. Thus, the contribution from the state budget for one insured person is equal to the amount of contribution paid for other categories of insured persons in the system. In other words, there is a fund equalizing the amounts transferred to MMI, regardless of the funding source (state budget, employee/employer, individuals).

**Figure 13. Trend of MMIF expenditure and state budget transfers to the funds as a share of GDP**



Source: NMIC Activity report for 2009, Chisinau 2010.

Unemployed people are the least motivated to contribute financially. The price is one of the reasons that prevent individuals from buying insurance directly. According to a study conducted by Transparency International in 2006<sup>46</sup>, about 56.5% of interviewed uninsured persons explained their decision not to buy insurance was because of its high price. In the Household Budget Survey for 2008 conducted by the National Bureau of Statistics, 56.8% of respondents considered insurance too expensive, 22.3% claimed that they did not need insurance, while 20.8% said they did not see the benefit of health insurance.

The coverage of the population by medical insurance remains one of the most sensitive issues. However, the collection of funds necessary for the normal functioning of CMI is stable.

<sup>46</sup> CBS-AXA for Transparency International. 2006. Study on public policy impact perception of the population in Moldova.

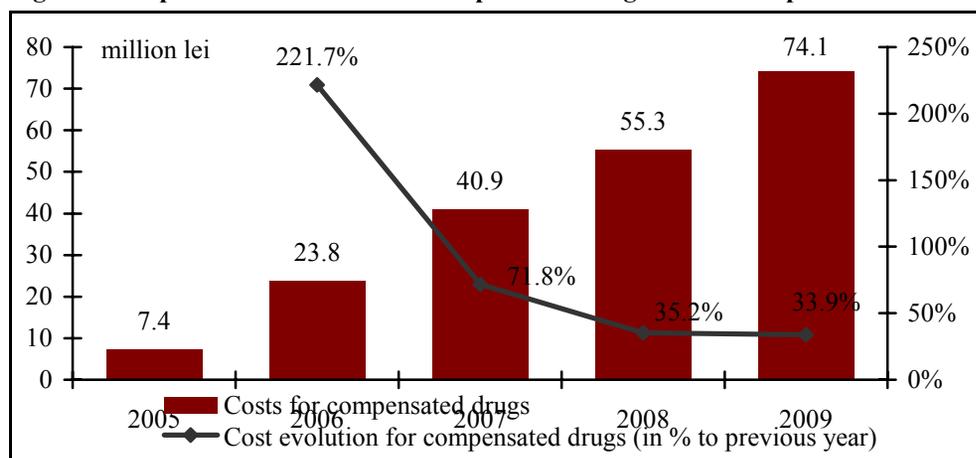
Collected financial resources are accumulated in a single NMIC account in a commercial bank selected on a competitive basis by the State Treasury of the Ministry of Finance. Afterwards money is allocated to the following funds based on legal norms:

- i. current medical care fund (base fund) – 94%
- ii. preventive measures fund – 2%
- iii. reserves fund – 2%, and
- iv. administrative costs – not more than 2%.

The use of money from the base fund is shown in Table 6. The biggest share (49.9%) goes to hospital care (inpatient medical care) and primary medical care (31.2%), including drug compensation costs.

The list of compensated drugs is constantly being revised (Figure 14). This, together with the improvement in drug prescription by family doctors, increased the allocations for compensated drugs tenfold from 2005 to 2009.

**Figure 14. Expenditure evolution for compensated drugs for insured persons**

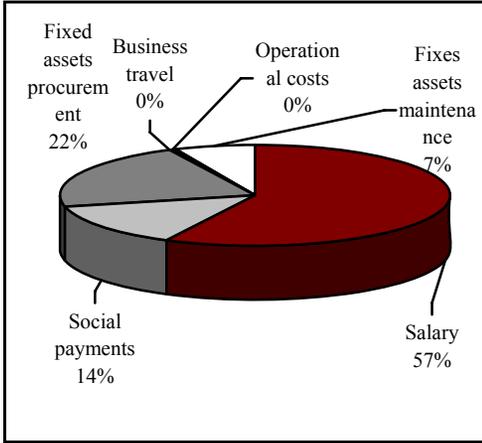


Source: Author's calculation.

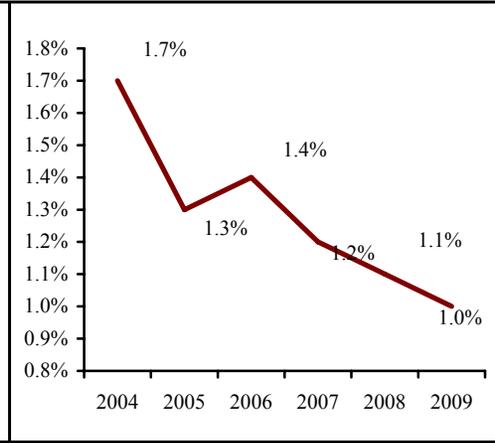
Preventive measure funds are used for promoting healthy lifestyles and in the case of epidemic prevention, the money is used for drugs and medicine products procurement. The reserve funds are spent on covering additional expenses for diseases which have a higher than usual rate of occurrence.

Administration costs include (Figure 15) NMIC and its territorial division personnel costs, operation costs, IT system support costs, staff training costs, staff travel costs.

**Figure 15. Administrative costs structure, 2009 executed budget**



**Figure 16. Administrative costs share in total MMIF revenues**

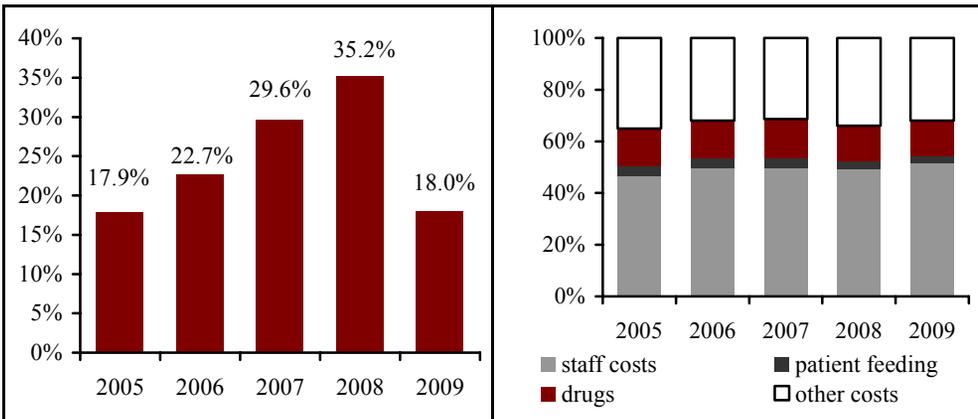


Source: Report on MMIF execution in 2009, Chisinau 2010.

The administrative costs in the total budget have a tendency to decrease constantly (Figure 16). These actions are the results of a state management policy that has request to save more money for service delivery.

The **economic structure** of expenditures from MMIF could be complemented with data from contracted medical institutions. During 2005-2009, actual expenditures increased 2.5 times (Figure 17).

**Figure 17. Structure and evolution of contracted medical institution actual expenditures**



Source: Own calculation.

The staff cost is increasing in comparison with the three other components that declining. This can be explained by a state policy oriented towards salary revision for medical staff, making it more attractive to work in the rural areas.

#### **4.5. Developments during the crisis**

The health sector was influenced by the recent economic crisis. The MMIF budget growth rate in 2009 was lower in comparison with previous years. For example, in 2009, the revenue side increased only by 7.1% as compared to 30% yearly growth in 2005 – 2008. The same is true for the expenditure side where only a 19.4% increase was registered as compared to about 30% yearly growth during the previous period.

The shortfall in revenue collection was covered out of the surplus balance from previous years. The law permits a budget surplus and it is deposited in the bank. Dividends are considered additional revenue for the MMIF.

At the same time, the list of medical care services covered by insurance was extended. This imposed additional burdens on the MMIF budget. A different situation happened with compensated drugs. The Government approved a new methodology on price setting for drugs which will decrease their price and will permit them to increase the list of compensated drugs.

Over the last two years, a decrease in the number of insured persons that need to buy fixed amount insurance was registered: from 35.5 thousand in 2008 to 25.7 thousand in 2009. To improve this indicator, the NMIC is working with local authorities and tax offices to identify the land owners, individual enterprise founders, and patent owners that are obliged by law to buy medical insurance at the fixed price.

Another factor which shows the effects of the crisis is employers' arrears in payments to the CMIF, which increased 2.7 times in comparison with 2008.

#### **4.6. Mid-term outlook for the sector in terms of spending, policies and health status of the population**

Strengthening health systems and protecting public health are priorities for the ongoing health reforms and a subject of the recently developed Government Pro-

gram for the next four years 2011-2014. The alignment to international and European community norms implies the adjustment of the public health system to the International Health Regulations (2005).

The main goals of the Health System Development Strategy (2008-2017), approved by the Government on December 24, 2007 are:

- Continuous enhancement of the population's health;
- Minimizing financial risks associated with health service delivery; and
- Health system responsiveness to the population's requests.

The activities included in the Agreement signed by the Government of Moldova and the European Commission will lead to the implementation of the above-mentioned goals, some of which are:

- **Develop human resources.** Although the education and training of specialists and the presence of modern medical equipment in hospitals and primary medical care institutions has directly contributed to obtaining the desired results such as reducing the infant mortality rate, a lack of qualified staff continues to represent a significant problem for the healthcare system. So while salaries in the healthcare system are continuously rising, the level of remuneration is not sufficient to attract and retain qualified medical staff for the healthcare system in rural areas.
- **Maintain public expenditures in the health sector**, by adjusting them to the inflation rate. The 2010 budget for healthcare was approved at the level of MDL 4,040.9 million, which is a 5% increase compared to the 2009 executed budget (according to the preliminary data, the inflation rate for 2010 in comparison with 2009 was 7.4%).
- **Maintain allocations to primary medical care** at no lower than 30% of the base fund.
- **Increase medical insurance coverage** to more than 80% of the population. The Government will maintain the current arrangements for people who buy the policy during the 3 month-period after the annual law is approved which foresees a reduction in cost by 50% and by 75% for agriculture land owners.
- **Increase the number of primary medical care institutions** covered by direct contracting with the National Medical Insurance Company. In 2010, an additional 20 medical institutions were evaluated in terms of correspondence to financial autonomy criteria in their activities and 19 of them had a direct contract with NMIC.

- **Increase the quality of medical services.** In this regard the ministry is requested to facilitate the process of implementing National Protocols for the most frequently occurring diseases. This work is supported by the international community, and already 66 protocols have been developed and started to be implemented during the medical services evaluation.
- **Rehabilitate medical infrastructure based on newly approved norms (protocols).** The major financing for this work comes from donors. The WB project administrated by the Ministry of Health is supporting these activities.

All the mentioned activities are subject to the Mid-Term Budget Framework for the period 2001-2013. The unapproved draft of the Sector Expenditure Programs (as of August, 2010) for healthcare is presented in the annexes (Annex 4).

## 5. Conclusions

In the Republic of Moldova, while macroeconomic and structural reforms have started to make an impact, significant economic management efforts have to be undertaken in order to make the process sustainable in the future. A more balanced policy approach will be the best response to development challenges.

A new challenge came with the Economic Stabilization and Recovery Programme of the new government (end of 2009) backed by the IMF. According to this program, the country's macroeconomic policies are built around four pillars:

(i) reversing the structural deterioration of fiscal policies in 2008– 2009 over the next three years while safeguarding public investment and social spending priorities;

(ii) maintaining flexible monetary and exchange rate policies to keep inflation under control, facilitate adjustment to shocks, and rebuild foreign reserves;

(iii) ensuring financial stability by strengthening the legal framework for bank resolution and close monitoring of the financial sector, accompanied by swift actions if and when necessary; and

(iv) implementing structural reforms to unlock and increase the economy's potential.

The Memorandum with the IMF unblocked the previously frozen financial assistance to the country from foreign donors to finance budgetary needs. The Moldovan Government presented its vision of transforming the country at the Donor Consultative Group Meeting – Moldova Partnership Forum, held in Brussels on March 24, 2010. The meeting was attended by donor countries and international organizations – European Commission, World Bank, UN, DFID, SIDA and European financial institutions. As a result, the development partners have pledged financial support to Moldova in the amount of approximately USD 2.6 billion for the years 2010-2013, of which 52% are grants.

Moldova has made progress towards strengthening economic integration with the EU as well, including negotiation on a Deep and Comprehensive Free Trade Agreement, the signing of which will facilitate Moldovan exports to the EU.

The authorities aim to continue removing administrative and institutional barriers, de-monopolizing and liberalizing the economy, modernizing the education

system and ensuring its integration into the European area of education and knowledge, developing information and communication technologies and applying these technologies to ensure the efficiency and accountability of the public administration system and public services.

However, the downside risks to the recovery remain. In particular, the budget remains highly unsustainable. Successful macro-economic stabilization is contingent on the implementation of a comprehensive reform agenda aimed at promoting economic diversification and market integration, and improvements to the business environment and public and private governance. During the next couple of years, financial assistance from the international community will be crucial in achieving the turnaround.

Further reforms are necessary to ensure long-term financial sustainability in the energy and municipal sectors and improve the quality of services. Additional improvements of the business environment, including the establishment of an equal level playing field for all market participants and streamlined business regulations, are needed to attract more investment and raise the economy's growth prospects.

Another important problem for the Republic of Moldova is the necessity of re-launching the process of fiscal decentralization and the reformation of local public administration. Presently, the Government and its development partners have focused their attention on stabilizing macroeconomic indicators and improving fiscal performance on the central level. Until now, the local public administration has not been a top priority in the schedule of reforms. In this situation, the Government tends to delegate more responsibilities to local authorities and if case the reform is not implemented with adequate seriousness and care, this area risks becoming a possible danger for macroeconomic stabilization.

## **Education**

The Government has protected the education budget from the impact of the financial crisis, consistently increasing the resources to the sector over the last years. However, this fact has not been reflected in the quality of education. Although the results of internal tests have been encouraging in recent years, the results of international tests (TIMSS and PIRLS) indicate that the country scored among the last in the region. Also, enrolment in compulsory education fell in recent years, and is among the lowest in the region. The causes for the drop in enrolment rates are related to poverty (especially in rural areas), the growth in the

number of children who do not have permanent parental care because their parents are working abroad, the unofficial migration of children whose parents work permanently abroad, as well as the financial difficulties that many families face when the time comes to send their children to school.

About one half of total expenditure for education is allocated for compulsory education and these resources are not used efficiently. The significant decline in student numbers was not accompanied by reductions of teaching and non-teaching staff. The reduction in the number of schools has been minor. There are many classes with only 8-15 pupils. The excess space in most schools has resulted in very low rates of use of school capacities, especially in rural areas where school consolidation is more problematic given the poor transport infrastructure and greater distances. This situation has resulted in a highly inefficient use of funds allocated to education with a high proportion of the budget being used for salaries, although teaching and non-teaching staff are still low-paid professions.

Since independence, a number of reforms have been implemented in the education sector, but one of the basic problems that remains is the inefficient use of public finances. The global economic crisis has provided the opportunity to pause and reflect on the Moldovan education system, on how it is founded and what the priorities should be. The crisis can provide a drive to optimize the efficiency of available resources in order to continue the efforts without any compromises or reductions to quality: money has to be channeled to the most problematic areas.

To address inefficient policy on education spending, the Government has recently initiated the optimization of the school network and a reform in financing general compulsory education in two pilot rayons, which cover 5.2% of the total number of schools. In the medium-term, the Government plans to optimize the entire school network and to use financial resources and existing technical and material assets more efficiently. This will be achieved through the creation of district schools, the development of school transportation, and the decentralization of financial management to the level of education institutions. Also, the Government should make efforts to rehabilitate vocational education and consolidate vocational training institutions.

## **Healthcare**

Some improvements in the list of essential health indicators have been achieved since independence. Among them is life expectancy at birth, maternal

and infant mortality, etc. Yet Moldova still lags behind other neighboring and CIS countries. At the same time, other health indicators have stagnated or gotten worse, like the abortion rate or the rates of socially conditioned diseases.

The analysis of the health reform has led to the following conclusions:

- The MMI system in Moldova is characterized by WHO experts as sustainable in terms of collecting the necessary funds;
- The health insurance scheme implemented in Moldova represents a mixed model based on both social taxes as well as direct contributions from citizens. The principle of universal coverage and, therefore, universal access to a basic MMI package is stipulated in the legislation;
- Contributions to the MMI Fund are stable. A new funding mechanism can improve the situation regarding the quality and accessibility to services only in conjunction with hospital reform and primary medical care. Although attention is given to primary care, there are still many problems related to access to services, human resources, finance, etc.;
- MMI coverage has barely increased somewhat in recent years, but the uninsured rate is still high. Every fourth citizen is not included in the MMI system. Most often the root causes are poverty, indifference and a low level of information. The demographic and socio-economic situation in the country is not favorable for achieving universal coverage by medical insurance. People are reluctant to go to the doctor for prophylactic purposes, and this is even more pronounced in the uninsured population;
- Since the beginning of the implementation of MMI, people's access to emergency services has increased, reducing the gap between the rural and urban populations. In 2009, a 3% increase for insured persons and a 20% increase for uninsured ones was registered in comparison to 2008. This result was partly caused by changes in the legal framework which began in 2010, which allows the uninsured population access to emergency services without any payment conditionality.

The Mandatory Medical Insurance implemented in the Republic of Moldova helped the Government to maintain the level of medical services financing despite the 2009 economic crisis. The crisis' influence on the health sector was minimized by improving the management of collected resources and support from the donors' community, especially in investment projects. Donors supported very costly projects related to the procurement of high performance equipment, capital renovation and staff training.

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# ANNEXES

## Annex 1. Main macroeconomic indicators of the Republic of Moldova

Indicators	Unit	2006	2007	2008	2009	2010 <sup>47</sup>
Nominal GDP	MDL billion	44.8	53.4	62.9	60.0	60.4
Real GDP	%	104.8	103	107.8	93.5	106.5
GDP per capita	USD at PPP	2561	2715	2986	2843	
<i>Consumer price index</i>						
average	%	112.7	112.3	112.7	100.0	108.0
at the end of period	%	114.1	113.1	107.3	100.4	107.2
Exchange rate, year average	MDL/USD	13.13	12.14	10.39	11.11	12.2
Export	USD million	1052	1342	1591	1298	1011
compared to the same period last year	%	96.4	127.6	118.6	81.6	112.9
Import	USD million	2693	3690	4899	3278	2636
compared to the same period last year	%	117.5	137	132.8	66.9	115.5
Trade balance	USD million	-1641	-2348	-3308	-1981	-1625.2
Industrial production, current prices	MDL billion	22.4	26.2	30.0	23.3	18.7
compared to the same period last year in real terms	%	95.2	98.7	101.5	77.8	106.3
Agricultural production, current prices	MDL billion	13.7	12.8	16.5	13.2	11.6
compared to the same period last year in real terms	%	98.9	76.9	132.1	90.1	108.7
Investment in fixed capital	MDL billion	11	15.3	18.1	10.8	6.4
compared to the same period last year in real terms	%	124	121.9	101.7	65.1	115.8
Average monthly wage	MDL	1697	2065	2530	2748	2909
in nominal terms	%	129	122	123	109	108
in real terms	%	114	108	109	109	101
Unemployment rate according to ILO	%	7.4	5.1	4.0	6.4	7.4

Source: National Bureau of Statistics.

<sup>47</sup> Preliminary data for 9 months of 2010

## Annex 2. National Public Budget of the Republic of Moldova

	Executed												2010 approved (including local budgets approved by local public authorities)		
	2006			2007			2008			2009					
	MDL Million	% of GDP	% of the total	MDL Million	% of GDP	% of the total	MDL Million	% of GDP	% of the total	MDL Million	% of GDP	% of the total	MDL Million	% of GDP	% of the total
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
I. Revenues, Global	17847.8	39.88	100.0	22292.0	41.72	100.0	25516.9	40.55	100.0	23517.7	39.17	100.0	25104.3	39.04	100.0
<i>Revenues, total, no grants</i>	<i>17532.3</i>	<i>39.17</i>	<i>98.2</i>	<i>21322.4</i>	<i>39.91</i>	<i>95.7</i>	<i>24448.6</i>	<i>38.86</i>	<i>95.8</i>	<i>22229.7</i>	<i>37.02</i>	<i>94.5</i>	<i>23036.0</i>	<i>35.83</i>	<i>91.8</i>
<i>Revenues, total (no grants, transfers, funds and special proceeds)</i>	<i>16041.1</i>	<i>35.84</i>	<i>89.9</i>	<i>19798.2</i>	<i>37.05</i>	<i>88.8</i>	<i>22604.4</i>	<i>35.92</i>	<i>88.6</i>	<i>20370.8</i>	<i>33.93</i>	<i>86.6</i>	<i>21557.7</i>	<i>33.53</i>	<i>85.9</i>
<i>except Social Insurance Fund (SIF) and Medical Insurance Fund (MIF)</i>		<i>0.00</i>	<i>0.0</i>	<i>14681.8</i>	<i>27.48</i>	<i>65.9</i>	<i>16017.2</i>	<i>25.46</i>	<i>62.8</i>	<i>13399.0</i>	<i>22.32</i>	<i>57.0</i>	<i>14377.4</i>	<i>22.36</i>	<i>57.3</i>
1. Tax revenues	14719.2	32.89	82.5	17939.0	33.58	80.5	20867.4	33.16	81.8	19175.1	31.94	81.5	20286.3	31.55	80.8
<i>1.1. Direct taxes</i>	<i>6624.0</i>	<i>14.80</i>	<i>37.1</i>	<i>8059.8</i>	<i>15.08</i>	<i>36.2</i>	<i>9046.3</i>	<i>14.38</i>	<i>35.5</i>	<i>9132.3</i>	<i>15.21</i>	<i>38.8</i>	<i>9145.5</i>	<i>14.22</i>	<i>36.4</i>
<i>except SIF and MIF</i>	<i>2439.5</i>	<i>5.45</i>	<i>13.7</i>	<i>2943.4</i>	<i>5.51</i>	<i>13.2</i>	<i>2459.1</i>	<i>3.91</i>	<i>9.6</i>	<i>2160.5</i>	<i>3.60</i>	<i>9.2</i>	<i>1965.2</i>	<i>3.06</i>	<i>7.8</i>
- Income tax for entrepreneur activity	1079.1	2.41	6.0	1388.4	2.60	6.2	717.5	1.14	2.8	442.9	0.74	1.9	214.8	0.33	0.9
- Income tax for physical entities	1127.7	2.52	6.3	1328.7	2.49	6.0	1479.6	2.35	5.8	1464.9	2.44	6.2	1486.1	2.31	5.9
- Land tax	191.9	0.43	1.1	174.2	0.33	0.8	197.7	0.31	0.8	183.0	0.30	0.8	195.7	0.30	0.8
- Real estate tax	40.8	0.09	0.2	52.1	0.10	0.2	64.3	0.10	0.3	69.7	0.12	0.3	68.6	0.11	0.3
- SIF contributions	3660.8	8.18	20.5	4332.7	8.11	19.4	5429.9	8.63	21.3	5595.2	9.32	23.8	5731.2	8.91	22.8
- Insurance premiums MIF	523.7	1.17	2.9	783.7	1.47	3.5	1157.3	1.84	4.5	1376.6	2.29	5.9	1449.1	2.25	5.8
<i>1.2. Indirect taxes</i>	<i>8095.2</i>	<i>18.09</i>	<i>45.4</i>	<i>9879.2</i>	<i>18.49</i>	<i>44.3</i>	<i>11821.1</i>	<i>18.79</i>	<i>46.3</i>	<i>10042.8</i>	<i>16.73</i>	<i>42.7</i>	<i>11140.8</i>	<i>17.33</i>	<i>44.4</i>
- Excise tax	1070.9	2.39	6.0	1392.3	2.61	6.2	1573.9	2.50	6.2	1539.6	2.56	6.5	1991.1	3.10	7.9

*THE IMPACT OF THE GLOBAL FINANCIAL CRISIS ON EDUCATION AND ...*

	Executed												2010 approved (including local budgets approved by local public authorities)		
	2006			2007			2008			2009					
	MDL Million	% of GDP	% of the total	MDL Million	% of GDP	% of the total	MDL Million	% of GDP	% of the total	MDL Million	% of GDP	% of the total	MDL Million	% of GDP	% of the total
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
<i>Levied</i>	1150.1	2.57	6.4	1437.3	2.69	6.4	1631.3	2.59	6.4	1600.0	2.66	6.8	2055.4	3.20	8.2
<i>Refunded</i>	-79.2	-0.18	-0.4	-45.0	-0.08	-0.2	-57.4	-0.09	-0.2	-60.4	-0.10	-0.3	-64.3	-0.10	-0.3
<i>- VAT</i>	6193.7	13.84	34.7	7586.9	14.20	34.0	9097.2	14.46	35.7	7595.6	12.65	32.3	8185.7	12.73	32.6
<i>Levied on the territory of the republic</i>	2078.1	4.64	11.6	2593.9	4.85	11.6	3187.6	5.07	12.5	3298.7	5.49	14.0	3615.2	5.62	14.4
<i>Refunded</i>	-1085.2	-2.42	-6.1	-1364.9	-2.55	-6.1	-1362.0	-2.16	-5.3	-1221.5	-2.03	-5.2	-1416.2	-2.20	-5.6
<i>Levied by customs</i>	5200.8	11.62	29.1	6357.9	11.90	28.5	7271.6	11.56	28.5	5518.4	9.19	23.5	5986.7	9.31	23.8
<i>- Taxes on foreign trade</i>	830.6	1.86	4.7	900.0	1.68	4.0	1150.0	1.83	4.5	907.6	1.51	3.9	964.0	1.50	3.8
<b>2. Non-Tax Revenue</b>	1321.9	2.95	7.4	1859.2	3.48	8.3	1737.0	2.76	6.8	1195.7	1.99	5.1	1271.4	1.98	5.1
<b>3. Grants, total</b>	315.5	0.70	1.8	969.6	1.81	4.3	1068.3	1.70	4.2	1288.0	2.15	5.5	2068.3	3.22	8.2
<i>- internal</i>	62.6	0.14	0.4	612.8	1.15	2.7	673.9	1.07	2.6	149.6	0.25	0.64	19.30	0.03	0.08
<i>- Budget support grants</i>	62.6	0.14	0.4	612.8	1.15	2.7	673.9	1.07	2.6	542.5	0.90	2.3	1532.0	2.38	6.1
<i>- Grants for externally-funded projects</i>	252.9	0.57	1.4	356.8	0.67	1.6	394.4	0.63	1.5	595.9	0.99	2.5	517.0	0.80	2.1
<b>4. Special funds revenues</b>	222.5	0.50	1.2	187.3	0.35	0.8	264.9	0.42	1.0	304.6	0.51	1.3	276.7	0.43	1.1
<b>5. Special proceeds</b>	1268.7	2.83	7.1	1336.9	2.50	6.0	1579.3	2.51	6.2	1554.3	2.59	6.6	1201.6	1.87	4.8
<b>II. Expenditures, Global</b>	17973.9	40.2	100.0	22415.6	42.0	100.0	26146.9	41.6	100.0	27354.3	45.56	100.0	29738.4	46.25	100.0
<i>Expenditures, except net lending</i>	18034.6	40.3	100.3	22476.4	42.1	100.3	26123.4	41.5	99.9	27400.7	45.64	100.2	29824.7	46.38	100.3
<i>Expenditures, except state</i>	17545.3	39.2	97.6	21805.8	40.8	97.3	25425.3	40.4	97.2	26520.1	44.17	97.0	28947.1	45.02	97.3

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1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
<i>debt servicing</i>															
<i>Expenditures, except state budget transfers to local budgets</i>	17973.9	40.2	100.0	22415.6	42.0	100.0	26146.9	41.6	100.0	27354.3	45.56	100.0	29738.4	46.25	100.0
1. General state services	1037.8	2.32	5.8	1265.4	2.37	5.6	1418.1	2.25	5.4	1412.6	2.35	5.2	1442.7	2.24	4.9
2. External activity	235.3	0.53	1.3	283.2	0.53	1.3	271.9	0.43	1.0	200.7	0.33	0.7	216.6	0.34	0.7
3. The justice system and constitutional justice	188.7	0.42	1.0	228.2	0.43	1.0	278.0	0.44	1.1	308.8	0.51	1.1	318.9	0.50	1.1
4. Maintaining public order, defense and state security	1206.0	2.69	6.7	1545.0	2.89	6.9	1764.0	2.80	6.7	1771.2	2.95	6.5	1519.1	2.36	5.1
National defense	216.0	0.48	1.2	275.8	0.52	1.2	382.9	0.61	1.5	249.2	0.42	0.9	233.8	0.36	0.8
Maintaining public order and state security	990.0	2.21	5.5	1269.2	2.38	5.7	1381.1	2.19	5.3	1522.0	2.53	5.6	1285.3	2.00	4.3
5. Social expenditures	11360.2	25.38	63.2	14038.7	26.28	62.6	17101.3	27.18	65.4	19190.5	31.96	70.2	21035.8	32.72	70.7
Education	3605.8	8.06	20.1	4248.6	7.95	19.0	5178.3	8.23	19.8	5665.9	9.44	20.7	6428.4	10.00	21.6
Culture, art, sports and youth actions	486.7	1.09	2.7	564.6	1.06	2.5	640.2	1.02	2.4	585.6	0.98	2.1	573.5	0.89	1.9
Healthcare	2111.8	4.72	11.7	2628.6	4.92	11.7	3391.4	5.39	13.0	3846.9	6.41	14.1	4030.9	6.27	13.6
Social assistance and insurance	5155.9	11.52	28.7	6596.9	12.35	29.4	7891.4	12.54	30.2	9092.1	15.14	33.2	10003.0	15.56	33.6
6. Science and Innovation	199.6	0.45	1.1	307.8	0.58	1.4	394.8	0.63	1.5	353.8	0.59	1.3	341.7	0.53	1.1
7. Economic expenditures	2721.1	6.08	15.1	3742.2	7.00	16.7	3490.9	5.55	13.4	2619.4	4.36	9.6	3563.8	5.54	12.0

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	Executed												2010 approved (including local budgets approved by local public authorities)		
	2006			2007			2008			2009					
	MDL Million	% of GDP	% of the total	MDL Million	% of GDP	% of the total	MDL Million	% of GDP	% of the total	MDL Million	% of GDP	% of the total	MDL Million	% of GDP	% of the total
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Agriculture, forestry, pisciculture and water management	681.4	1.52	3.8	1228.3	2.30	5.5	1243.6	1.98	4.8	1034.0	1.72	3.8	786.0	1.22	2.6
Industry and constructions	40.8	0.09	0.2	44.8	0.08	0.2	31.5	0.05	0.1	33.6	0.06	0.1	32.9	0.05	0.1
Transportation, road management, communications and information technologies	507.5	1.13	2.8	1063.2	1.99	4.7	1145.9	1.82	4.4	683.8	1.14	2.5	1398.8	2.18	4.7
<i>Including Road Fund</i>		0.00	0.0	185.4	0.35	0.8	254.0	0.40	1.0		0.00	0.0		0.00	0.0
Utilities and housing	1011.5	2.26	5.6	754.7	1.41	3.4	627.0	1.00	2.4	539.5	0.90	2.0	855.6	1.33	2.9
Fuel and energy sector	383.8	0.86	2.1	460.9	0.86	2.1	259.8	0.41	1.0	189.8	0.32	0.7	153.0	0.24	0.5
Other economic activity related services	96.1	0.21	0.5	190.3	0.36	0.8	183.1	0.29	0.7	138.7	0.23	0.5	337.5	0.52	1.1
8. Environment protection and hydro-meteorology	108.2	0.24	0.6	104.5	0.20	0.5	94.1	0.15	0.4	125.9	0.21	0.5	201.3	0.31	0.7
9. Public debt servicing	428.6	0.96	2.4	609.8	1.14	2.7	721.6	1.15	2.8	834.2	1.39	3.0	791.3	1.23	2.7
-internal	197.5	0.44	1.1	410.2	0.77	1.8	558.3	0.89	2.1	629.9	1.05	2.3	460.5	0.72	1.5
-external	231.1	0.52	1.3	199.6	0.37	0.9	163.3	0.26	0.6	204.3	0.34	0.7	330.8	0.51	1.1
10. Other areas	549.1	1.23	3.1	351.6	0.66	1.6	588.7	0.94	2.3	583.6	0.97	2.1	393.5	0.61	1.3
Supplementing state reserves	83.7	0.19	0.5	55.2	0.10	0.2	189.6	0.30	0.7	178.6	0.30	0.7	53.7	0.08	0.2

	Executed												2010 approved (including local budgets approved by local public authorities)		
	2006			2007			2008			2009					
	MDL Million	% of GDP	% of the total	MDL Million	% of GDP	% of the total	MDL Million	% of GDP	% of the total	MDL Million	% of GDP	% of the total	MDL Million	% of GDP	% of the total
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Expenditures not distributed to main groups of expenditure	465.4	1.04	2.6	296.4	0.55	1.3	399.1	0.63	1.5	405.0	0.67	1.5	339.8	0.53	1.1
11. Net lending	-60.7	-0.14	-0.3	-60.8	-0.11	-0.3	23.5	0.04	0.1	-46.4	-0.08	-0.2	-86.3	-0.13	-0.3
III. Deficit (-), surplus (+)	-126.1	-0.28	-0.7	-123.6	-0.23	-0.6	-630.0	-1.00	-2.4	-3836.6	-6.39	-14.0	-4634.1	-7.21	-15.6
IV. Public deficit financing	126.1	0.28	0.7	123.6	0.23	0.6	630.0	1.00	2.4	3836.6	6.39	14.0	4634.1	7.21	15.6
1. Net internal	65.3	0.15	0.4	-144.9	-0.27	-0.6	-328.4	-0.52	-1.3	1406.5	2.34	5.1	209.4	0.33	0.7
National Bank of Moldova loans	-118.8	-0.27	-0.7	-160.0	-0.30	-0.7	-118.8	-0.19	-0.5		0.00	0.0		0.00	0.0
Other loans	62.1	0.14	0.3	-103.4	-0.19	-0.5	-135.9	-0.22	-0.5	-201.5	-0.34	-0.7	9.4	0.01	0.0
State securities	122.0	0.27	0.7	118.5	0.22	0.5	-73.7	-0.12	-0.3	1608.0	2.68	5.9	200.0	0.31	0.7
2. Net external	-230.4	-0.5	-1.3	131.9	0.2	0.6	34.3	0.1	0.1	2229.7	3.71	8.2	3061.1	4.76	10.3
Disbursements	410.1	0.9	2.3	577.6	1.1	2.6	442.4	0.7	1.7	2792.9	4.65	10.2	3647.5	5.67	12.3
Amortization	-640.5	-1.4	-3.6	-445.7	-0.8	-2.0	-408.1	-0.6	-1.6	-563.2	-0.94	-2.1	-586.4	-0.91	-2.0
3. Funds from selling and privatizing public property	394.4	0.88	2.2	406.3	0.76	1.8	1226.0	1.95	4.7	241.3	0.40	0.9	602.0	0.94	2.0
4. Changes in account balances	-103.2	-0.23	-0.6	-269.7	-0.50	-1.2	-301.9	-0.48	-1.2	-40.9	-0.07	-0.1	761.6	1.18	2.6

Source: Ministry of Finance.

## Annex 3. Education

## Main education indicators

Domain/Indicator	2001	2002	2003	2004	2005	2006	2007	2008	2009
<i>Selected population characteristics ('000)</i>									
Total	3634.5	3627.2	3617.7	3383.3	3599.8	3589.9	3581.1	3572.7	3567.5
Population aged 3-6 years	177.3	167.3	159.1	150.2	135.2	...	148.0	147.3	147.5
Population aged 7-10 years	225.7	213.6	199.3	188.1	177.9	...	170.0	161.4	155.4
Population aged 11-15 years	350.5	334.1	320.5	303.5	293.5	...	281.0	266.1	249.9
<i>Poverty indicators<sup>48</sup></i>									
Absolute poverty line (MDL per adult equivalent per month)	257.3	270.7	303.5	327.0	353.9	747.4	839.3	945.9	...
Absolute poverty rate	54.6	40.4	29.0	26.5	29.1	30.2	25.8	26.4	...
Extreme poverty line (MDL per adult equivalent per month)	201.5	212.0	235.5	258.1	278.5	404.2	453.9	511.5	...
Extreme poverty rate	38.0	26.2	15.0	14.7	16.1	4.5	2.8	3.2	...
International poverty line USD \$2,15 PPP per person/day	183.9	193.7	216.2	239.5	268.0	...	...	...	...
Poverty rate (expenditures per equivalent)	32.3	21.0	11.5	11.4	14.4	27.2	13.2	10.5	...
International poverty line USD 4.3 PPP per person/day	-	-	-	-	-	604.0	678.3	764.1	...
Poverty rate (expenditures per equivalent)	-	-	-	-	-	34.5	29.8	30.4	...
<i>Gross enrolment ratios (%)</i>									
Preschool – overall	47.6	57.0	61.1	66.1	70.7	70.1	72.6	74.4	75.5
Urban	65.6	75.5	80.4	84.8	89.2	87.2	88.8	90.8	91.9
Rural	38.6	47.7	51.3	56.4	61.0	61.0	63.6	65.2	66.1
Primary (grades 1-4) – overall	99.5	99.5	99.8	97.9	96.7	94.4	94.0	93.6	93.3
Urban	101.3	101.7	104	102.8	102.4	100.5	100.9	101.6	102.4

<sup>48</sup> In order to measure poverty, two national poverty lines are defined: extreme and absolute. The extreme poverty line is based on food expenditure (the minimum ratio of calories per day) and the absolute poverty line makes a supplement for the non-food goods and services to the extreme poverty line. Poverty analysis uses data from the Household Budget Survey, which is carried out by the Department of Statistics. The Absolute poverty rate and Extreme poverty rate are calculated as a share of the population living on less than these expenditures.

The Annex also includes the indicators used for international comparison. The World Bank has defined the international poverty line in 1993 Purchasing Power Parity (PPP), which adjusts for differences in the prices of goods and services between countries.

<b>Domain/Indicator</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>
Rural	98.5	98.3	97.7	95.5	93.7	91.4	90.5	89.4	88.9
Lower secondary (grades 5-9) – overall	91.1	92.3	92.2	92.5	93.0	90.5	90.1	89.3	88.9
Urban	95.1	95.9	95.6	96.6	97.7	95.4	95.4	95.1	95.8
Rural	88.5	90	90.1	90.1	90.3	87.9	87.3	86.3	85.3
<b>Net enrolment ratios (%)</b>									
Preschool- overall	42.4	52.4	58.7	63.7	68.6	68.5	71.1	72.7	74.0
Urban	58.6	71.9	77.8	82.0	86.7	85.4	87.4	89.2	90.5
Rural	33.8	44.8	49.0	54.2	59.1	59.4	62.0	63.5	64.5
Primary (grades 1-4) – overall	92.4	92.7	92.4	91.0	87.8	87.6	87.7	87.5	87.6
Urban	94.6	94.8	96.4	95.5	92.1	93.3	94.0	94.9	95.4
Rural	91.3	91.6	90.4	88.7	85.6	84.7	84.5	83.7	83.5
Lower secondary (grades 5-9) – overall	86.8	87.9	87.5	88.5	86.8	86.2	85.6	84.6	84.0
Urban	91.2	91.6	90.8	92.1	90.1	90.4	90.0	89.6	90.2
Rural	84	85.7	85.4	86.3	84.9	83.9	83.3	82.0	80.8
<b>Preschool education</b>									
Number of institutions – overall	1128	1192	1246	1269	1295	1305	1334	1349	1362
Urban	318	313	309	309	309	307	308	315	316
Rural	810	879	937	960	986	998	1026	1034	1046
Children in preschool institutions – overall ('000)	96.5	104.0	106.5	109.7	113.1	116.2	120.1	123.9	125.0
Urban	47.8	49.7	50.1	50.8	52.1	53.9	55.8	57.8	58.8
Rural	48.6	54.4	56.5	58.9	61.0	62.3	64.3	66.1	67.2
Places in preschool institutions – overall ('000)	145.6	150.2	154.0	156.1	159.1	159.6	160.2	161.0	162.9
Urban	64.6	63.7	63.1	63.7	63.5	63.2	63.2	64.0	64.4
Rural	81.0	86.5	90.8	92.4	95.7	96.4	97.0	97.1	98.5
Children per 100 places – overall	66	69	69	70	71	73	75	77	77
Urban	74	78	79	80	82	85	88	90	91
Rural	60	63	62	64	64	65	66	68	68
Number of groups ('000)	4.3	4.6	4.7	4.9	5.0	5.2	5.4	5.5	5.6
Urban	2.1	2.1	2.2	2.2	2.6	2.3	2.4	2.4	2.5
Rural	2.2	2.4	2.6	2.7	2.8	2.9	3.0	3.1	3.2
Children/group ratio – overall	23	23	23	22	23	22	22	22	22
Urban	23	23	23	23	21	23	23	24	23
Rural	22	22	22	22	23	22	21	21	21
Pedagogical staff – overall ('000)	9.0	9.6	9.8	10.0	10.3	10.5	10.9	11.2	11.7
Urban	4.5	4.5	4.4	4.4	4.5	4.5	4.7	4.8	5.0
Rural	4.6	5.1	5.4	5.6	5.8	6.0	6.3	6.4	6.6
Of which educators – overall	6.9	7.3	7.5	7.6	7.8	8.0	8.3	8.6	9.0
Urban	3.6	3.6	3.6	3.6	3.6	3.7	3.8	3.9	4.1
Rural	3.3	3.7	3.9	4.0	4.2	4.3	4.6	4.7	4.9

*PUBLIC EXPENDITURES ON EDUCATION AND HEALTH IN KYRGYZSTAN...*

<b>Domain/Indicator</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>
Children/educator ratio-overall	14.0	14.2	14.2	14.4	14.5	14.5	14.5	14.4	13.9
Urban	13.3	13.8	13.9	14.1	14.5	14.6	14.7	14.8	14.3
Rural	14.8	14.7	14.5	14.7	14.5	14.5	14.0	14.1	13.7
<b>Primary and general secondary education</b>									
Total number of pupils ('000)	618.4	603.4	578.7	546.6	517.0	491.5	461.0	436.1	413.7
Primary (grades1-4)	224.5	212.6	198.9	184.2	171.0	160.5	151.7	145.4	141.4
Urban	80.8	74.6	69.3	64.5	60.8	57.2	54.9	53.7	53.4
Rural	143.7	138.0	129.6	119.7	110.3	103.3	96.9	91.7	87.8
Boys	114.6	109.1	102.1	94.9	88.0	81.5	78.4	75.3	72.7
Girls	109.9	103.5	96.8	89.3	83.0	79.0	73.3	70.1	68.5
Lower secondary (grades 5-9)	319.0	308.0	295.2	280.4	267.5	254.2	239.5	222.9	207.5
Urban	128.1	122.7	116.4	108.1	100.9	94.2	87.3	80.6	75.2
Rural	190.9	185.3	178.8	172.3	166.6	160.0	152.1	142.3	132.3
Boys	161.3	155.7	149.4	143.1	136.2	130.0	122.4	114.1	106.7
Girls	157.7	152.3	145.8	137.3	131.3	124.2	117.1	108.8	100.9
Upper secondary (grades 10-11(12))	71.9	80.0	81.9	79.4	76.0	74.4	67.4	64.0	62.9
Urban	45.2	51.2	52.1	49.8	46.8	46.6	44.0	41.5	39.4
Rural	26.8	28.8	29.8	29.6	29.2	27.8	23.4	22.4	23.4
Boys	31.6	35.2	36.0	34.4	32.7	31.9	28.5	27.2	26.7
Girls	40.3	44.8	45.9	45.0	43.3	42.5	39.0	36.8	36.1
<b>Special schools</b>									
Total number of pupils ('000)	4.9	4.8	4.8	4.9	4.5	4.3	4.0	3.8	3.6
<b>Secondary vocational/professional education</b>									
Number of institutions	82	83	83	81	78	78	75	75	75
Matriculations ('000)	16.7	16.5	16.7	15.6	15.4	15.5	16.2	15.3	13.4
Graduates ('000)	15.4	14.9	15.5	14.7	11.3	14.5	12.9	13.0	12.8
Number of pupils ('000)	23.0	22.6	22.8	22.7	25.0	23.7	24.5	24.3	22.2
in state institutions	22.5	22.1	23.0	22.5	24.9	23.4	24.3	24.1	22.1
In non state institutions	0.5	0.5	0.4	0.2	0.2	0.2	0.2	0.2	0.1
Boys	14.6	14.3	14.2	14.1	15.9	15.3	16.1	16.1	15.2
Girls	8.4	8.4	8.6	8.6	9.1	8.4	8.4	8.2	7.0
Pedagogical staff – overall ('000)	2.3	2.2	2.2	2.3	2.4	2.5	2.4	2.3	2.2
<b>Secondary specialized (colleges)</b>									
Number of institutions	67	63	60	56	51	49	49	47	46
State	44	43	45	43	42	42	43	41	41
non state	23	20	15	13	9	7	6	6	5
Matriculations ('000)	5.5	5.1	10.0	10.6	10.7	9.9	10.1	10.7	9.4
of which on contract basis	2.1	2.0	5.2	5.7	4.9	5.0	4.8	4.4	...
Graduates ('000)	6.6	5.1	4.3	3.5	4.9	3.8	6.4	6.6	7.1
Number of pupils ('000)	17.0	15.2	18.7	23.6	27.1	30.2	31.3	32.7	32.2
in state institutions	14.0	12.5	16.9	21.5	24.7	27.9	28.8	30.1	29.8
In non state institutions	3.0	2.7	1.8	2.2	2.4	22.9	24.1	2.6	2.4

Domain/Indicator	2001	2002	2003	2004	2005	2006	2007	2008	2009
Boys	7.2	6.5	8.2	10.5	12.0	13.2	13.7	14.4	...
Girls	9.8	8.7	10.5	13.1	15.0	17.0	17.6	18.3	...
Pedagogical staff – overall ('000)	2.0	1.7	1.8	1.9	2.0	2.0	2.0	2.4	2.5
<b>Higher education</b>									
Number of institutions	47	45	40	35	35	31	31	31	33
State	16	17	17	18	18	17	17	17	19
non state	31	28	23	17	17	14	14	14	14
Matriculations ('000)	24.7	28.1	30.2	31.9	34.6	25.9	23.8	23.9	21.2
of which on contract basis	19.6	22.3	24.2	25.3	22.4	18.1	15.6	13.9	10.5
Graduates ('000)	11.3	12.5	14.5	15.3	15.3	17.4	17.0	20.0	29.6
Number of students ('000)	86.4	95.0	104.0	114.6	126.1	128.0	123.0	114.9	109.9
in state institutions	63.5	71.2	80.9	93.6	104.4	106.7	102.0	93.1	90.3
In non state institutions	22.9	23.8	23.1	21.0	21.7	22.7	21.0	21.8	19.6
Boys	36.9	41.2	44.0	46.3	53.1	53.8	50.6	48.5	...
Girls	49.5	53.9	60.0	68.2	73.0	74.2	72.4	66.4	...
Pedagogical staff – overall ('000)	5.3	5.5	5.7	5.9	5.8	5.7	5.6	5.4	5.5

Source: Ministry of Education (2010), Draft Education Strategy for 2010-2015.

#### Education normative per capita (state budget allocation)<sup>49</sup>, MDL

	Pre-school institutions			Primary schools, gymnasiums and lyceums			Special institutions		
	All rayons	Chisinau	Bălți	All rayons	Chisinau	Bălți	All rayons	Chisinau	Bălți
2008	4528	5507	5297	3483	3814	3483	21694	21694	21694
2009	4840	6631	5082	3755	3755	3755	23876	23876	23876
2010	8022	9619	8736	5247	5839	5247	32422	32422	32422
2011	8799	9846	8799	6037	6459	6037	36006	36006	36006

Source: Ministry of Finance.

<sup>49</sup> The normative includes expenditures for the organization of the educational process (salaries of teachers, maintenance of schools, heating costs, cleaning, management, etc), but does not include costs for meals, exams, textbooks, capital investments. The rises in normative per capita covers mainly wage increases.

**Total expenditure on education (by main programmes)<sup>50</sup>, thousands MDL**

	2005	2006	2007	2008	2009	2010, ap- proved	Forecast		
							2011	2012	2013
Preschool education	422703	526803	735871	942982	1119353	1289187	1391325	1450404	1486596
Secondary education	1376702	1937444	2275253	2759577	2956309	3545958	3806790	3986608	4102949
Secondary specialized education	135765	188863	208554	218382	284647	307127	364351	366959	366959
Higher education	494621	594692	646347	642448	781333	848738	976313	1005908	985108
Post graduation education	42347	56854	63463	63656	73525	78338	89591	85770	85770
Professional education	11467	10069	11228	13800	15158	16551	19644	18830	18830
Extra-curricular education	192023	260380	301423	255578	404160	501114	556019	585831	596769
<b>Total for sector</b>	<b>2697013</b>	<b>3605799</b>	<b>4269396</b>	<b>5178300</b>	<b>5665946</b>	<b>6618730</b>	<b>7237678</b>	<b>7539201</b>	<b>7682745</b>

Source: Ministry of Finance.

**Total base expenditure on education (by economic classification)**

	Thousand MDL				Structure, %			
	2008	2009		2010	2008	2009		2010
	Executed	Approved	Executed	Approved	Executed	Approved	Executed	Approved
<b>Total base expenditure</b>	<b>4540505.4</b>	<b>5322935.3</b>	<b>5121922.6</b>	<b>5795646.6</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Expenditures for salaries and those related	2533220.8	3418425.7	3373294.2	3942147.5	55.8	64.2	65.9	68.0
Salaries	2016866.3	2729513.3	2694450.0	3153948.6	44.4	51.3	52.6	54.4
Social contributions	459269.4	597779.4	589485.8	684028.0	10.1	11.2	11.5	11.8
Health insurance	57085.1	91133.0	89358.5	104170.9	1.3	1.7	1.7	1.8
Goods and services	1152310.8	1199020.8	1085375.5	1307762.0	25.4	22.5	21.2	22.6
Electricity	93869.0	113303.0	107878.2	112488.1	2.1	2.1	2.1	1.9
Gas	93993.3	128568.5	119116.3	151383.8	2.1	2.4	2.3	2.6
Stationary	80760.8	68256.1	58392.2	66610.3	1.8	1.3	1.1	1.1
Heating	139542.3	155959.7	146801.9	105633.1	3.1	2.9	2.9	1.8

<sup>50</sup> Total expenditure consists of 4 components: base expenditure, special means, special funds and investments projects.

	Thousand MDL				Structure, %			
	2008	2009		2010	2008	2009		2010
	Executed	Appro- ved	Executed	Appro- ved	Exe- cuted	Ap- pro- ved	Exe- cuted	Ap- pro- ved
Feeding	308643.3	333495.8	301887.2	421392.1	6.8	6.3	5.9	7.3
Fuel	85166.1	84463.0	80256.3	71146.7	1.9	1.6	1.6	1.2
Building cur- rent repair	78198.3	60070.2	52487.9	82269.5	1.7	1.1	1.0	1.4
Capital invest- ments	315034.3	184941.1	175061.8	58050.3	1.6	3.5	3.4	1.0
Fix assets pro- curement	73586.7	34937.9	22834.0	36705.0	1.6	0.7	0.4	0.6
Capital repairs	68582.2	224344.3	207376.3	192254.6	1.5	4.2	4.0	3.3

Source: Ministry of Finance.

## Annex 4. Healthcare

## Key healthcare indicators 2004-2009

Description	2004	2005	2006	2007	2008	2009	(+) to 2008, %
Number of insured persons	2263489	2411176	2498085	2634417	2568734	2448072	-4.7
In % of total population	62.7%	67.0%	69.6%	73.6%	71.9%	68.6%	-4.6%
Medical funds budget revenues, MDL million	976.9	1281.7	1559.0	2036.4	2688.7	2878.9	+7.1
Share of transfers from the state budget to medical funds budget, %	66.7	65.5	64.2	58.7	54.9	50.6	-7.8
Medical funds expenditures, MDL million	937.5	1108.0	1485.4	1894.6	2572.0	3071.4	+19.4
Share of Medical funds expenditures in GDP, %	2.9	2.9	3.3	3.5	4.1	5.2	+26.8
Insurance premium level, % from calculated salary/wage	4	4	4	5	6	7	+16.7
Insurance premium level in fixed amount, MDL	441.23	664.8	816.0	1209.0	1893.6	2637.6	+39.3
Number of medical institutions contracted by territorial divisions	98	200	239	251	307	320	+3.9
Number of medical institutions contracted directly by NMIC	21	21	24	29	72	73	+1.4
Number of compensated medical prescriptions	-	n/a	732778	1644088	1975526	2180557	+10.4
Expenses for compensated drugs, MDL million	-	7.4	23.8	40.9	55.3	74.1	+34.0

Description	2004	2005	2006	2007	2008	2009	(+-) to 2008, %
Average salary in health care institutions, MDL	730	832	1081	1387	1871	2269	+21.3
Average national salary, MDL	1103.1	1318.7	1697.1	2065.0	2529.7	2747.6	+8.6
Average exchange rate USD/MDL	12.3283	12.6003	13.1319	12.1362	10.3895	11.1134	+7.0

Source: Report on MMIF execution in 2009, Chisinau 2010. [www.cnam.md](http://www.cnam.md).

### Sector Expenditure Programs for healthcare in Medium-term Budgetary Framework for 2011-2013

Program/ subprograms	Total expenditures, MDL million		Forecast, MDL million		
	2009 actual	2010 approved	2011	2012	2013
Subprogram I. <i>Policy development and management in healthcare system</i>	41.7	46.7	51.7	55.3	57.5
Subprogram II. <i>Prioritized interventions in public health</i>	334.0	339.5	374.	365.6	336.3
Subprogram III. Individual health services	3,093.7	3,386.4	3,649.0	3,852.4	4,043.6
Subprogram IV. <i>Resource development in health system</i>	270.7	209.9	187.0	219.0	261.4
Subprogram V. <i>Special health programs</i>	106.7	58.5	64.9	64.9	64.9
<b>Total per sector</b>	<b>3,846.8</b>	<b>4,041.0</b>	<b>4,326.5</b>	<b>4,557.2</b>	<b>4,763.7</b>
<i>Financed from:</i>					
<b>State budget total, of which:</b>	<b>2,159.0</b>	<b>2,486.4</b>	<b>2,532.7</b>	<b>2,619.0</b>	<b>2,596.5</b>
main budget, including:	1,911.8	2,252.9	2,290.0	2,359.9	2,386.2
<i>Transfers from the state budget</i>	1,456.6	1,926.4	1,940.6	2,006.3	2,024.6
special funds and resources	104.0	86.2	79.9	79.9	79.9
Investment projects financed from external resources	143.2	147.3	162.7	179.2	130.4
<b>Administrative territorial units budgets (local budgets)</b>	<b>73.0</b>	<b>97.5</b>	<b>46.6</b>	<b>46.9</b>	<b>96.9</b>
<b>Mandatory Medical Insurance Funds (MMIF)</b>	<b>3,071.4</b>	<b>3,383.5</b>	<b>3,687.8</b>	<b>3,897.6</b>	<b>4,095.0</b>
<b>Total per sector</b>	<b>3,846.8</b>	<b>4,041.0</b>	<b>4,326.5</b>	<b>4,557.2</b>	<b>4,763.7</b>

Source: Ministry of Healthcare draft MTBF 2011-2013, August, 2010.