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Republic of Moldova: Recent Economic Developments

This Recent Economic Developments report on the Republic of Moldova was prepared by a staff team of the International Monetary Fund as background documentation for the periodic consultation with this member country. As such, the views expressed in this document are those of the staff team and do not necessarily reflect the views of the Government of the Republic of Moldova or the Executive Board of the IMF.

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INTERNATIONAL MONETARY FUND

REPUBLIC OF MOLDOVA

Recent Economic Developments

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Approved by the European II Department

March 16, 1998

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Moldova: Basic Data 1/

Social and demographic indicators (1996)		
Area (including Transnistria)	33,800	sq. km.
Population	3.6	million
Share of urban population	46	percent
Rate of population growth	-0.3	percent
Life expectancy at birth (1995)	65.8	years
Infant mortality rate (per 1,000 live births)	20.2	
Hospital beds (per 10,000 people)	121.4	

	1993	1994	1995	1996	1997 Prelim.
	(Millions of Mdl unless otherwise indicated)				
GDP 2/					
Nominal GDP	2,137	5,505	7,545	8,828	10,118
GDP per capita (in US$)	415	377	467	533	607
Real GDP (percentage change)	-1.2	-31.2	-1.4	-7.8	1.3
Sectoral distribution of GDP 3/					
(in percent of total)					
Agriculture and fishing	32	29	33	31	30
Manufacturing, energy, and processing	39	33	28	28	29
Construction, services and other	29	38	39	41	41
Trade					
Exports of goods (US$ millions)	451	618	739	822	823
(in percent of GDP)	30.2	45.9	44.0	42.4	37.4
Imports of goods (US$ millions)	631	672	794	1,056	1,142
(in percent of GDP)	42.2	50.0	47.2	54.5	51.9
General Government 4/					
Total revenue	488	1,847	2,556	2,835	3,473
(in percent of GDP)	22.8	33.5	33.9	32.1	34.3
Total expenditure and net lending	651	2,347	2,993	3,418	4,165
(in percent of GDP)	30.5	42.6	39.7	38.7	41.2
Overall balance (cash)	-163	-501	-437	-583	-691
(in percent of GDP)	-7.6	-9.1	-5.8	-6.6	-6.8
Money and Credit (end of period)					
Net foreign assets 5/	40	192	239	271	466
Domestic credit	507	973	1,523	1,804	2,305
Claims on general government (net)	173	304	489	469	800
Broad money (M3)	349	753	1,244	1,434	1,922
Other selected indicators					
Consumer prices (percentage change)					
Annual average	788.5	329.6	30.2	23.5	11.8
End-period	837.0	116.1	23.8	15.1	11.1
Average nominal wage (percentage change)	791.4	244.2	30.8	33.6	13.2
Exchange rate (Mdl/US$)					
Annual average	1.43	4.06	4.49	4.60	4.63
End-period	3.64	4.27	4.50	4.65	4.66

Sources: Moldovan authorities; and Fund staff estimates.

1/ Data exclude Transnistria.
2/ GDP data include a staff-estimated allowance for the shadow economy.
3/ Based on share of value added at current prices.
4/ On a cash basis; includes the Social Fund and extrabudgetary funds.
5/ At actual exchange rates.

I. Introduction and Background

1. *Moldova is a small landlocked country in the northeastern Balkans, bordering Ukraine in the north, east, and south and Romania in the west. A moderate continental climate with mild winters and rich, fertile soils have favored agricultural production and processing, which currently account for about 50 percent of GDP. Following the collapse of the Soviet Union and Moldova's independence in 1991, output dropped sharply and inflation soared, but substantial progress has since been made in financial and macroeconomic stabilization. At present, efforts are focused on maintaining this progress while implementing structural measures and institutional reforms needed to lay the foundation for recovery and sustainable economic growth.*

2. Moldova was affected by a sharp deterioration in its terms of trade, the loss of traditional markets, and disruptions in payments and trade relations after the break-up of the Soviet Union. The adverse effects on output were compounded by droughts in 1992 and 1994 and an internal conflict in 1992 over the independence of the Transnistria region (the area of Moldova to the east of the Dniestr river). As a result, real GDP declined by more than 50 percent between 1991 and 1994. At the same time, annual inflation soared, peaking at almost 2200 percent in 1992, following the liberalization of prices and the monetization of a fiscal deficit of 26 percent of GDP.

3. In 1993, the authorities adopted a comprehensive program of **financial stabilization** supported by a stand-by arrangement with the Fund. By 1995, the fiscal deficit had been cut to 5¾ percent of GDP and annual inflation had fallen to 24 percent. Exports and imports recovered rapidly, with the current account deficit narrowing to 8½ percent of GDP. In 1996 the authorities adopted a three-year program supported by resources under the extended fund facility to accelerate and deepen structural reforms and consolidate the stabilization effort.

4. Progress has been made in **structural reform**, notably in the liberalization of prices, finance, and trade and the privatization of significant state assets. However, only limited success has been achieved so far in enforcing hard-budget constraints and in restructuring the industrial and agricultural sectors. Hard-budget constraints have also not been enforced in the public sector, which has accumulated large debts to energy enterprises and pensioners. Barter is prevalent throughout the economy.

5. **Performance in 1996 and 1997 has been mixed**. While annual inflation has been further reduced to 15 percent at end-1996 and 11 percent at end-1997, the cash fiscal deficit rose in 1996 to nearly 7 percent, where it has remained in 1997. Reflecting this, the external current account deficit has widened to 13 percent of GDP. The pace of implementation of structural reforms has been halting, and strong economic growth has not yet emerged, although a modest increase in output was recorded in 1997, for the first time since independence.

II. RECENT MACROECONOMIC DEVELOPMENTS

A. Real Sector Developments

Output and demand

6. **Real GDP**[1] continued to decline in 1996 but recovered slightly in 1997, for the first time since independence. GDP fell by 8 percent in 1996, bringing the cumulative decline since 1993 to about two-fifths. The sharpest declines were recorded in 1994 and 1996, both years of bad harvests. Preliminary estimates for 1997 are that GDP showed modest growth of 1¼ percent (Tables 1 and 20), reflecting a recovery in agriculture which more than offset a continued fall in industrial production (Figure 1).

Table 1. Gross Domestic Product 1/

	1993	1994	1995	1996	1997 2/
Real GDP (percent change)	-1.2	-31.2	-1.4	-7.8	1.3
Nominal GDP (Mdl millions)	2137	5505	7545	8828	10118

Sources: Information provided by the Moldovan authorities; and Fund staff estimates.

1/ Excludes Transnistria; includes staff adjustment for shadow economy.
2/ Preliminary.

7. Although estimates of **real GDP on an expenditure basis** are rough, they indicate that private consumption and fixed capital formation grew in real terms in 1996, but public consumption and stock building made negative contributions to GDP growth (Table 21). There was also a very sharp deterioration in the real trade balance for goods and nonfactor services. For 1997, preliminary figures suggest continued growth in real private consumption, but a real decline in public consumption and fixed capital formation, and a small negative contribution of the external balance.

8. On the supply side, the volume of **agricultural output** declined by nearly 12 percent in 1996, reflecting the cold winter and drought during much of the growing season (Tables 2 and 22 to 24). In 1997 there was significant recovery, with a rise in overall agricultural production of nearly 11 percent, though there was some storm damage to crops during the summer. The volume of grain produced, especially of wheat, rose by nearly three-quarters. Tobacco production also recovered from low 1996 levels, but production of sunflower seeds declined, and grape production was less than half the previous year. Animal husbandry output, including meat and milk, also declined slightly.

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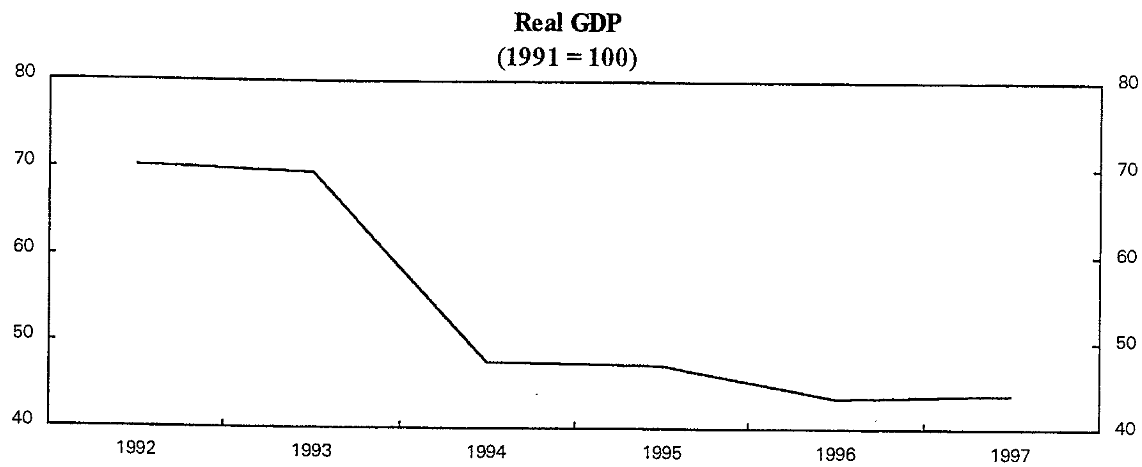
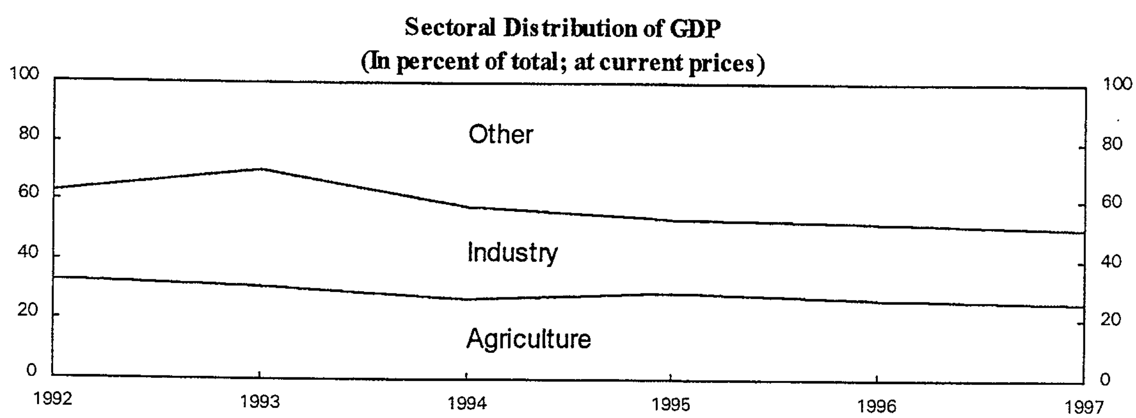
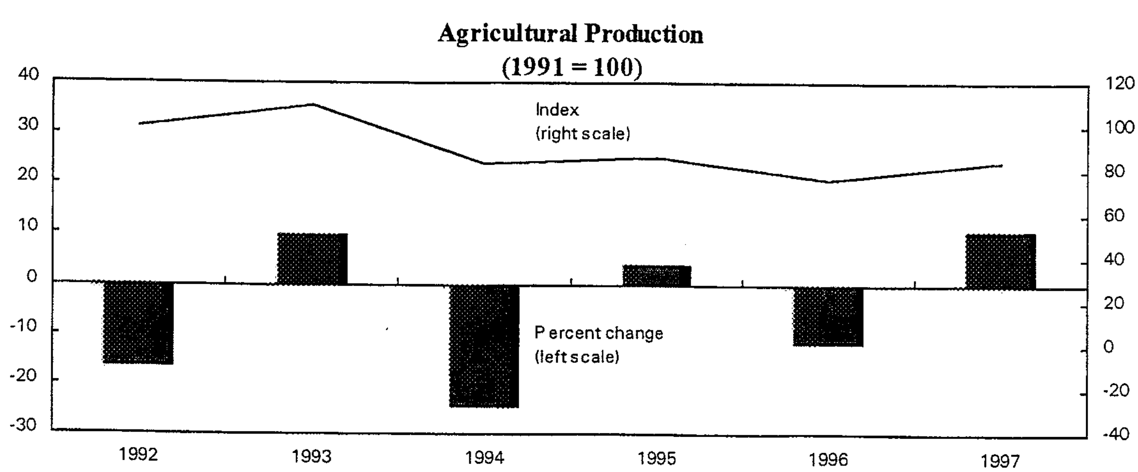
[1] Although national accounts data are compiled according to the *1993 SNA* methodology, the coverage of the reporting system remains narrow and a sampling system is not yet in place. The GDP used in this report is GDP by expenditure, excluding Transnistria, but with an additional adjustment for the shadow economy, as discussed in Annex I.

Figure 1. Moldova: Output Indicators







Sources: Moldova Department of Statistics; and Fund staff estimates.

Table 2. Agricultural and Industrial Production

(Percentage change at constant prices)

	1993	1994	1995	1996	1997 Prel.
Agricultural production	9.9	-24.3	3.7	-11.9	10.7
Industrial production	0.3	-27.7	-3.9	-6.5	-7.0

Sources: Information provided by the Moldovan authorities; and Fund staff estimates.

9. Since the collapse of the Soviet Union, agricultural performance has been adversely affected by a large rise in the price of fertilizers and insecticides, with a consequent sharp decline in the amount used.[2] Privatization and the breakup of former state farms have also disrupted production, as time has been needed for newly independent farmers to band with others to form new farm management structures and economically sized farms. On the other hand, agricultural restructuring holds promise for the future, as productivity is generally higher. Although only about 30 large farms had been fully restructured into private operations as of early 1998, the pace of privatization is increasing, and the government's intention is to privatize up to 550 farms by the end of 1999.[3]

10. The volume of **industrial production** declined for the third consecutive year in 1996, with the largest decline in the machinery and metalworking sector (Table 25). The poor 1996 agricultural harvest also contributed to a fall of 9 percent in the output of the agroprocessing industry, which is a major component of the industrial sector. For 1997, preliminary results suggest that industrial production fell by 7 percent. A sectoral breakdown of industry for 1997 is not yet available.

Labor market developments

11. Of a population of 3.6 million in 1996,[4] the **civilian labor force** was about 1.7 million. Civilian employment averaged 1.66 million, while registered unemployment averaged about 24 thousand, of whom only about 7 thousand received unemployment benefit (Table 26).[5] At the end of 1996, however, nearly 200 thousand persons were on unpaid leave and a further

[2]For example, the average amount of fertilizer used, which was 5.6 tonnes per hectare in 1990, had declined to 0.6 tonnes in 1996.

[3]There are about 1000 large farms (of between 700 and 4,000 hectares) in Moldova.

[4]Annual average, excluding Transnistria.

[5]Because unemployment benefit is generally low, many unemployed persons do not register.

36 thousand were employed part-time. Agricultural employment declined by about 60 thousand, but still accounted for more than two-fifths of total employment.[6] The share of industrial employment remained at about 12 percent in 1996. Since the early 1990s, however, it has declined from about a fifth of the total, reflecting the ongoing process of restructuring in the economy, while employment in the services sector has more than doubled.

12. While the figures for total employment have declined only slightly in the last few years despite the continued decline in output, and registered unemployment remains very low, these developments give only a partial picture of conditions in the labor market. First, as indicated above, many enterprises have partly adjusted to declines in output by placing workers on **partially paid or unpaid leave**, or **part-time** employment status, rather than pay severance benefits averaging three months' salary. Moreover, social benefits provided by the employer, in contrast to low unemployment benefits, provide an incentive for underemployed workers to remain formally employed, even if they are actively seeking new employment. This is reflected in relatively **high labor mobility**, despite low recorded unemployment (Table 3).

Table 3. Labor Mobility

	Dismissals (In thousands)	Placed in New Jobs	
		(In thousands)	(Percent of labor force 1/)
1993	191	175	10
1994	189	145	9
1995	196	145	9
1996	219	151	9

Source: Department of statistics.

1/ Formal sector labor force, excluding Transnistria.

13. Following declines in 1992-94, **real wages** rose by 1½ percent in 1995. In 1996, average real wages in the formal sector rose by a further 6 percent, with the largest gains recorded in industry, and financial mediation (which, at Mdl 687 is the most highly paid sector) (Table 27). Preliminary data suggest that in 1997, the average nominal wage rose by 17½ percent to Mdl 220, corresponding to a real wage increase of about 5 percent. However, at this level average wages in U.S. dollars remain very low (US$47). The monthly minimum wage has been Mdl 18 since June 1994. No information is available about wages in the shadow economy.

[6] This should be taken as a rough guide, because of a change in the classification of employment during 1996, and since recording of employment in the private agricultural sector is likely incomplete.

Prices

14. **Annual consumer price inflation** has continued to decline over the past two years, from 24 percent at end-1995 to 15 percent at end-1996 and 11 percent at end-1997. Relative price developments showed a continuation of the trend for services prices to rise faster than goods prices, in large part owing to sizable increases in administered prices for public utilities, especially energy in 1996 and 1997 (Figure 2 and Table 28).

B. Fiscal Sector Developments

Background

15. Following Moldova's independence in 1991, the fiscal situation deteriorated markedly as rising expenditures and lagging revenues pushed the consolidated government cash deficit to over 25 percent of GDP in 1992. **From 1993, however, public finances improved rapidly** as a result of expenditure cuts, especially in lending to state enterprises, improved revenues, and the deficit fell to 5¾ percent of GDP by 1995 and improving procedures (Box 1). Part of the adjustment in cash expenditure, however, reflected **nonpayment of expenditure obligations**, leading to increases in expenditure arrears averaging 1½-2 percent of GDP a year during the period 1993-95. The commitment deficit (defined as the cash deficit plus the increase in expenditure arrears) declined to 7¾ percent of GDP in 1995 (Table 29).

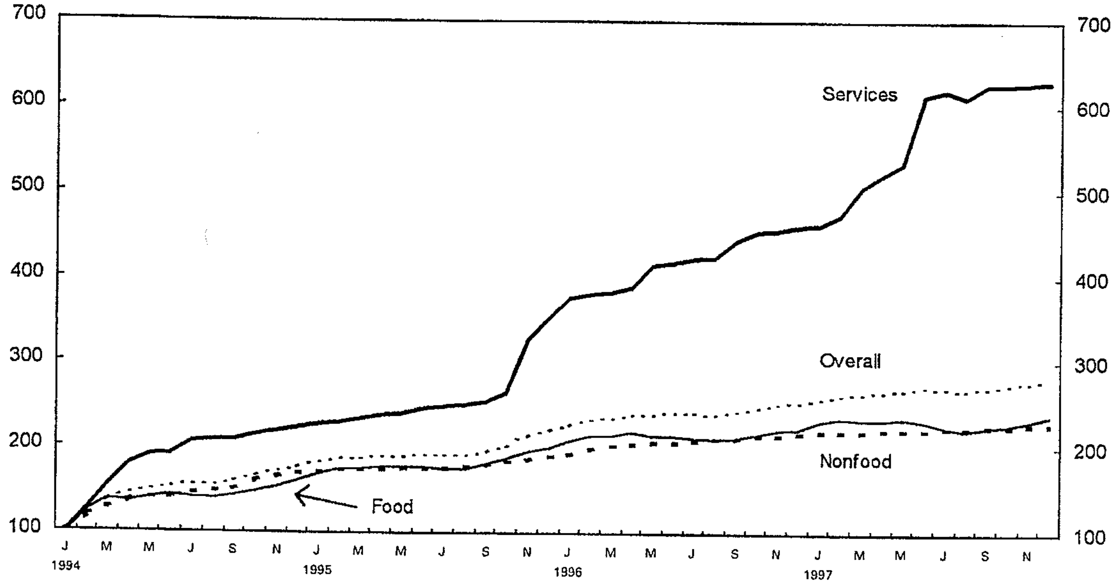
Box 1. Budgetary Procedures

Progress has recently been achieved in improving **budgetary procedures** in several areas. The **treasury system** is near completion and is expected to significantly improve expenditure management and fiscal reporting. The first regional treasury office in Chişinaŭ became operational in January 1998 and the system is expected to expand to cover all state budget operations through ten regional treasuries by April 1998. The new treasury system should greatly strengthen monitoring by the ministry of finance, given that some institutions' financial reports currently lack the necessary detail to adequately assess expenditure commitments, as well as the scope and efficacy of their operations. Fiscal reports are also constrained by the widespread use of **in-kind and netting operations** in budgetary accounts, but progress is expected in this area following a ministry of finance decision to cease these operations, at least as regards the consolidated state and local budgets, starting in 1998. The **chamber of accounts**, an agency which reports to parliament, is responsible for auditing the financial reports of central government institutions, including the social fund, though not so far of local authorities. Auditing procedures are being improved in line with the introduction of the new accounting systems.

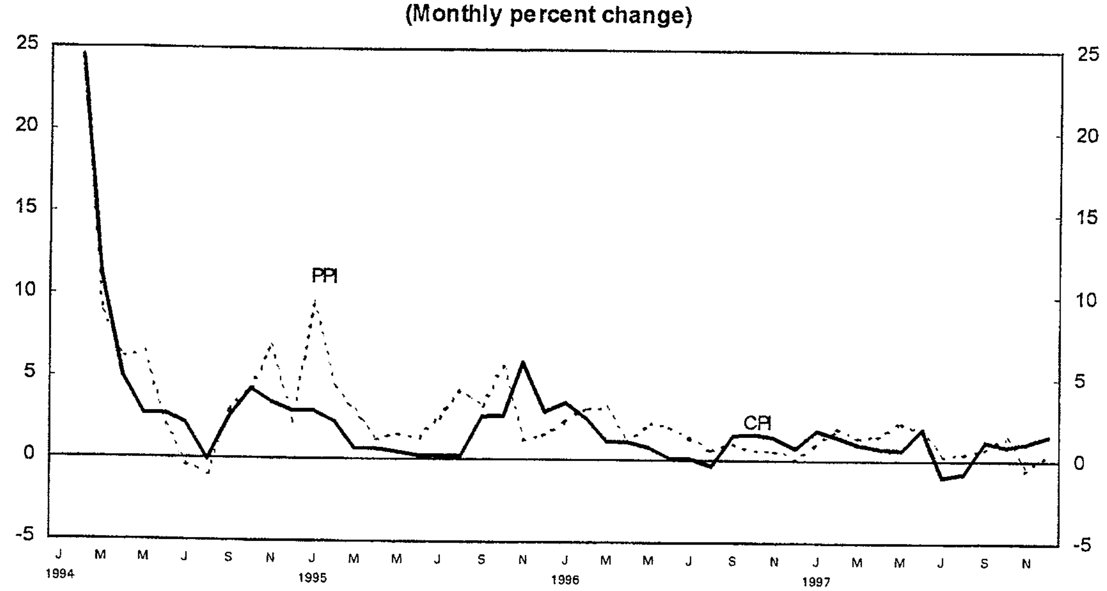
16. **Government finances deteriorated again in 1996** because of a dip in revenues, mainly reflecting falling receipts of corporate and value added taxes, and rising expenditures on health and education. As a result, the consolidated **general government cash deficit** rose to 6½ percent of GDP. Moreover, because the authorities reacted to the revenue shortfall by curtailing cash outlays through sequestration, but failed to limit expenditure commitments, expenditure arrears, mainly on wages and pensions, rose by a further 4 percent of GDP. The **commitment deficit** was 10¾ percent of GDP, three points above the 1995 level.

Figure 2. Moldova: Prices

Composition of Consumer Price Index
(Index January 1994 = 100)



Consumer and Producer Prices
(Monthly percent change)



Sources: Moldova Department of Statistics; and Fund staff estimates.

17. While through 1993 the bulk of the **financing requirement** was met by central bank credit, improved access to external financing subsequently allowed a reduction in borrowing from the central bank. Net external financing amounted to 5 percent of GDP in 1996, three quarters of the government's financing needs. Domestic financing of about 1½ percent of GDP was obtained by sales of treasury bills to both commercial banks and nonbank institutions. Part of the proceeds of foreign loans remained unspend at the end of the year and was held on deposit, resulting in modest negative net financing from the central bank.

Fiscal performance in 1997

18. The consolidated **general government cash deficit** increased again in 1997, albeit only slightly, to 6¾ percent of GDP, exceeding the budget target of 4½ percent. Although revenues rose substantially, in part because of special factors, cash expenditures rose even more, as the authorities made determined efforts to reduce **expenditure arrears**. As a result, the upward trend in wage, pension and other arrears was sharply reversed (Table 4 and Figure 3).[7]

Table 4. General Government Budget

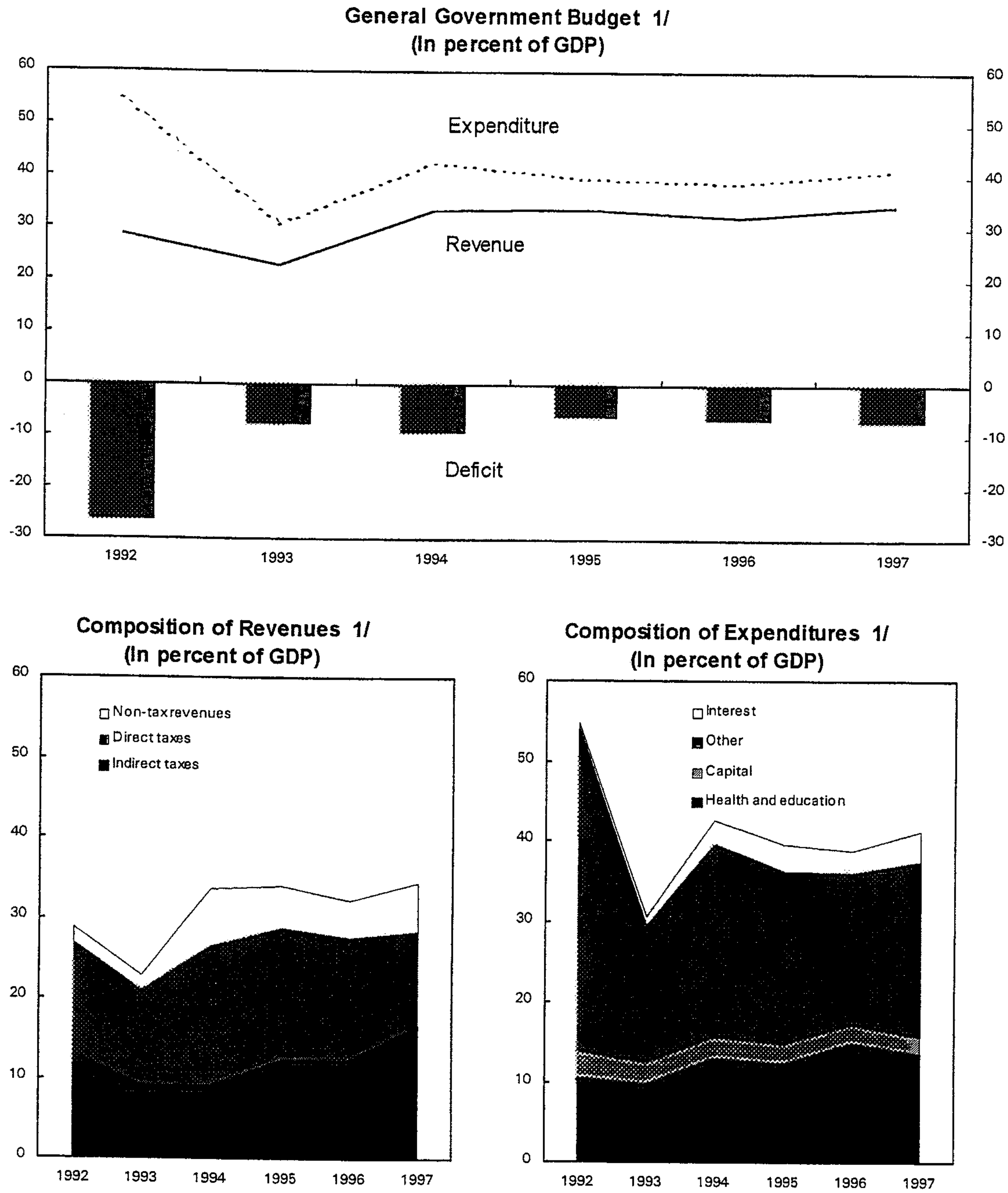
(In percent of GDP)

	1993	1994	1995	1996	1997
Revenue	22.8	33.5	33.9	32.1	34.3
Of which tax revenue	21.0	26.4	28.8	27.4	28.2
Expenditure (commitments)	31.7	44.6	41.6	42.8	38.3
Deficit (commitments)	8.8	11.1	7.7	10.7	4.0
Change in expenditure arrears	1.2	2.0	1.9	4.1	-2.8
Cash deficit/financing	7.6	9.1	5.8	6.6	6.8
Domestic	5.1	2.1	2.5	1.5	4.0
Central bank	5.1	1.9	1.5	-0.7	1.4
Commercial banks	0.2	0.2	0.9	0.5	1.9
Nonbank	—	—	0.1	1.7	0.8
Foreign	2.5	7.0	3.2	5.1	2.8

Sources: Information provided by the Moldovan authorities; and Fund staff estimates.

[7]The fiscal data do not reflect **debt assumption** by the budget of gas payments arrears of public enterprises US$140 million in 1997.

Figure 3. Moldova: Fiscal Indicators



Sources: National Bank of Moldova, Ministry of Finance; and Fund staff estimates.

1/ Cash basis; includes Social Fund operations on gross basis.

19. On a commitments basis, however, expenditures were cut substantially, largely through decisions to freeze wages and pensions at 1996 nominal levels. Combined with higher revenues, this led to a **big fall in the commitments deficit**, to 4 percent of GDP. Although this is a major improvement compared with the high commitments deficits of previous years, it probably understates the **underlying fiscal deficit** because it reflects one-off receipts from the sale of military aircraft to the United States (US$40 million or 1¾ percent of GDP) and special tax collection efforts, mainly payments in kind and offset operations, designed to reduce tax and expenditure arrears. Allowing for these factors, the underlying deficit might have been 2-3 percentage points of GDP higher.

20. **Deficit financing** reverted more to domestic sources in 1997. Domestic financing, amounting to 4 percent of GDP, was accounted for mainly by treasury bill sales and the run down by the government of the deposits it held at the central bank at the start of the year. External financing was dominated by proceeds of a Eurobond issue (US$75 million) and the first tranche of the World Bank's SAL II (US$35 million).

Revenues

21. Consolidated **government revenues** (including contributions to the social fund) amounted to 34¼ percent of GDP in 1997, a two point increase over 1996. This partly reflected higher nontax revenues, on account of unbudgeted receipts from the sale of military aircraft to the United States. Tax revenues were also strong, rising by nearly one point to over 28 percent of GDP. This reflected buoyant indirect tax collections, which more than offset a nearly 4 percentage point decline in revenues from corporate income taxes and social security contributions. Rising indirect tax collections resulted from increases in excise tax rates, in particular for gasoline, and improved VAT administration. However, corporate tax proceeds continued their steady decline as a result of broad tax amnesties passed in 1997,[8] as well as new accelerated depreciation allowances and falling output in the traditional industries (Table 30). Social security contributions dropped sharply, from 8½ percent of GDP to 6¾ percent, despite substantial efforts to reduce contribution arrears through collection of commodities from enterprises.

Expenditure

22. On a commitments basis, **expenditures** fell by 4½ percent of GDP, to 38¼ percent in 1997, reflecting across-the-board sequestration and the freezing of government remunerations and pension payments (Table 31). Government expenditures are dominated by spending on health and education, pensions, other social allowances, and interest payments, which accounted for 70 percent of outlays in 1997.

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[8]Tax amnesties entailing a sizable fiscal cost were passed in 1997, including forgiveness of tax arrears because of "natural catastrophes;" and an amnesty on all tax penalties.

23. **Education and health** services are provided mainly by the local governments and cover large segments of the population at virtually no charge to the beneficiary (Box 2). These activities demand considerable human and financial resources, accounting for one-third of government expenditure and 70 percent of public sector employment in 1997 (Table 5). Given tight budgetary constraints, the authorities are gradually introducing administrative fees and copayments for health and education services, which are expected to induce more efficient usage and reduce the burden on the budget. Moreover, the authorities are considering a comprehensive review of these sectors aimed at rationalizing and increasing productivity.

Table 5. General Government Employment

(In thousands, September 1997)

	Total	Central government	Local governments
Total	**326.6**	**114.5**	**212.1**
Education	149.0	29.0	119.9
Health	84.3	20.3	63.9
Agricultural support	10.5	6.9	3.5
Cultural activities	12.4	5.0	7.4
Research and science	6.1	6.1	0.0
Social security	4.6	0. 9	3.6
General services	14.8	6.6	8.2
Others	44.9	39.7	5.6

Sources: Information provided by the Moldovan authorities; and Fund staff estimates. Numbers may not add because of rounding.

Box 2. Relations with Local Authorities

Governmental administrative and operating arrangements remain largely in line with the prereform procedures. Government responsibilities are conducted in a highly decentralized way, as reflected in the fact that about two-thirds of the 325,000 government employees work at the local governments. Revenue sharing arrangements are unsatisfactory. A share of tax revenues from a number of taxes is ascribed to individual local governments based on specific arrangements and tradition, but such arrangements do not reflect properly institutionalized procedures for income equalization, nor do they compensate for operating expenditures of specific programs, such as health or education. As a result, local government revenues are often insufficient to cover expenditure commitments. Because they do not generally engage in domestic or external financing operations (except for suppliers' credit), local governments require financial support from the state government. Transfers to local governments amounted to 2¾ percent of GDP in 1997.

24. Expenditures by the **social fund**, including pensions, family allowances, energy compensations and unemployment benefits, rose by 1 percent of GDP, to 9¾ percent in 1997 (Table 6). However, this was more than accounted for by arrears clearance, while expenditure commitments fell sharply as a share of GDP, reflecting the freeze on nominal pensions and cuts in other benefits and allowances. With social security contributions down substantially, arrears clearance and part of current commitments were financed by a transfer from the state budget. Social fund outlays constituted the largest expenditure category in the consolidated general government expenditures, accounting for 24 percent of total expenditures in 1997.

Table 6. Social Fund Operations

(As percent of GDP)

	1993	1994	1995	1996	1997
Total revenues	5.7	8.2	8.5	8.6	9.5
Of which					
Social security contributions	5.3	7.3	7.9	8.6	6.7
State budget transfers	0.4	0.9	0.6	0.0	2.8
Total expenditure (cash)	4.4	8.2	8.6	8.7	9.7
Of which					
Commitments	...	...	8.9	11.5	7.7
Arrears clearance	...	...	-0.3	-2.8	2.0
Balance (cash)	1.3	0.0	-0.1	-0.1	-0.2

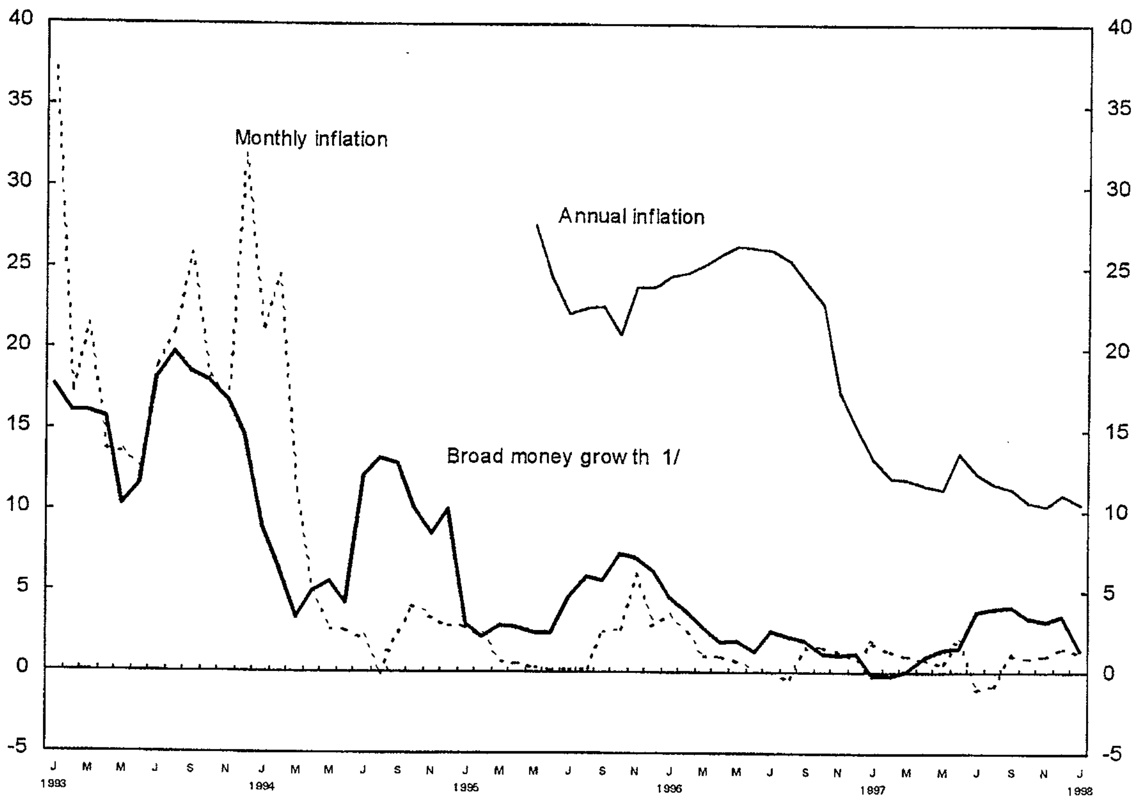
Sources: Information provided by the Moldovan authorities; and Fund staff estimates.

C. Monetary Sector

25. The pursuit of a restrained monetary policy accompanied by structural measures to improve the efficiency of monetary and banking operations has led to steady gains in the public's **confidence in the leu**. As inflationary expectations have moderated, the **velocity of circulation** of broad money (end-period) has declined from about 14 at end-1993 to 5½ at end-1997 (Table 7 and Figures 4 and 5). **Broad money growth** declined from 115 percent in 1994 to 15 percent in 1996. However, after contracting somewhat in the first quarter of 1997, reflecting seasonal factors, liquidity rose sharply through August in the face of a large build-up of net foreign assets by the central bank (Tables 32 and 33). This build-up reflected a large Eurobond placement and bilateral borrowing by the government, as well as considerable foreign interest in the domestic treasury bill market. In late-1997, reflecting further strong fiscal pressures, liquidity creation accelerated again. Overall in 1997, reserve money rose 32 percent and broad money increased 34 percent, both well above the NBM's targets of 18 percent and 26 percent, respectively.

26. The **money multiplier** has continued to increase gradually from 1.59 at end-1995 to 1.71 at end-1997, reflecting an effective reduction in reserve requirements in March 1997 (Box 3) and improvements in banks' cash management, as evidenced by decreases in excess reserves. At the same time, the **currency deposit ratio** has declined from a peak in mid-1996 of around 110 percent to 103 percent at end-1997. Nevertheless, **currency use** remains quite intensive, fluctuating around 50 percent of broad money since mid-1995. A slight declining trend from a peak of 52 percent in early-1996 appears to have emerged, though the spike in liquidity in late-1997 has unfortunately lead to a reversal of this trend—at least temporarily.

Figure 4. Moldova: Money and Inflation
(In percent)

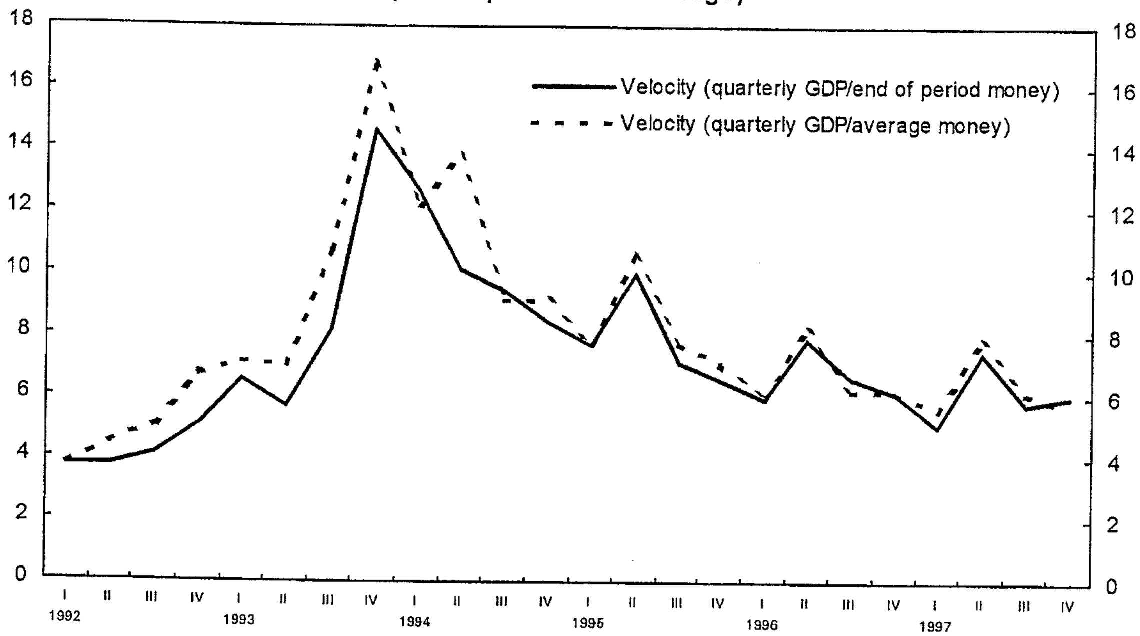


Sources: Moldova Department of Statistics, National Bank of Moldova; and Fund staff estimates.

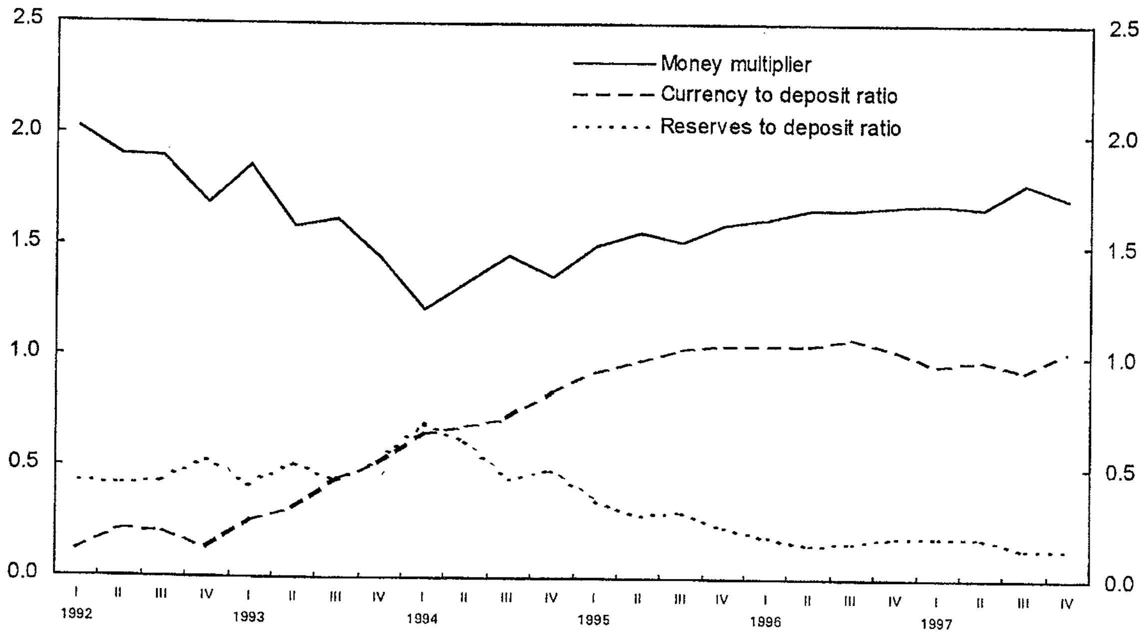
1/ Six month backward moving average of monthly growth.

Figure 5. Moldova: Velocity and the Multiplier

Velocity of Circulation of Broad Money
(End of period and average)



Money Multiplier



Sources: Moldovan authorities; and Fund staff estimates.

Table 7. Monetary Developments

	1995	1996	1997
		(Period percentage changes)	
Broad money	65.1	15.3	34.0
Currency 1/	38.9	7.4	17.0
Reserve money	41.3	9.4	31.5
NFA 2/	7.1	17.8	26.6
NDA 2/	34.2	-8.3	16.5
Inflation (CPI; end-period)	23.8	15.1	11.1
		(Absolute values)	
Money multiplier (end-period)	1.59	1.68	1.71
Velocity	6.6	6.1	5.5
Interest rate 3/	45.7	31.2	25.8

Sources: Information provided by the Moldovan authorities; and Fund staff estimates.

1/ As a percent of period initial broad money stock.
2/ As a percent of period initial reserve money stock at end-1995 exchanges rates.
3/ Average annualized yield on 91-day treasury bills in fourth quarter.

Box 3. NBM Reforms in 1996-97

With the support of technical assistance from the Fund, the NBM has been pursuing a medium-term strategy of development of **indirect monetary policy tools** and reforms to improve the effectiveness of monetary policy and the efficiency of financial intermediation. In March 1997, the NBM modified the reserve requirement rule to allow cash-in-vault, up to a maximum of 2 percent of deposits, as a qualifying asset. This effectively lowered the reserve requirement by 2 percent although the required rate was left unchanged at 8 percent. The NBM took a number of other measures during 1997 to further improve monetary policy effectiveness, including: the harmonization of the rate mark-up on the Lombard facility to 5 percent over the 28-day treasury bill rate (August); the abolition of quotas on individual bank participation in the credit auctions (October); and approval of the regulations and initiation of activities on open market operations (August).

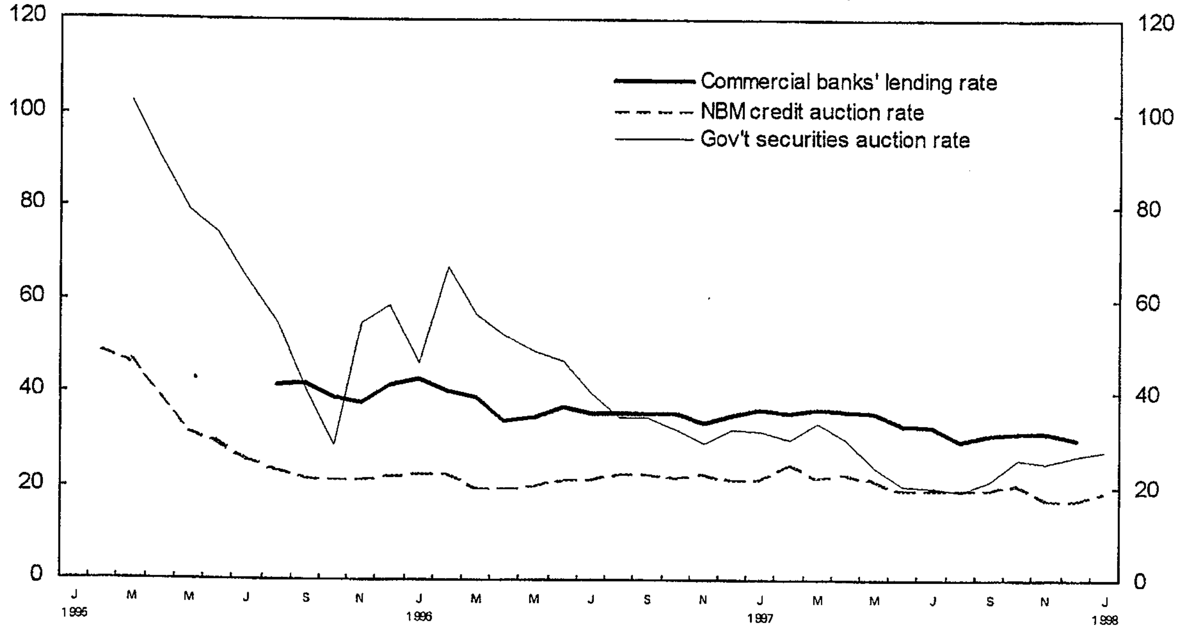
As regards **data availability**, the NBM has made significant progress in 1997. It publishes exchange rate data on a daily basis, by electronic means; interest rates on the weekly government securities auctions also electronically, produces a monthly statistical bulletin and has a web page site featuring some statistics, legal, and regulatory information and older annual reports.

27. Nominal **interest rates** have declined steadily over the past two years, broadly in line with the reduction in inflation (Figure 6).

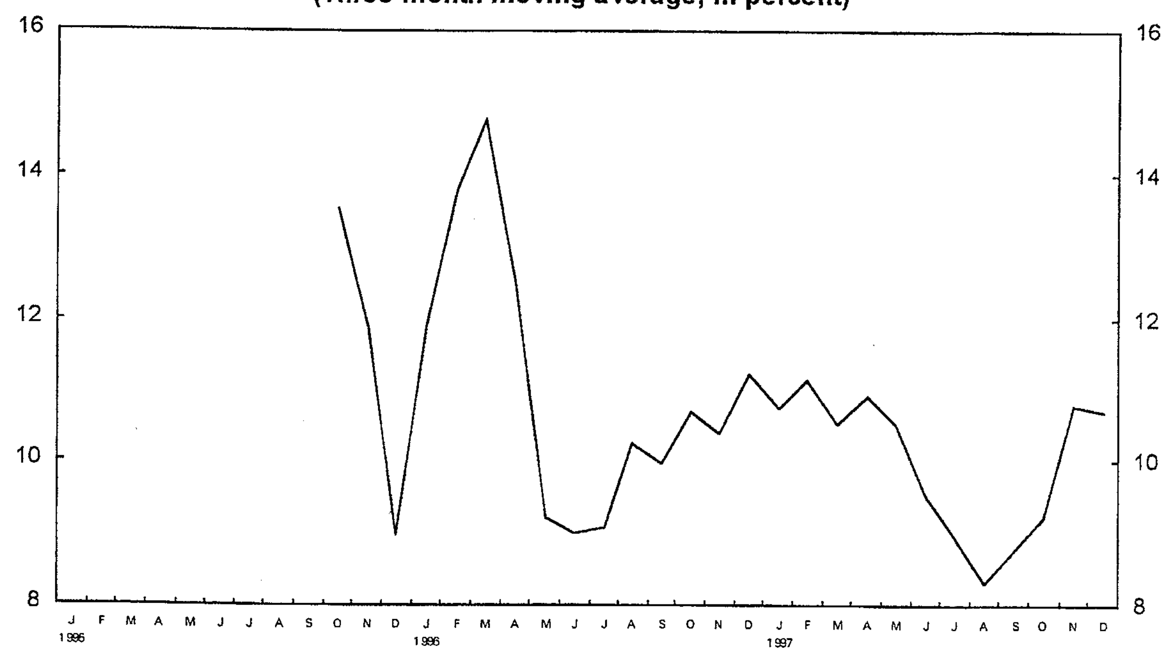
- The interest rate on the most widely traded **treasury bill**—the 91-day note—declined from about 46 percent annual yield in late-1995 to around 20 percent at end-September 1997, before rising in the fourth quarter to end at 28 percent, reflecting global trends in emerging country debt markets and fiscal pressures. This rate remains high in real terms, and reflects structural impediments to the emergence of a viable secondary money market, as well as high demand for financing by the government. Leading up to the financial crisis in Asia, there had been significant foreign participation in the longer maturities of the treasury-bill market (182-, 273- and 364-day bills), which in the first nine months of 1997 averaged over 40 percent of total security sales. This improved

Figure 6. Moldova: Interest Rates

Nominal Interest Rates
(Annual rates, period average, in percent)



Absolute Differential of Credit Less Deposit Rate
(Three-month moving average, in percent)



Sources: National Bank of Moldova; and Fund staff estimates.

coverage in these auctions and resulted in a yield curve which was quite flat. Foreign participation in the auctions appeared to recover somewhat in early 1998.

- **Commercial bank lending rates** have also declined steadily from an average across all maturities of 42 percent in December 1995 to 30 percent in December 1997. **Deposit rates** have similarly eased from 32 percent to 20 percent over the same period. The average **spread**, has also declined slowly, although somewhat erratically, from around 12 percent in late 1995/early 1996 to about 10 percent since mid-1997 (in absolute terms) and from around 1.5 to about 1.45 (in relative terms—lending over deposit rates). The **maturity structure** of both lending and deposits is heavily concentrated in short-term maturities of six months or less but has begun to lengthen slightly. The proportion of new lending for six months or less has declined from about 90-95 percent of total at end-1995 to about 50-55 percent in the last quarter of 1997, while new deposits of greater than one year have increased from 5-10 percent to 15-20 percent of total over the same period.

- The rate of discount in the NBM biweekly **credit auctions** has also declined, apart from a short period in early October following a rules change, and remains generally below rates on government paper. At end-1997 the annualized rate stood at 17.6 percent.

28. **Monetary policy** has been complicated by the large fluctuations in the external position, especially since mid-1996. Increases in NFA in the second half of 1996 were largely sterilized through reductions in credit to government. After a significant reversal in early 1997, much larger and lumpy inflows occurred in mid-1997, about two-thirds of which were monetized. Although open market sales of treasury bills were initiated in August, use of sterilization instruments was constrained by a reluctance to allow a significant nominal appreciation of the exchange rate or sharp increase in interest rates. The exchange rate has fluctuated narrowly within a band of +/-1 percent to the U.S. dollar for most of 1996-97, while in real effective terms the rate appreciated steadily.

29. The NBM has been pursuing a strategy of conversion to indirect **monetary policy instruments**. Monetary control has been effected through foreign currency transactions as well as the credit auction, and reserve requirements have not been used for monetary control purposes. In August 1997, open market operations were initiated on a small scale. However, these operations, as well as the development of the secondary market, were severely constrained by the existence of a 0.3 percent transactions tax on securities, which was finally abolished as of January 1998. In November 1997, in response to a request from the banks for a short-term liquidity management instrument, the ministry of finance introduced a 14-day treasury note and in mid-December introduced a two-year coupon note.

30. The **banking system remains fragile,** although important progress has been achieved in building a supervisory capacity at the central bank. All banks have been examined on-site at least once and CAMEL[9] ratings assigned. In 1996, two small bank were closed, and in 1997 three banks were closed or being closed. At end-1997, there were 23 licenced commercial banks, including two being closed. Preparations for the introduction of International Accounting Standards (IAS), which have taken longer than expected, were completed in late-1997 and IAS formally came into effect as of January 1, 1998. **Capital adequacy standards** have been progressively raised (the overall minima as of January 1, 1998 are Mdl 8 million and 8 percent of risk weighted assets) and risk provisioning was fully implemented during 1997 (see Section IV).

D. External Sector

31. Following a sharp deterioration in 1996, Moldova's **external current account deficit** increased further to just over 13 percent of GDP in 1997 (Tables 8 and 34). While the merchandise trade deficit continued to widen, this was nearly offset by an improvement in net current transfers, reflecting increased labor remittances and foreign grants mainly in the form of technical assistance. The balances on services and net income were little changed as a percentage of GDP. The growing trade deficit over the past two years has reflected very strong **nonenergy import** growth, especially in 1996, and generally disappointing **export** growth which has seen the share of exports in GDP drop significantly. The particularly large drop in export share in 1997 reflected poor harvests for two key export crops, grapes and sunflowers, and weak prices and demand for grain as a result of a bumper crop in the region. **Energy imports** have continued to rise, albeit relatively slowly, reflecting lack of structural reforms in the sector and the reluctance of external suppliers to impose hard-budget constraints on their Moldovan customers.

32. The current account deficit and amortization payments were mainly financed by (in order of importance) disbursements from international development agencies and bilateral donors, issuance of Eurobonds, foreign direct investment, accumulation of energy arrears,[10] and sales of treasury bills to nonresidents. The capital account also benefited from

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[9]CAMEL (Capital, Assets, Management, Earnings, & Liquidity) ratings of one to five have been used (in decreasing order of financial health). A "five" rating signals the need for liquidation.

[10]US$140 million of energy arrears were cleared through the issuance of bonds to RAO-Gazprom, but new arrears totaling US$64 million were accumulated during the year compared to US$61 million in 1996 and US$47 million in 1995.

US$40 million in receipts from the sale of military aircraft to the United States.[11] Gross official reserves continued to grow to reach US$366 million, equivalent to 3.3 months of imports of goods and nonfactor services (Table 34).

Table 8. Summary of the Current Account

	1995	1996	1997
		(In percent of GDP)	
Current account	-8.7	-12.9	-13.3
Trade balance	-3.2	-12.1	-14.5
Export of goods	44.0	42.4	37.4
Imports of goods	-47.2	-54.4	-51.9
Of which			
Balance of services	-5.7	-4.0	-4.1
Income (net)	-1.7	-2.1	-2.1
Current transfers (net)	2.1	5.3	7.4
		(Annual percentage change)	
Exports	19	11	0
Energy imports	2	8	5
Nonenergy imports	30	48	10

Sources: Information provided by the Moldovan authorities; and Fund staff estimates.

33. **Merchandise exports plus imports** amount to more than 90 percent of GDP in Moldova.[12] Exports consist primarily of agricultural and food products, including wine, spirits, tobacco, fruits and fruit juices, vegetables, and sugar. There are also some exports of electrical appliances and motors, textiles and leather products, and precision tools. Major imports include energy products, machinery, and consumer and durable goods (Table 35). In recent years about two-thirds of Moldova's trade has been with BRO (the Baltics, Russia and other former Soviet

[11]For analytical purposes, this transaction is treated as a capital transfer rather than exports, because it is a large infrequent transaction involving assets that are not produced in Moldova.

[12]Total external trade, including services, amounts to slightly more than 100 percent of GDP. However, Messrs. Havrylyshyn and Al-Atrash ("Opening-Up and Geographic Diversification of Trade in Transition Economies," 1998) argue that for Moldova and other BRO countries, such traditional measures of openness can be misleading because of data problems. Controlling for the size of the economy and using purchasing power parity data, they conclude that Moldova as well as other BRO countries remain relatively closed compared with economies of similar size and development.

Union countries) and one-third with the rest of the world. The share of Moldova's exports going to markets other than BRO and Eastern European countries has risen from 12 percent in 1993 to 19 percent in 1997.

Trade regime

34. Moldova's **trade regime** remains relatively liberal, notwithstanding some recent reversals. By 1996, import quotas had been eliminated and the number of import tariff bands reduced to five, with a maximum tariff rate of 20 percent with few exceptions. All export licences were removed on September 1, 1997. However, exports of unbottled wines, cereals, sunflower seeds, and nonfermented tobacco became temporarily restricted as of October 24, 1997, in response to poor harvests or weak export prices for some of the crops and concerns that domestic processors should have adequate supplies of cheap raw materials.

35. The average **import tariff** had been reduced to a low level by 1996, reflecting a zero tariff on 84 percent of imports (Table 9). In the course of 1997, tariff rates were increased for many imports, particularly those that were previously zero-rated. As a result, the weighed import tariff rate (excluding alcohol, tobacco, and vehicles) more than doubled to just over 5 percent. The dispersion of tariff rates also increased slightly. Following these changes, Moldova's average tariff is close to that in many other countries in the region, but the number of tariff bands and the maximum rate are high by regional standards.

Table 9. Import Tariff Developments 1/

	1996	1997
Simple average tariff	6.3	9.4
Weighted average tariff	2.3	5.3
Distribution of imports by tariff band		
0 percent	84	45
5 percent	3	29
10 percent	5	13
15 percent	2	1
20 percent	6	11
above 20 percent	1	1
Dispersion of tariff rates 2/	6.0	6.8

Sources: Information provided by the Moldovan authorities; and Fund staff estimates.

1/ All imports excluding alcohol, tobacco, and vehicles.
2/ Tariff rate dispersion is the standard deviation of tariff rates from their mean.

36. Moldova continues its negotiations for **accession to the WTO**. A working party was formed in mid-1997 and is aiming for accession in 1999, if possible. Moldova has free trade agreements with all BRO countries and Romania. It also signed an agreement on partnership and cooperation with the EU in late-1994.

External debt

37. Moldova's external debt has grown from zero in the early 1990s to almost 50 percent of GDP at present. Debt service rose to about 17 percent of exports of goods and nonfactor services in 1997 from 6 percent in 1996. In July 1997, following a favorable rating from international rating agencies, the authorities issued a US$75 million, five-year Eurobond. The issue was heavily oversubscribed and was priced at LIBOR plus 3.4 percent. Also in mid-1997, the World Bank extended IDA eligibility to Moldova on a blend basis, with one-half of the new SAL of US$100 million on IDA terms. By end-1997, total external debt, including Eurobond issues, stood at just over US$1 billion. Moldova's major creditors are the IMF, the World Bank, Russia, the EU, the United States, Japan, and Romania. In addition, accumulated energy arrears of enterprises to Russian, Ukrainian, and Romanian energy suppliers amount to around US$160 million.

38. A system of **reporting and monitoring external debt** has been in operation since early 1994. This is now being improved through technical assistance from UNCTAD to facilitate effective monitoring and analysis. In July 1996, parliament passed a law on public debt and guarantees which stipulated that all external loans and guarantees must be proposed by the ministry of finance and approved by parliament.

Exchange market and exchange arrangements

39. The leu, Moldova's national currency, was introduced on November 29, 1993. Following an initial modest depreciation, the **nominal exchange rate against the U.S. dollar has remained broadly stable** since mid-1995. In real terms, the leu has depreciated against the currencies of BRO countries but appreciated against the currencies of other countries. Overall, **the real effective exchange rate** has appreciated steadily over the past three years. It appreciated by 7 percent during 1997.

40. The **foreign currency market** consists of the daily fixing sessions of the Chişinaŭ Interbank Foreign Currency Exchange (CIFCE), the interbank market outside the fixing session, and the cash market. As banks have developed some expertise in foreign exchange transactions, the volume of operations carried out in the interbank market has gown and the share of transactions conducted at the CIFCE has waned to less that 5 percent.

41. Moldova accepted the obligations of Article VIII, Sections 2, 3, and 4 of the Fund's Articles of Agreement on June 30, 1995. Since then, **Moldova's exchange system** has remained free of any restrictions on current account transactions. Export proceeds are required to be repatriated within 180 days and violators are subject to heavy fines. In practice, however, such fines are rare as regulators usually accept petitions with regard to repatriation delays. Capital account transactions require licenses from the NBM. The system is fairly liberal with regard to inflows and nonresidents' transactions.

E. Structural Policies

42. The structural reform effort in Moldova has proceeded slowly and with occasional setbacks. Following administrative price increases to cost covering levels in the key **energy sector**, preparation for demonopolization and privatization is proceeding. In late-1997 a stake in the state telecom company was tendered to international bidders, although interest in this venture as well as for other large enterprises has been weak. While significant progress has been made in **privatization,** corporate governance remains a weakness, especially in the agricultural and agroprocessing sectors. A pilot project to break-up the farms and distribute individual **land titles** to farmers, with donor support, has proceeded well and is being expanded. Small-scale privatization has been progressing slowly on a cash basis. Progress has been made in passing **laws** underpinning a market economy, notably regarding collateral, bankruptcy, financial institutions, accounting standards, taxation, and land trading and registration.

43. **Energy sector reforms in 1997** included further tariff increases in March and June,[13] bringing energy prices to full cost recovery levels (including debt service) and unifying household and nonhousehold rates for gas and electricity; and initial steps toward demonopolization and privatization of the sector. Recognizing the need for an integrated, medium-term approach to energy sector reform, the government also prepared (with technical assistance from the World Bank) and adopted a debt-management plan, providing for steps to increase collection rates, debt-restructuring measures, and the establishment of a regulatory commission to regulate prices and services as the demonopolization of the energy sector proceeds. The corporatization of Moldenergo (electricity supplier) took place in 1997, with a view to breaking it up into generation, transportation and distribution companies. The next steps are expected to be the breakup of Moldenergo into companies responsible for electricity generation, distribution and bill collection; and implementation of the privatization plans for Tirex-Petrol (petroleum products distribution) and Moldovagas.

44. The privatization of Moldovagas is expected to involve the taking of a substantial minority equity share by RAO Gazprom, as partial payment for Moldovagas's arrears. Although programs to increase metering and enforce more stringently the laws against energy theft remain in place, progress under them has been only gradual.

45. **Privatization** has now moved from voucher privatization, which was successful in privatizing over four-fifths of residential housing, most small scale traders, and over half small-scale enterprises, to cash privatization. The **1997/98 privatization plan** now in force contemplates the privatization of most remaining state assets, in particular large-scale enterprises in the energy and telecommunications sectors. Another important element is the privatization of land under enterprises and sale of leased premises owned by the state. Cash privatization (including under the previous privatization plan), however, has not proceeded as

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[13]Parliament recommended the roll-back of the latter tariff increases, but the government declined to follow this recommendation.

quickly as expected, in part because of lack of adequate publicity for tenders, and because earlier attempts to sell land were hampered by unrealistically high "normative price" floors. In May, parliament reduced the normative price of land, and since then 150 parcels of land under enterprises have been sold. In addition, during 1997, 90 small enterprises and 240 leased premises were privatized for cash, producing revenue for the budget of Mdl 55 million.

46. No **large-scale enterprises** were privatized during 1997. The largest privatization planned for 1997 was that of 40 percent of Moldtelecom, the telecommunications company, by international tender. This has been delayed, however, by a lack of bids acceptable to the government. The government is continuing to consider ways in which to privatize the tobacco sector, which also has been delayed following an unsuccessful tender in 1996. Several other large-scale privatizations (e.g., Rezina Cement, Moldcarton, Floare Carpet) have been delayed while the government seeks improved offers for them. The full privatization of Fertilitate and Cereale (except for facilities to hold the state's emergency grain reserves) is scheduled to be completed as part of the 1997/98 privatization program.

47. Significant progress was made in 1997 in **farm break-up and privatization**, and in **agricultural land reform**. As of early 1998, about 30 out of a thousand large-scale farms have been fully restructured as private farms, and a pilot project, undertaken with the assistance of USAID, is to be expanded to 550 farms in 1998, with the intention of completing their restructuring in 1999. In addition, **trading of agricultural land** should increase steadily as titles continue to be issued under the farm break-up programs. Thus far, some 57,000 land titles have been prepared and submitted to local authorities for distribution to individuals. To support this process and to facilitate the use of land as collateral, parliament, following an initial rejection, has recently approved at first reading a law to establish a **national cadastre**.

48. With the passage of amendments to the **bankruptcy law** in 1997, the first bankruptcy actions were initiated by the government and the quasi-official enterprise restructuring agency.[14] At the end of the year, three sizable industrial enterprises,[15] were in the initial phases of bankruptcy, though so far no bankruptcy actions had been brought by enterprises or financial institutions. Delays were being experienced, however, in finding and appointing

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[14]The Agency for the Reconstruction of Enterprises and Assistance (ARIA), with technical assistance from the World Bank and U.S. Treasury, works with enterprises to establish plans for restructuring and repayment. The ARIA refers companies to the State Creditors' Council (SCC), which can temporarily freeze arrears obligations of enterprises which agree to and carry out a restructured debt-payment plan. At the end of 1997, over a hundred enterprises had such agreements with the SCC. Where firms fail to meet their obligations, they may be referred to the Economic Court for bankruptcy.

[15]Manufacturing a range of food products, and meat, refrigerators, and television sets, respectively. As of late January 1998, no bankruptcy proceeding had gone beyond the appointment of a bankruptcy administrator, a relatively early step in bankruptcy proceedings; and in some cases, this had not been done.

qualified bankruptcy administrators, as required under the bankruptcy act. In addition, nearly 90 smaller enterprises were also being liquidated under less formal procedures. For many of these, the liquidation follows attempts at financial restructuring. The **collateral law**, which provides, *inter alia*, for the use of agricultural land as collateral, is now in force.

49. Progress, albeit slow, has also been made in the preparation of a **new civil code** for Moldova. Thus far, the "general" portion of the code has been prepared and is being reviewed by ministries and parliamentary committees, but it is not expected that further progress toward passage can be made in this parliament. Other sections in preparation deal with such areas as property, bankruptcy and collateral, inheritance, and intellectual property.

III. MONETIZATION AND FINANCIAL DEVELOPMENT

Introduction

50. Public policy debate in Moldova has sometimes questioned whether tight monetary policy is responsible for a slow rate of banking sector development and the persistence of significant domestic barter activity. While Moldova has been one of the more advanced countries of the BRO as regards reform of the financial sector, much remains to be done to foster a stable and efficient payments system and promote financial intermediation. Although the level of monetization of the economy is high compared to other BRO countries, the structure of broad money is highly skewed toward cash, and barter remains an important means of exchange, especially in agriculture, social security transactions, and for public utilities.

51. This chapter attempts to address this issue by examining the trends in monetization and financial deepening since the introduction of Moldova's currency, the leu, in late-1993. It explores the evolution of the income velocity of circulation, the structure of money, and some of the structural, institutional, and financial constraints to development of a modern banking system capable of supporting effective financial intermediation and strong, sustainable private sector growth.

Monetization

52. Moldova has been making gradual but steady progress in monetizing its economy since 1994. This progress reflects reform efforts in all areas of the economy, from reducing large macroeconomic imbalances, to privatization, to specific money and banking system reforms. The velocity of circulation of broad money (end-period) rose sharply through end-1993 to about 14, but with the introduction of the leu in late-1993, accompanied by appropriate financial policies, it has declined steadily to 5½ at end-1997 (Figure 6). However, the level of monetization in Moldova still falls well short of the average in industrial countries (typically 50-100 percent), and of that in the more advanced transition countries of Central and Eastern Europe (20-50 percent) (Figures 7 and 8).

Figure 7. Moldova: Monetization
(Broad money in percent of GDP, end 1996)

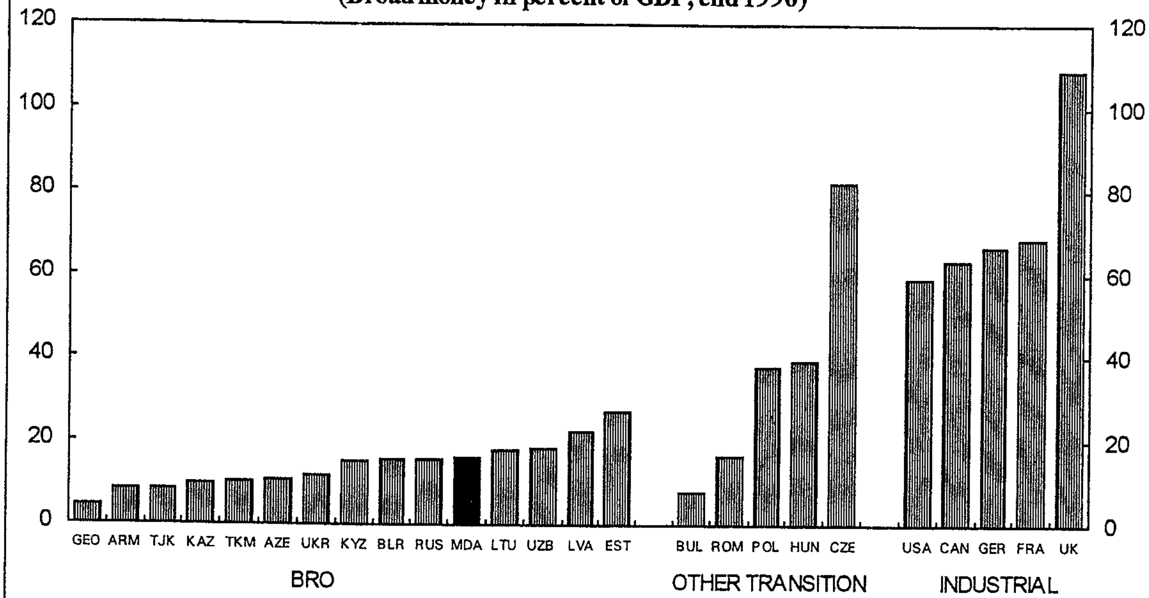
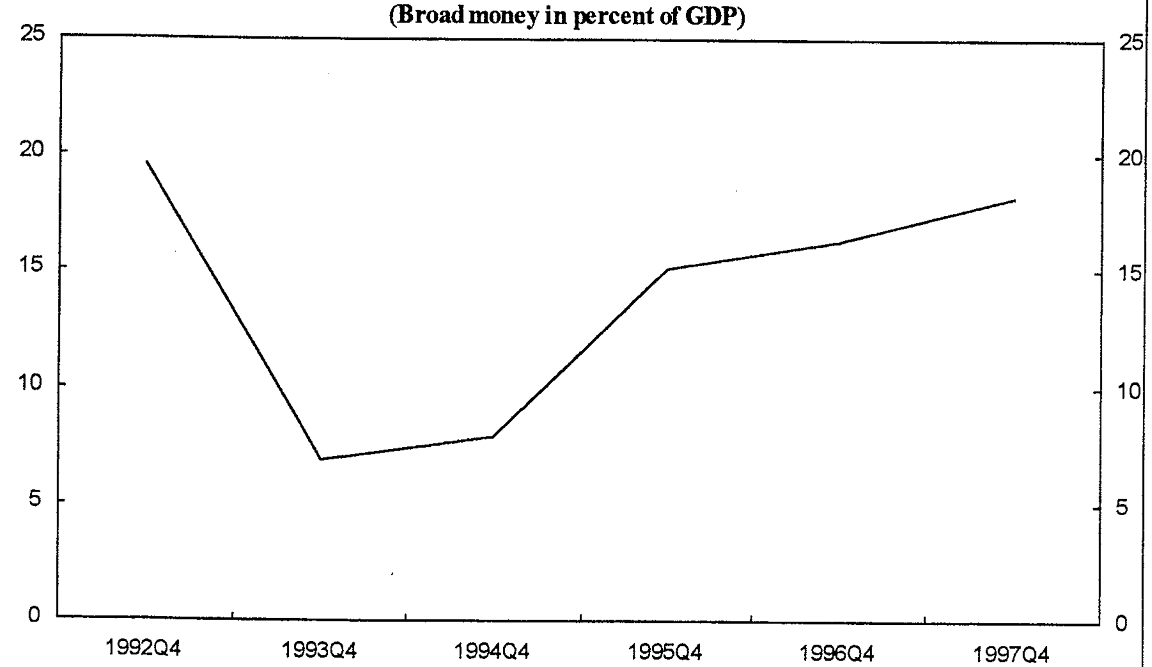


Figure 8. Moldova: Monetization
(Broad money in percent of GDP)



Sources: Moldovan authorities; and Fund staff estimates.

53. At end-1997, the broad money stock stood at Mdl 1.9 billion, some 19 percent of estimated annual GDP. Of this total, currency represented almost exactly one-half, with foreign exchange deposits accounting for about 10 percent. At end-1996 **Moldova ranked among those BRO countries with the highest degree of monetization,**[16] just behind Estonia, Latvia, Lithuania, and Uzbekistan.[17]

54. The pace of monetization reflects the public's desire to hold domestically denominated assets, its confidence in the banking system, and the extent and accessibility of banking services. In Moldova, banking services are generally still at a rudimentary level and payments instruments remain relatively underdeveloped. The development of banking infrastructure and payments instruments innovation, which will attract customers to more secure and efficient means of payments, is necessarily a gradual, long-term process which cannot be forced by artificial measures to increase the money supply.

Financial deepening

55. While the trend in monetization is quite favorable, the **structure of the money supply shows less progress toward financial deepening**. Domestic currency denominated deposits, which constituted 90 percent of broad money at end-1991 dropped sharply in 1992-94 to less than 40 percent of total liquidity. Foreign currency deposits grew sharply in 1992-93 peaking at nearly 15 percent before stabilizing at some 10 percent of liquidity since late-1994.[18] This is encouraging evidence of confidence in the leu (Figure 9).

56. Within lei denominated assets, however, there has been a flight from deposits into cash, so that the striking feature of money in Moldova now is the very **high share of cash (currency in circulation) in broad money**. This share rose steadily during the early transition period, from 10 percent at end-1991 to over 50 percent by mid-1996, but has since begun to ease. At around 50 percent, this share is second only to that of Georgia among BRO countries.

57. The converse of the trend toward cash is that the **banking system, as measured by the level of bank deposits, has been growing relatively slowly**. In real terms, deposits in commercial banks have grown at an annual average rate of 4.8 percent in the 1994-97 period.

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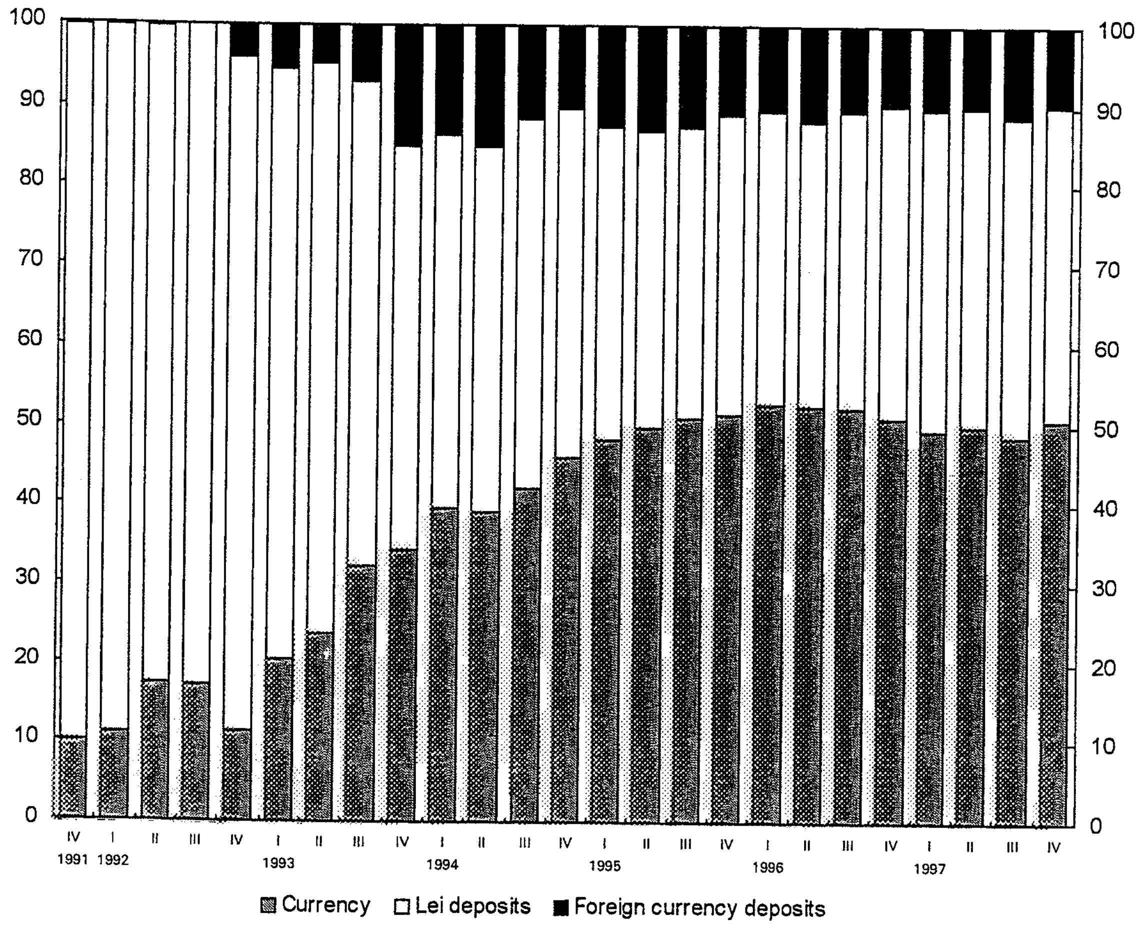
[16]Monetization, the extent that money is used in economic transactions, is measured as the ratio of the money stock to output—the inverse of the velocity of circulation of money. Financial deepening, a closely related concept, focusses on the development of monetary sophistication versus cash.

[17]Preliminary data for 1997 (partly based on projections of 1997 GDP) suggest that Moldova has at least maintained its relative position.

[18]This represents an underestimate of the degree of dollarization as it does not capture cash foreign exchange holdings by the public or amounts held in accounts abroad.

Figure 9. Moldova: Structure of Broad Money
(In percent of total)



Sources: Moldovan authorities; and Fund staff estimates.

In the absence of unforseen shocks to the system, it would be expected that the trend would strengthen, reflecting the superior security and facility of noncash payments as the increasing degree of sophistication in financial and payments systems leaves a diminished role for cash.[19]

58. In addition to the strong preference for using cash in Moldova, barter remains an important and persistent means of exchange. This is particularly true in the areas of social security, energy, and agriculture. The government plays an active role in perpetuating barter through its promotion of elaborate netting operations and commodity transactions involving

[19]It should be noted that illegal and shadow economy activities generally tend to be highly cash (or barter) intensive and as such contribute to a significant extent to the high cash composition of money.

enterprises (especially in the agricultural sector), the state budget and social fund, energy utilities and foreign energy suppliers. While cash and barter transactions flourish, **the banking sector is not adequately fulfilling its role as an intermediary** between savers and investors.

Factors affecting financial deepening

59. Slow growth of the banking system reflects factors which discourage economic agents from holding deposits, as well as factors which reduce the willingness of banks to attract deposits and extend loans. Aside from general measures of macroeconomic reform aimed at reducing inflation and stimulating private sector activity, there are several factors which have a direct impact on financial development. From the perspective of economic agents, the most important factors working against use of the banking system are the following:

- **Imperfect banking secrecy and privacy protections**. The public will avoid using banks if, in so doing, they would expose themselves to a significantly **higher probability of taxation or confiscation of funds** than if they used alternative means of settling transactions. The probability of being taxed on a transaction should not be a function of the means of settlement. This problem affects most directly the emerging private sector. It means, in effect, that for these agents transactions carried out through the banking system are potentially more expensive than those undertaken with cash or barter. There need to be clear rules delimiting the financial information the authorities are permitted to obtain from banks and requiring that confiscation of assets should involve formal judicial proceedings.

- **A lack of confidence in the liquidity and security of the banking system**. Given the considerable progress that has been made in strengthening banking legislation and supervision in Moldova, this is probably not as big a factor as in some other transition countries. Nonetheless, recent closures of small banks, though essential, will have undermined confidence somewhat. This can only be overcome by sticking with the NBM's successful strategy to steadily strengthen the capital position and supervision of the banking system.

60. Further, a number of factors reduce banks' incentive to compete for deposits and extend loans to enterprises.

- **The lack of competitiveness and efficiency of the banking system**. A more competitive environment would spur lower fees and interest rate spreads—allowing banks to offer higher deposit rates—as well as stimulate financial innovation, all of which would tend to attract deposits. Recent steps to lower indirect taxation of financial intermediation, through effective reductions in required reserves will help in this regard and will encourage investment in infrastructure, training and human capital, and technology.

- **Heavy borrowing by the public sector** through treasury bill sales provides a secure asset for banks to hold and therefore reduces the funds available for lending to enterprises. At the same time, high government borrowing raises real interest rates and reduces the demand for funds for investment. High treasury bill rates combined with the availability of funds at the central bank credit auctions at lower rates, well below the cost of funds from deposits, allow banks to make a steady profit without needing to engage in the normal banking activities of attracting deposits and lending money to the private sector.

- **A lack of secure, profitable lending opportunities.** This reflects weak economic conditions generally but also, more importantly, the **lack of a reliable legal framework** for enforcing property rights and a slow rate of privatization and structural reform. Banks must be able to collect security and enforce property rights in a rapid, efficient, and predictable manner. This underlines the importance of effective bankruptcy and collateral laws, a modern civil code, and a legal system under which these rights can be enforced. Over the long term, the health of the banking system will tend to mirror the general health of the private sector, which will crucially depend on the speed and extent of privatization, especially of land and major industries, including the public utilities.

- **Lack of transparency within the banking system**, which has contributed to underdeveloped interbank markets. Faced with short-term excess liquidity, banks in developed economies normally place funds in overnight markets with other financial institutions. In the absence of this possibility, banks will be more cautious about attracting deposits they may not be able to use immediately. In Moldova, development of interbank markets has been held back by two problems: (i) a long delay in introducing IAS; and (ii) a failure to fully remove a 0.3 percent transactions tax on securities. IAS was introduced with effect from January 1, 1998, with the new income tax code, and is expected to greatly improve the quality of information about the financial health of banking institutions. Until now, bank profitability and capital adequacy have been difficult to assess, thereby increasing counterpart risk. The transactions tax was abolished with the 1998 budget.

Conclusions

61. **Compared to other countries of the BRO, Moldova is among the most monetized**. This owes much to early and strong efforts to control inflation and implement financial and other macroeconomic reforms. The degree of monetization has progressed rapidly since 1994 as confidence in the leu has emerged and is more than twice its level at end-1993.

62. However, in Moldova **cash forms an unusually high share of broad money**. Conversely, bank deposits—usually by far the largest component of broad money in a developed market economy—account for less than half of broad money, and this is reflected in relatively low levels of bank lending. The slow growth of the banking system, as well as the prevalence of barter (see Section VI), is a result of a range of **structural impediments** that

reduce the willingness of economic agents to deposit money in banks, and reduce the willingness of banks to extend risky loans. Private borrowing is also crowded out by high real interest rates, resulting in part from the **large financing needs of the state**.

63. The limited availability of financing for enterprises, both for long-term investment and working capital, has contributed to the growth of barter as a way to get around the resulting budget constraints. However, by softening the budget constraint faced by enterprises,[20] **barter is slowing the process of enterprise restructuring**, hampering the development of wholesale markets, particularly for agricultural goods, **and impeding the development of bankable opportunities**. The problem is especially acute in the rural sector, where privatization and restructuring have not yet been effective. A noteworthy example is the failure of the tobacco sector tender in late-1996, which has postponed the monetization of what should be an internationally traded cash crop. Measures to reform the energy sector, particularly to demonopolize and privatize the electricity and gas sectors, as well as an extension of the pilot project for the distribution of individual land titles to farmers—both expected to accelerate in 1998—should go a long way to making progress in this area.

IV. THE HEALTH OF THE BANKING SYSTEM

Background

64. **Moldova's banking sector is relatively small**, with total bank deposits at end-1997 equal to less than 10 percent of GDP, and **highly concentrated and segmented**. Most banks are very small—almost two-thirds have total assets less than US$20 million—while the largest bank has total assets of US$220 million, about 28 percent of the whole. Emerging from the state planning period, the sector was split between four large state banks and a large number of private entrants. The large banks were privatized by end-1995 and the number of licenced banks grew rapidly to 27. Since 1996, there has been some **consolidation**: the number of banks declined to 23 by end-1997, of which 20 are domestically owned, while the share of the four former state banks has fallen. In 1996 two small banks were closed, in early-1997 one medium-sized bank was closed, and at year-end two small banks were at various stages of closure/liquidation. The Moldovan banking system is based on the Anglo-American model.

65. As described in Section III, the extent of **financial intermediation remains relatively low,** as reflected in a monetization level of less than 20 percent of GDP and a high proportion of cash in broad money (around 50 percent). Problems include underdeveloped financial infrastructure, the slow pace of enterprise reform—reflected in a high percentage of nonperforming loans and barter transactions—delays in introducing IAS, and still nascent technical and human capital skills. In addition, concerns regarding the privacy/confidentiality of banking transactions, as well as the risk of confiscation by tax authorities, represent serious

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[20]To the extent that barter represents a way to off-load nonmarketable goods, it allows enterprises to postpone restructuring or closure. This appears to be the case to a significant degree in Moldova, especially as relates to barter within the public sector.

handicaps to the development of the financial system. Nevertheless, **deposits have been growing slowly but steadily** at about 5 percent per annum in real terms, **major crises have been avoided, and important reforms have been put in place**. Interest rates have remained positive in real terms and interest rate spreads have generally been on a downward trend, especially during most of 1997 (Figure 6).

Regulatory developments

66. On the **regulatory front**, in late-1995 two important laws were passed—the central bank law and the law on financial institutions—both of which came into effect in early-1996 and formed a strong base for institutional development. Supported by external technical assistance, including from the Fund, the World Bank, and bilateral agencies, the NBM has been **progressively developing its supervisory capacity**.[21] **On-site inspections** were conducted beginning in 1995 and have been energetically pursued; all banks were inspected on site in both 1996 and 1997. Supervisory memoranda and enforcement orders have been issued to several banks, supported by a CAMEL rating system. Total **regulatory capital requirements** have been enforced, including with full risk provisioning since 1997. A three-tier bank licencing system[22] is in place and minimum capital adequacy requirements have been progressively raised in line with a medium-term strategy. As of January 1998, the **minimum capital requirement** was doubled to Mdl 8, 16, and 24 million for the three licence levels and the **total regulatory capital to risk-weighted assets** (TRC) requirement raised to 8 percent. The objective is to raise the TRC ratio to 12 percent by January 2000.

67. **Banking system assets** have been growing steadily from Mdl 3.0 billion at end-1996 to Mdl 3.7 billion at end-1997, some 11 percent in real terms. However, credit to the private sector has grown somewhat less rapidly as banks have accumulated significant holdings of treasury securities. In 1997, bank holdings of treasury bills more than quintupled to Mdl 220 million. Reflecting operational improvements, banks excess reserve levels remained virtually unchanged in 1997. Total **regulatory capital** rose 16 percent in 1997 to Mdl 540 million before provisioning for risk. For the banking system as a whole capital adequacy represented 24 percent of risk-weighted assets, although this overstates the true position as a few large banks were still not fully provisioning, and uncertainties exist as IAS was not yet in place. **Past-due credits** (over 30 days) represented almost 9 percent of total credit, up from about 8 percent at end-1996. While these ratios may not appear too alarming for a transition economy, several banks have considerably higher ratios, including some of the

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[21]This section draws on a detailed review by Coats, Warren and Faulk, Betsy and Walter "Building a Strong Banking Sector in Transition Economies: The Case of Moldova (October 1997)."

[22]Banking licences are granted in three categories as a function of minimum capital and the scope of permitted activities.

larger banks. The introduction of IAS will also help clarify **bank profitability**, which until now has been difficult to accurately assess. Under the old Gosbank set of accounts the sector has been consistently profitable on average.

68. As indicated above, **the banking system is very concentrated**, with the top four banks holding 70 percent of assets and 60 percent of household deposits. **This degree of concentration heightens the risk associated with individual bank failures,** and during 1997 two associated banks in the top tier received strongly unfavorable CAMEL ratings of four, reflecting nonperforming loans—in large part to associated companies—and risk provisioning inadequacies which compromise capital adequacy. These two associated banks together hold 35 percent of household deposits. The NBM has stepped up examinations, issued enforcement orders and has required a full-scale audit and diagnostic study for the largest of these banks.

Structure of deposits and lending

69. **The term structure of both deposits and lending** is highly concentrated in short-term instruments of less than a year maturity (about 85-90 percent of total). However, **a trend toward longer maturities emerged in 1997** (Figure 10). Deposits of a year or longer, which represented about 7 percent of the total in the first quarter, grew steadily to average 20 percent by the fourth quarter. A similar, if less pronounced, trend is evident for lending, with the share of loans of maturity over a year rising from about 10 percent in the first quarter to 14 percent in the fourth quarter. With increased macroeconomic stability—notably price

Interbank money and secondary markets

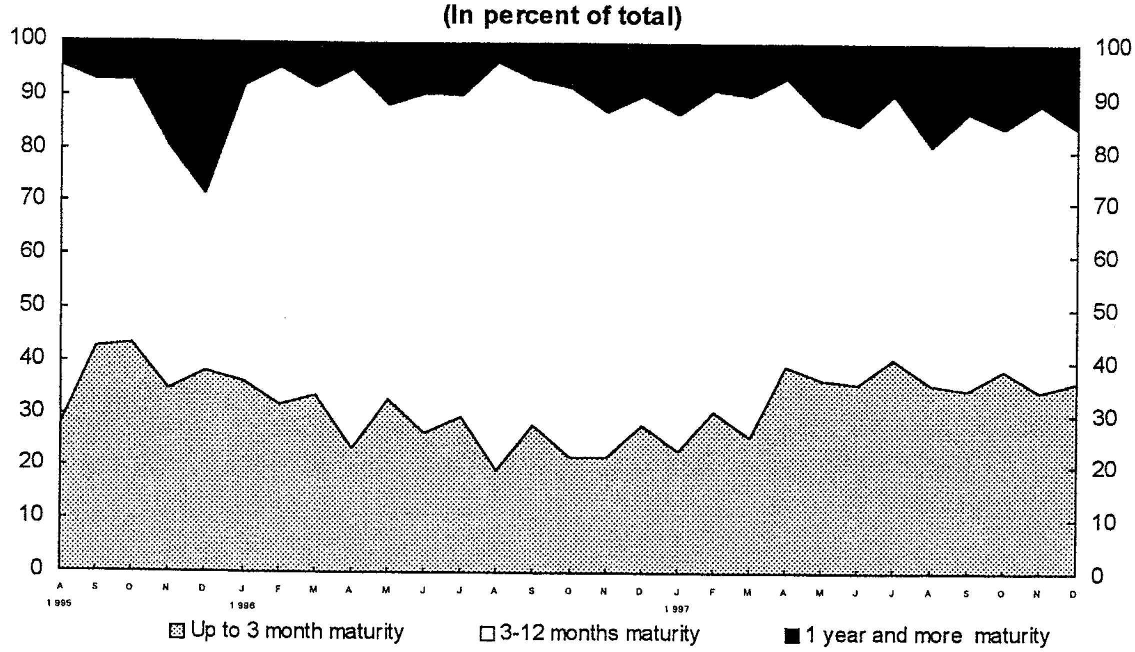
70. The development of an **interbank money market and a secondary market in treasury securities has been slower than expected**. Nevertheless, progress was apparent in 1997, especially regarding an interbank money market, where the volume of transactions nearly tripled from Mdl 29 million in the first quarter to Mdl 80 million in the fourth quarter. Data for 1997 show the market to be bimodal with about a quarter of transactions for seven days or less and 35 percent at one to three months. The one to three-month transactions are growing most rapidly. Secondary market transactions in government securities are also emerging although the market remains small and the trend is less apparent. The slow development of interbank money and security markets can be traced to a lack of confidence between banks, which in part reflects delays in implementing IAS, as well as a transactions tax on securities of 0.3 percent. Both of these impediments were removed with the new year.

Summary

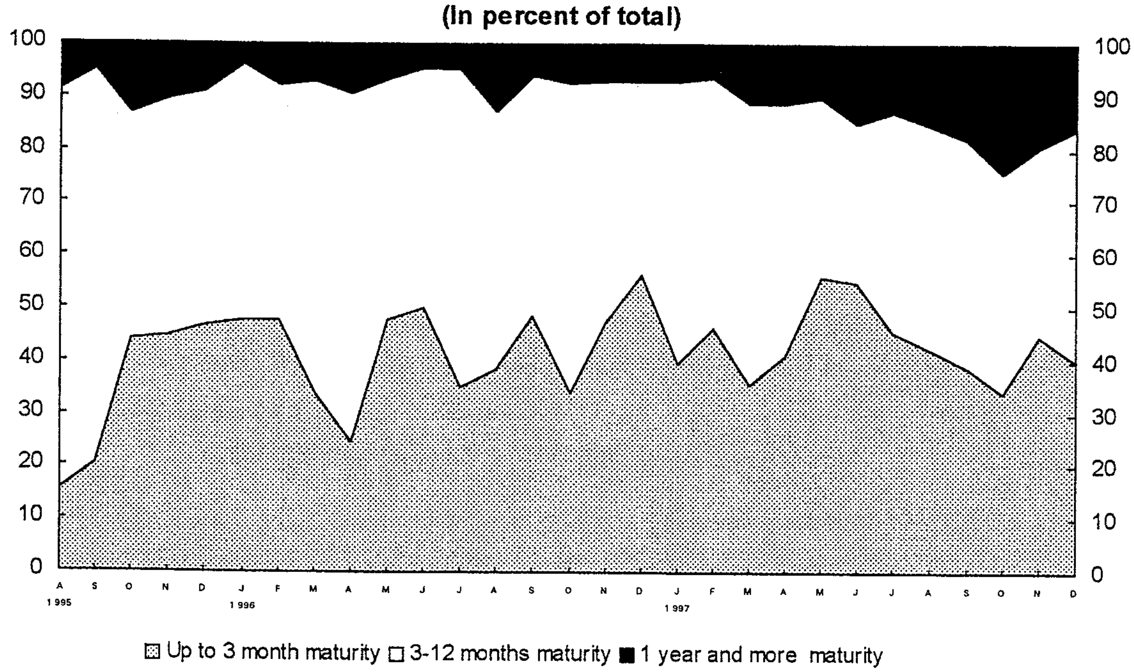
71. Some **positive trends have emerged in 1997**, notably the decrease in interest rate spreads, the growth of interbank markets, growth of assets, and consolidation in the number of players. As secondary markets develop, the excess reserve ratio can be expected to decline, as banks are better able to manage their liquidity positions. More efficient liquidity management

Figure 10. Moldova: Structure of New Loans and Deposits

Bank Credit 1/
(In percent of total)



Bank Deposits 1/
(In percent of total)



Sources: National Bank of Moldova; and Fund staff estimates.

1/ Domestic currency only.

can also be expected to support further reductions in interest rate spreads, as well as more competitive behavior in the treasury bill market. The raising and enforcement of capital standards through the developing banking supervision function at the NBM is also a very positive development. **Nevertheless, a deterioration in asset quality, and in particular the performance of two large banks, risks undermining the progress which has been made and underlines the importance of continued regulatory vigilance.**

V. PROGRESS IN TAX REFORM

Introduction

72. Moldova has developed a broadly-based tax system comprising many features existing in market economies.[23] Tax categories include levies on corporate and personal income, payroll taxes (social security contributions), VAT and excises, customs duties, stamp duties, and real estate taxes. Tax performance has been stronger than in many economies in transition, with collections stabilizing at around 28 percent of GDP in the period 1995-97, despite lagging economic growth.

73. The authorities are aware of the importance of having an effective tax system to support macroeconomic policies and have designed a reform program that involves thorough review and revision of tax legislation, strengthening of the tax enforcement and administration apparatus and introduction of adequate accounting procedures by enterprises. Efforts are also being made to limit tax exemptions, which the authorities recognize distort resource allocation, adversely affect tax equity and limit the system's capacity for revenue mobilization.

74. The authorities have already introduced new corporate and personal income tax codes, which started operating in January 1998. A revised VAT code was approved by parliament in 1997 and is scheduled to be introduced in July 1998. Efforts to improve tax enforcement and administration include strengthening auditing procedures, consolidating enforcing agencies, expanding computerization of the system, introducing individual "tax identification numbers" (TIN) for all taxpayers and establishing a "large taxpayers" unit to prioritize tax compliance. Furthermore, significant progress has been made in the introduction of accounting procedures compatible with IAS, to support efficient tax reporting and auditing (Box 4).

Box 4. Introducing New Accounting Standards

New accounting procedures consistent with the IAS are being implemented from January 1, 1998. The authorities recognize that the introduction of new accounting norms for enterprises is difficult and they have envisaged a gradual transition process, which started in August 1996. This process contemplates an intense training program, supported by international organizations (USAID provided a US$450,000 grant to hire foreign consultants); these training programs are expected eventually to include about 40 thousand accountants including staff of the state tax inspectorate.

[23] Annex II provides a description of the current tax system.

Reforming the tax system

75. The new **corporate income tax** code was approved by parliament in mid-1997 and came into force in January 1998. The new code replaces previous complex legislation contained in some 30 laws. The main changes are as follows:

- Previously scattered legislation was consolidated into a **single corporate income tax document**;

- **Tax rates** were unified at 32 percent, compared to the previous system, which included several special rates, ranging from 25 to 32 percent, applying to different activities such as banks and insurance companies, joint ventures, sport and cultural activities. In addition, many special **tax exemptions** were eliminated;

- **Agricultural enterprises**, previously exempt for income tax, are subject to the new corporate income tax, though this will be phased in gradually. Initially, the benefits are quite generous (starting with the tax rate reduced by 80 percent) and will fall gradually through the year 2000 (when the tax rate reduction will be cut to 20 percent). Special concessions are also contemplated for insurance businesses;

- Taxable income is now defined after **allowances for ordinary expenses** needed to conduct business, including business trips and entertainment expenses within limits approved by corresponding regulations. Deductions are also allowed for nonperforming assets and provisions for bad loans;

- **Depreciation allowances** were simplified into five categories ranging from 3 percent to 30 percent per year; depreciation may now include intangibles and depletion deductions.[24] Also, investment incentives were introduced through accelerated depreciation allowances;

- New rules provide for **carry-over of losses** for up to three years, consistent with internationally accepted corporate taxation standards;

- New **corporate accounting** standards were introduced in January 1998; but state-owned enterprises will be allowed delayed introduction of the new procedures until 1999;

- The new legislation introduces a **capital gains tax**;

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[24]Depreciation allowances previously distinguished some 1,500 different categories of assets, making the system complex to administer and control.

- The new code recognizes previously established provisions in international treaties avoiding **double taxation**;

- There are provisions for final **withholding of taxes on dividends distribution** at a 32 percent rate, with a corresponding credit against income tax on the distributing entity. Individuals are not required to report dividends if the corresponding tax has already been subject to withholding by the entity; and

- While many previous special exemptions and favorable rates were eliminated, some were maintained through "grandfather clauses," such as a 50 percent reduction in the rate applicable to **joint ventures** with foreign participation.

76. Overall, the new corporate income tax code represents a major improvement, although some operational problems will take time to be satisfactorily solved. Adoption of international accounting standards and standardized allowances for deducting business related expenditures should facilitate foreign participation in economic activities. Nevertheless, a number of administrative procedures remain cumbersome and unclear. For example, enterprises are still required to submit quarterly financial statements, which constitute a major burden for small- and medium-size enterprises. This is a difficult requirement, in particular for an economy undergoing a major economic transformation process and still lacking adequate support in terms of staff and equipment. Also, while new accounting standards were introduced starting January 1998, it will be some time before such systems are fully operational. Other difficulties include dealing with the impact of past price distortions on the valuation of assets and merchandize stocks. A significant learning process still has to take place, both by staff of the enterprise sector and the state tax inspectorate (STI). While the new tax code was designed to be broadly revenue neutral, some of the new features are likely to cause an initial revenue loss to the budget; in particular, the introduction of accelerated depreciation and provisions for loss carryover.

77. The new **personal income tax** code was approved by parliament at the same time as the corporate income tax code and also came into force in January 1998. The main characteristics are as follows:

- The new legislation simplified the **tax rate structure**, with a 20 percent rate applicable to taxable income up Mdl 10,800 and a 32 percent rate for additional income. This compares with four rates, ranging from 10 to 40 percent, under the previous system. Tax brackets are now defined in terms of the minimum wage rather than the previous nominal brackets which had not been adjusted since June 1994;

- New **personal exemptions and allowances** include a much higher basic deduction of Mdl 2100, compared with the previous basic exemption for personal income below "eight times the minimum monthly wage" (equivalent to Mdl 144 in 1997). The new legislation also provides exemptions for the customary family allowances as well as deductions for invalids or individuals under special circumstances (veterans, etc);

- The **definition of income** has been broadened, gross income is now defined to include remuneration, fees, commissions, bonuses, interest income, rents, annuities, capital gains, and fringe benefits. Excluded from the tax base are receipts from gifts and inheritance, compensations for work injury, alimony, severance payments mandated by law, and pensions from the social fund; and

- Legislation provides for **easier administrative procedures**; for example, there is (final) tax withholding on income from distributed dividends, and individuals are not now required to report such income in their tax returns.

78. These reforms, particularly the broadening of the definition of personal income, the simplified rate structure, and simplified administrative procedures, represent a substantial improvement. The financial impact of the new system remains to be fully assessed, but initial estimates suggest a modest revenue loss caused by the revised rate structure and a higher exempted income threshold.

79. The new **VAT** was approved by parliament in late 1997 and is scheduled to start operating in July 1998. The 20 percent rate tax will be maintained and the tax will apply, in principle, to most business activities. A number of major improvements are incorporated in the new legislation, in particular:

- Introduction of the **destination principle**, except for a transitional arrangement with Russia pending completion of bilateral negotiations;

- Full requirement for **invoices** for determining both tax liabilities and credits; and

- Detailed specification of **administrative and accounting requirements** which should significantly improve tax administration and enforcement.

80. The new tax will replace a VAT, initially introduced in 1992, which has many shortcomings. First, there are confusing arrangements using a mixture of the origin and destination principles: imports from a number of BRO countries are exempt while exports to these countries are subject to VAT; on the other hand, imports from non-BRO countries are subject to VAT while corresponding exports are exempt. This leads to opportunities for tax evasion through misrepresenting the origin or destination of consignments. Second, administration of the tax is further complicated because tax liabilities are determined using two methods, the credit method is used in the primary and manufacturing sectors while the gross margin method is used at the distribution and retail levels. Third, the system has become severely distorted as a result of various exemptions introduced over time, which have significantly eroded the tax base and made the system complex to administer.

81. The main features of the new system are as follows:

- There will be a single **20 percent rate**, with exports zero rated;

- The **destination principle** will be introduced for all trade; imports will be subject to tax at entry into the country. There is, however, a temporary clause, which will maintain use of the origin principle for trade with Russia (which continues to use the origin principle for trade with BRO countries) during 1998, pending the results of ongoing negotiations;

- Operationally, the new VAT will be based on **invoices**. Issuing of invoices will be required for each transaction to determine tax liabilities and credits in a transparent manner, and the authorities will issue a comprehensive set of regulations on the information content of invoices. Tax obligations will be calculated as the difference between the liabilities, determined on the basis of total taxable sales, and the corresponding tax credits for all inputs for each tax period, including imported goods and services. Exporters having excess taxes credited will be entitled to a refund; all creditors will be required to be in possession of supporting VAT invoices;

- The VAT law limits **exemptions** to sales of residential premises, lease of land, food and books for children, toys, education and health services, financial transactions and insurance, services by casinos, imports related to assistance for natural calamities or war, temporary imports and goods in transit. There will also be an exemption for noncommercial imports by individuals of up to US$250; and

- All business activities with operations in excess of a **threshold** will have to be registered with the STI; taxpayers with sales under the threshold may opt to register. The regular VAT filing and payment period will be shortened from quarterly to monthly; but quarterly filing will be allowed for small taxpayers defined as having gross sales under a given threshold.

82. Although the new law represents substantial progress, the VAT system is likely to remain subject to distortions arising from the practice of including additional exemptions in the annual budget law. A particularly damaging example of this was the decision of parliament during discussion of the 1998 budget to exempt the agricultural sector from VAT.

Tax administration and reforms

83. Tax collection responsibilities are divided between the customs department and the STI; the customs department administers customs duties while the STI is responsible for collecting domestic taxes, including social fund contributions.

84. Significant efforts have been made to improve tax administration. At the time of introduction of the new income tax codes, the authorities upgraded procedures for tax payer registration and the issuance of TINs. They also introduced revised accounting procedures consistent with internationally approved standards, established new procedures for assessing penalties for late payments and for tax appeals, and issued standards governing the behavior of STI officials. New tax reporting and withholding forms for VAT and income taxes have also been designed (Box 5).

Box 5. Taxpayers and the STI structure

To improve administrative procedures, TINs have been issued to over 80 percent of the 130,000 registered business. About a quarter of the registered business are in the capital, Chişinaŭ; other large centers include Dubasary, Hincesti and Telenesti (which, combined, account for nearly another quarter of registered businesses). The STI has a staff of some 2300 officers, its headquarters are in Chişinaŭ and there are 46 local tax offices throughout the territory .

85. The STI has recently been reorganized, with a separate tax audit function established in each tax inspectorate office, under the guidance of the STI. New business registration procedures aim to reconcile tax registration information with data from the ministry of justice. There has also been substantial progress in computerization of the STI, which is expected to improve efficiency and significantly strengthen tax auditing and control procedures.

86. The authorities are also considering unifying under one deputy minister of finance all tax-enforcement functions, including the STI, the financial guard, the economic police (currently under the ministry of interior), and eventually the customs administration. The staff of the STI is undergoing a review to assess the adequacy of its personnel and define training needs. To help focus resources where they will be most effective, the authorities plan to establish a large taxpayers' unit, with the assistance of a Fund short-term resident advisor.

Assessment and remaining reforms

87. The authorities have made considerable progress in developing an effective, modern tax system in the period since Moldova's independence in late 1992, and several key reforms are currently being implemented. They are aware, however, that much remains to be done, especially because fiscal pressures are likely to require at least the maintenance of the current ratio of revenues to GDP in the years ahead. Tax collection efforts continue to be undermined by widespread exemptions, amnesties, payment in kind, and tax avoidance, requiring tax rates to be maintained at a high level. The latter increases the incentives for tax evasion and shadow economy activities.

88. Priority areas for further reform include the following:

- Reform of **social security contributions**, to improve cash collections, eliminate payment in kind, and reduce the currently excessive 31 percent payroll tax rate

(30 percent for employers, 1 percent for employees). Progress here will require restructuring of the expenditure side of the social fund, which is now underway with World Bank assistance;

- Ending the practice of **ad hoc exemptions and amnesties**, granted on the basis of various circumstances (e.g., floods or droughts) and political considerations, which have particularly benefited the agricultural sector; for example, major forgiveness of tax obligations and penalties were granted twice in 1997;

- A broad review of the impact of taxation and subsidies on the **agricultural sector**, which is being undertaken with World Bank support. This should include a review of **land and real estate taxation**, and the plans to phase in slowly the corporate income tax in this sector. Currently the land tax is the main tax on the agricultural sector but it raises relatively little revenue; and

- Continued **strengthening of tax administration** procedures to enhance compliance, including through greater use of bankruptcy and liquidation, and improve transparency. The STI needs to develop clear procedures for collecting taxes in cooperation with the banking system and terminate the practice of appropriating funds from taxpayers in arrears without formal judiciary procedures.

VI. Barter in the Moldovan Economy

The nature of barter

89. Barter is pervasive throughout the countries of the BRO. In Moldova, as elsewhere in the region, the **incentives for barter** (and related noncash offset and netting operations) arise from a number of considerations, such as the desire to maintain former trading relationships, and enterprise employment and benefits, despite insufficient cash flow for operations and investment; and opportunities for personal gain through manipulation of prices and concealment of transactions in the shadow economy. Barter is also a legacy of the state planning system of the Soviet Union, with its administrative approach to the allocation of resources, and is thus a way of transacting business with which most enterprise managers are familiar.

90. Barter **distorts and inhibits economic growth**. In general, it inhibits transparency in economic transactions and tends to perpetuate nonmarket pricing, e.g., mispricing of goods and/or under reporting of income both to tax authorities and enterprise owners. In addition, it relieves producers of the obligation to commercialize their sales.[25] This environment has, in

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[25]In the debt-ridden state agricultural sector, for example, it has been much easier for former state farms to turn over their produce and let the state worry about marketing it, rather than try to generate cash which in any case would be taken by the state in payment for current and

(continued...)

turn, been detrimental to the establishment of wholesale markets for agricultural commodities, and to the growth of private sector farms which have neither the access to barter of large agro-producers, nor access to a well-developed cash market. In a nonagricultural context, barter tends to favor cronyism, stifling competition and allowing inefficient producers to remain in the marketplace. Barter also slows development of the banking system (indeed, it is partly a response to the wish of many enterprises to avoid the banking system, where their funds can be seized), and thus undermines a vital channel for intermediating savings and funneling resources into the most productive investment.

91. This sector presents available evidence on the extent of barter, and noncash transactions more generally, in several key sectors of the economy and considers measures which are being or could be taken to eliminate barter.

Government barter operations

92. In recent years, noncash payments, in the form of payments in kind and offset operations,[26] have been an **important revenue component of the consolidated budget and social fund**. For the social fund, the share of such receipts in 1997 reached half the total, while for the consolidated budget, it amounted to about a third (Table 10).

Table 10. Noncash Payments to the Budget and Social Fund

(In percent of total receipts)

	Consolidated budget	Social fund
1997 H2	37	50
1997 H1	26	50
1996 H2	41	30
1996 H1	27	9

Source: Information provided by the Moldovan authorities.

[25](...continued)
overdue tax liabilities. In addition, in the Moldovan environment, the finding of a buyer for agricultural products may be easier when one is not limited to a cash purchaser but can also accept a good (e.g., energy) as payment.

[26]An example of the latter would be where the budget has liabilities to an energy company, and a third party, with a tax liability to the budget, produces a product demanded by the energy company. The third party sends its product to the energy company, reducing its tax liability by the value of the goods; and the government deducts the value of the goods from its liability to the energy company.

93. **Noncash payments (barter and offsets) reduce budgetary flexibility**, since the ability to meet changing expenditure priorities without cash in hand is severely constrained. The willingness of the budgetary authorities to accept such payments also softens the budget constraints facing less efficient enterprises, thus making the government an implicit partner in perpetuating a sub-optimal pattern of production. The acceptance of payment in kind by the tax authorities undermines the incentive of economic agents to pay in cash, so perpetuating the inefficiencies of the noncash payments system.

94. In the last quarter of 1997, the ministry of finance announced that it would henceforth **stop accepting payments in kind or offsets in satisfaction of tax liabilities**, although commodities may still be seized by the tax authorities and sold at auction to satisfy tax arrears. In-kind payments are **still accepted by the social fund**, which also pays pensions, on a voluntary basis, with selected commodities (e.g., coal and sugar) available at special shops for pensioners. In principle, such in-kind pension payments are valued at market prices. In-kind payments were used extensively in 1997 to clear pension arrears for 1996. In addition, a small proportion of 1997 pensions were paid in-kind (about 5 percent), though the share was rising toward the end of the year.

Payments to energy companies

95. **The share of cash payments is particularly low in the energy sector**. Energy costs are one of the highest costs of doing business for enterprises, which are often faced at the same time with inadequate distribution networks or wholesale markets in which to dispose of their products, or where implicit prices for payment in kind may be more advantageous than by selling them at current market prices. Government also encourages barter (and offset) payments for energy, as a means of disposing of commodities received in respect of tax liabilities, and to help finance its own energy needs. In addition, the government sometimes takes decisions directing enterprises (including but not limited to energy enterprises) to accept payment in kind (see the example of Moldovagaz and apples, below). Finally, for their own part, energy enterprises may hope to derive additional profit from advantageous pricing in the receipt and payment of commodities rather than cash.

96. Data on payment for energy deliveries by the two main energy suppliers, Moldovagaz and Moldenergo,[27] show that in 1997, only one seventh of the cost of energy supplied by Moldovagaz, and about twice that from Moldenergo, was covered by cash payments (Table 11). By contrast, noncash payments in the form of reciprocal accounting, including for payment in kind, accounted for a third of the cost of gas supplies (Moldovagaz) and nearly two-thirds of other energy supplies (Moldenergo).

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[27]Nearly all of Moldova's natural gas is imported by Moldovagaz from Russia's Gazprom. Much of the gas is used by Moldenergo to produce electricity, and other companies to produce thermal energy.

Table 11. Payment for Energy Deliveries in 1997

(In percent of cost of total deliveries)

	Cash payment	Noncash payment	Arrears
Moldovagaz	14	36	50
Moldenergo	29	63	7

Source: Information provided by the Moldovan authorities.

97. In addition to the general undesirability of barter payments, in the energy sector such payments have **diverted significant management and other resources** away from dealing with the urgent problems of restructuring the energy sector along market lines and into opposed activities dealing with the acquisition, preservation, and disposition (sale or use as a barter payment) of commodities. The low share of cash payments has also greatly inhibited needed repairs and investments.

Barter in foreign trade

98. Barter is also a **significant component of foreign trade**, particularly with other CIS countries (Table 12). In 1996, barter trade accounted for 19 percent of the value of exports (24 percent of exports to the CIS), and 15 percent of imports (20 percent). Preliminary data for 1997 indicate a decline in the shares.

Table 12. Barter as a Share of Foreign Trade

(In percent)

	Exports		Imports	
	Total	CIS	Total	CIS
1996	19	24	15	21
1997	15	16	11	18

Source: Data provided by the Moldovan authorities.

99. Barter in foreign trade, as well as sharing the disadvantages of domestic barter, also has the additional feature of **distorting the terms of trade and weakening net receipts of foreign exchange**. This is because, in general, a prospective importer wishing to pay in kind is in a weakened negotiating position vis-à-vis the seller. At the same time, when exporters are known to accept payment in kind, there is room for price distortion and "special commissions."

Enterprise operations

100. Barter is **widespread throughout enterprise operations**, especially in transactions between agricultural producers and processors which often have close links through cross ownership arrangements. The government often intervenes directly to facilitate or promote

such barter transactions. Examples of barter transactions at the enterprise level will illustrate its use and its problems.

- In the autumn of 1997, the government acted to hold apple prices at higher-than-market levels in the face of an abundant crop, in order to help agricultural producers. The ministry of finance in essence bought the apple crop and ordered it directed to some canning enterprises. It allowed apple producers to write down tax liabilities for deliveries of apples to canneries at the higher (administered) price, while obliging Moldovagaz and several other enterprises to provide services in kind (natural gas, electricity, transport) to the company designated by the government to procure the bulk of the crop. The ministry then used the processed apples as a means of payments for its own liabilities, including to enterprises earlier obliged to provide services in kind.

- In many other instances, producers of raw materials have been paid in kind by processors for their products: tobacco farmers in cigarettes, sugar beet producers in processed sugar, and apple producers in apple juice. In some cases, e.g., the tobacco sector, the government actively discourages the sale of raw materials to cash buyers, such as foreign processing companies.

101. The share of barter payments in enterprise sales is available for over a 100 enterprises with financial restructuring agreements with the state creditors' council. These shares may be higher than for enterprises sales generally, since presumably enterprises seeking restructuring are also in less of a position to insist on cash payments than those in better financial heath. Nevertheless, the data are suggestive of a large share of barter payments in enterprise operations, especially for those in the agricultural sector (Table 13).

Table 13. Barter in the Sales of Companies with Agreements with the State Creditors' Council, 1997

(In percent)

	Total	Agricultural
I	51	61
II	51	44
III	44	56
IV	43	61

Source: Information provided by the Moldovan authorities.

102. The consequences of the large share of barter sales by enterprises is similar to that for energy companies: enterprise flexibility to deal with changing business conditions is reduced, while significant management resources must be deployed to manage and dispose of the commodities. The presence of large commodity stocks also encourages companies to attempt to meet tax liabilities with commodities.

Conclusions and possible measures

103. The discussion above points to the pervasiveness of barter and related operations in the Moldovan economy. Far from regarding it as bad, many in and out of government accept barter as a necessary, albeit second-best, way for the economy to function in a situation where absent or poor enterprise profits and an aversion to the banking system lead many enterprise managers to seek other ways to conduct business. In this view, barter prevents the collapse or contraction of many enterprises and government services. But this is a self-fulfilling prophecy, since the use of barter transactions can acquire an impetus of its own, as participants have an incentive to ask others to participate in barter transactions so as to dispose of goods acquired in earlier transactions. Thus, there can be a kind of "chain letter" effect in which the share of barter trade tends to grow. In addition, in external trade, the willingness of some external partners to engage in barter makes it difficult for Moldova alone to abstain.

104. Given its distortionary effects on the pricing system and pattern of production, viable enterprises, financial institutions, and the government should all have a stake in ending barter. Only the most inefficient producers, and individuals that benefit from mispricing and lack of transparency, do not, since barter is, in effect, a subsidy to them. The elimination of barter should go hand in hand with the effective operation of incentives for economic agents to pay in cash, rather than run up arrears, when payments in kind are no longer accepted. To this end, producers, especially in the agricultural sector, need access to wholesale markets where commodities can be turned into cash at market prices. Producers should also know that in the event of a failure to meet tax or other liabilities, effective bankruptcy procedures can be invoked.

105. Probably the most important measure to reduce the scope of barter would be for the **government to cease completely its participation in noncash and offset operations**, and its encouragement of such transactions by others. Although the ministry of finance has taken an important step in this direction, the social fund remains actively involved in such operations. A ban of this sort would help to short-circuit the reinforcing nature of barter transactions throughout the economy. Such a step would need to be supported by **complementary structural measures**, many of which the authorities are implementing as part of their medium-term program, including:

- Measures to facilitate adequate **wholesale markets**;

- Effective **bankruptcy procedures**;

- **Fiscal consolidation and structural fiscal reforms**, which would allow reductions in the high burden of taxation, thus removing some of the incentives for tax avoidance, including through barter and other noncash transactions;

- **Strengthening of the banking system**, which would increase the use of banks in settling transactions; and

- Further **privatization**, especially in the agricultural sector, that will weaken links with agricultural producers.

VII. Current Account and External Debt Developments

106. The deterioration of Moldova's external current account over the past two years and the associated rapid rise in external debts raises concerns about the external position. This section examines the evolution and structure of the balance of payments in recent years, analyses the likely causes of the deterioration and draws some conclusions about the policies needed to correct the imbalances.

Evolution of the current account

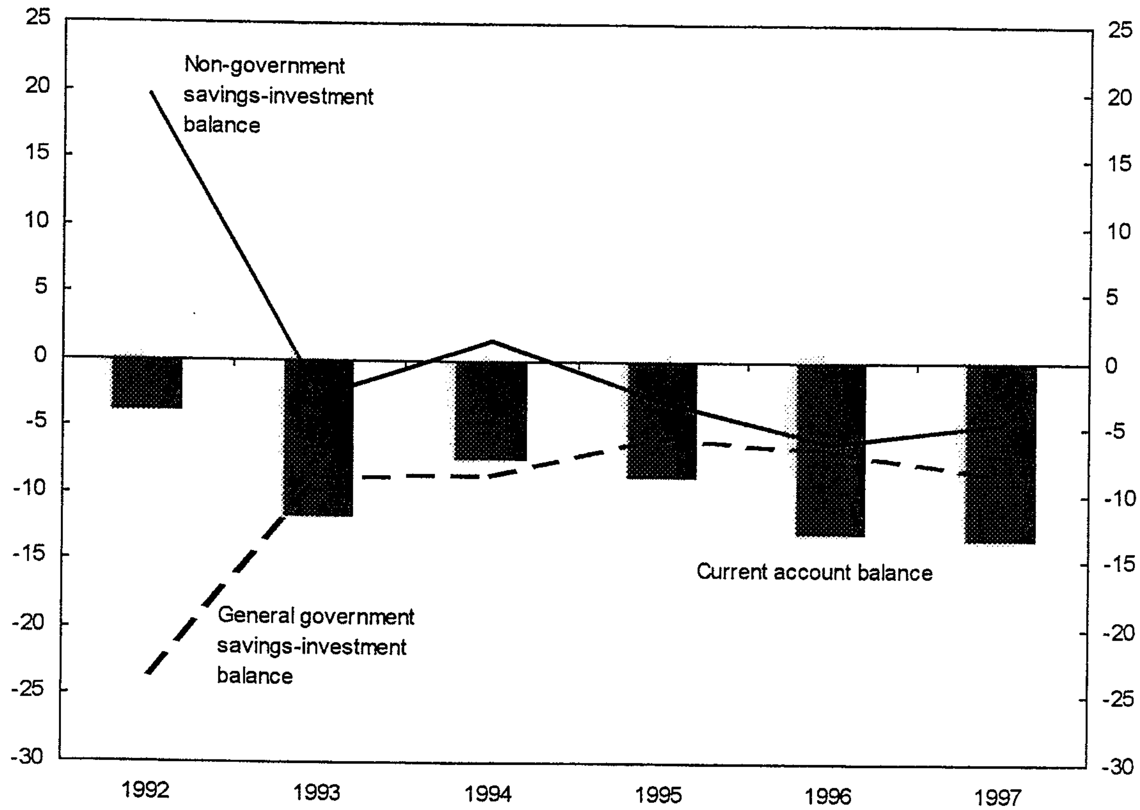
107. The **current account deficit** rose sharply from 8¾ percent of GDP in 1995 to over 13 percent in 1997. This was mainly due to a deterioration in the merchandise trade balance, reflecting rapid growth of imports of about 45 percent over the two years, and modest growth of exports of only 11 percent over the same period. Strong **import growth** appears to have been at least partly a result of rapid increases in real private sector demand, especially private consumption: official data suggest that real private consumption rose by about 15 percent between 1995 and 1997, while real fixed investment increased by nearly the same percentage. Weak **export performance** was associated with supply side problems in the agricultural sector, especially in 1997 when the grape and sunflower crops—both key export earners—were poor.

108. The widening current account deficit since 1995 reflected both an increase in the **fiscal deficit**, on a cash basis, and a deterioration in the **private sector savings-investment balance** (Figure 11). The former probably helped to fuel domestic demand growth, while the latter partly reflected a lack of hard-budget constraints which allowed Moldovans to finance increased spending in part through arrears accumulation.

109. Analysis of the **commodity composition of trade** tends to confirm a shift within imports toward consumer goods and reveals an increasing dominance of agricultural sector products in exports, despite recent poor harvests (Figure 12). The share of consumer goods, such as agricultural and food products, plastics, electric appliances and cars, in total imports increased from 24 percent in 1993 to 34 percent in 1997. Energy imports continued to grow in absolute terms but their share in total imports declined from 34 percent to 29 percent. On the exports side, the share of agricultural and food products increased from about 70 percent in 1993 to 78 percent in 1997. The share of some manufactured products such as plastics, textiles, cement and stone products also grew, albeit modestly, while the share of minerals, metals, machinery and electric equipment declined significantly.

110. **Direction of trade** data show a steady rise in the share of Moldova's trade with "the West" relative to traditional trading partners in recent years, especially on the import side (Table 14). Nonetheless, Moldova's trade remains predominantly with BRO countries, Romania, and Bulgaria. While the share of imports from Germany, Italy, and the United States

Figure 11. Moldova: Savings-Investment Balance and the Current Account
(In percent of GDP)



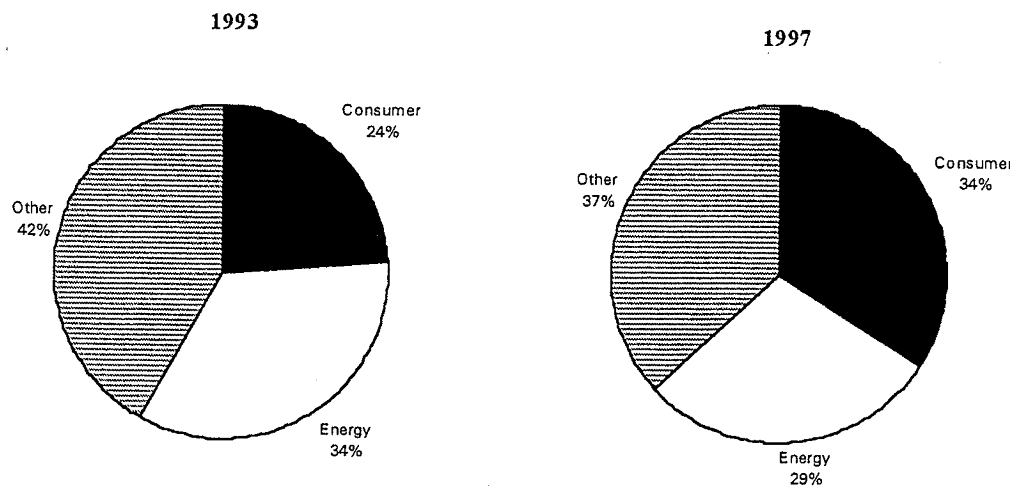
Sources: National Bank of Moldova; and Fund staff estimates.

has increased steadily from 7 percent in 1993 to 17 percent in 1997, around 50 percent of Moldovan imports still come from Russia and Ukraine, and over 66 percent from traditional trading partners. Russia alone receives more than 50 percent of total Moldovan exports, while Romania and Ukraine come next with significantly smaller shares. The share of exports to the West has risen modestly, from 12 percent in 1993 to 19 percent in 1997.

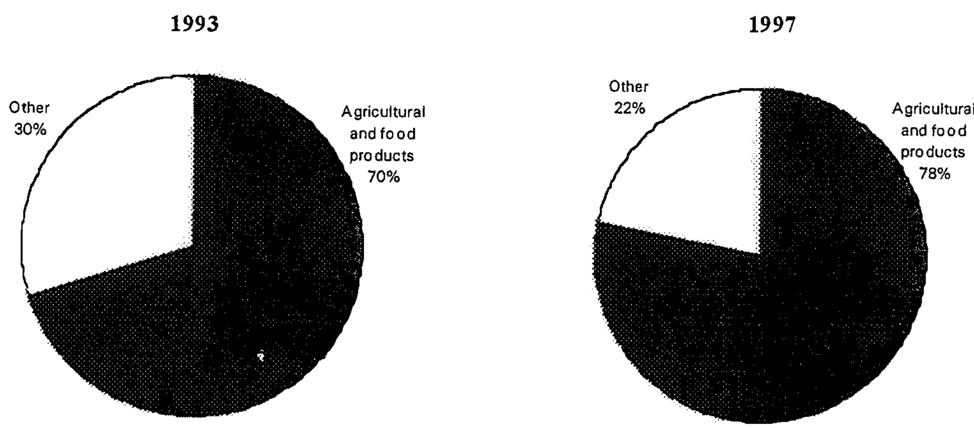
111. These developments suggest considerable scope for expanding Moldova's exports to new markets, including in the EU, while maintaining a strong position in markets of BRO countries. While it is likely that exports will continue to be dominated by agricultural products, especially wine, where Moldova has a strong comparative advantage, there is scope for the volume and price of these exports to rise with improved marketing and reforms to encourage private investment in these sectors.

Figure 12. Moldova: Composition of Trade

IMPORTS



EXPORTS



Sources: Moldovan authorities; and Fund staff estimates.

Table 14. Direction of Trade
(in percent of total)

	Exports					Imports				
	1993	1994	1995	1996	1997 Estimate 1/	1993	1994	1995	1996	1997 Estimate 1/
BRO	63	72	63	68	73	71	72	68	62	52
Russia	36	51	48	54	62	35	47	33	27	29
Ukraine	13	12	8	6	5	21	19	27	27	18
Belarus	4	4	4	4	4	5	3	6	6	4
Others	10	5	4	4	2	10	3	2	2	1
Non-BRO	37	28	37	32	27	29	28	32	38	48
Romania	22	15	14	9	7	11	6	7	7	9
Germany	3	4	6	4	4	4	5	5	6	8
Bulgaria	3	2	3	2	1	1	2	4	6	5
Italy	1	1	2	3	3	1	1	2	3	4
United States	0	0	1	1	2	2	3	1	1	4
Others	8	6	11	13	10	10	11	13	15	18

Source: Data provided by the Moldovan Department of Statistics.

1/ Based on preliminary data for the first 11 months of the year.

112. **Barter** continues to constitute an important, albeit declining, part of Moldova's external trade. Much of this reflects payments in kind for energy imports. In 1997 barter constituted about 15 percent of exports and 11 percent of imports. Such payments in kind are liable to lead to losses through mispricing, and the prevalence of barter and resulting inability or reluctance of many Moldovan enterprises to engage in cash transactions may well have held back the growth of trade with the West.

External competitiveness and trade potential

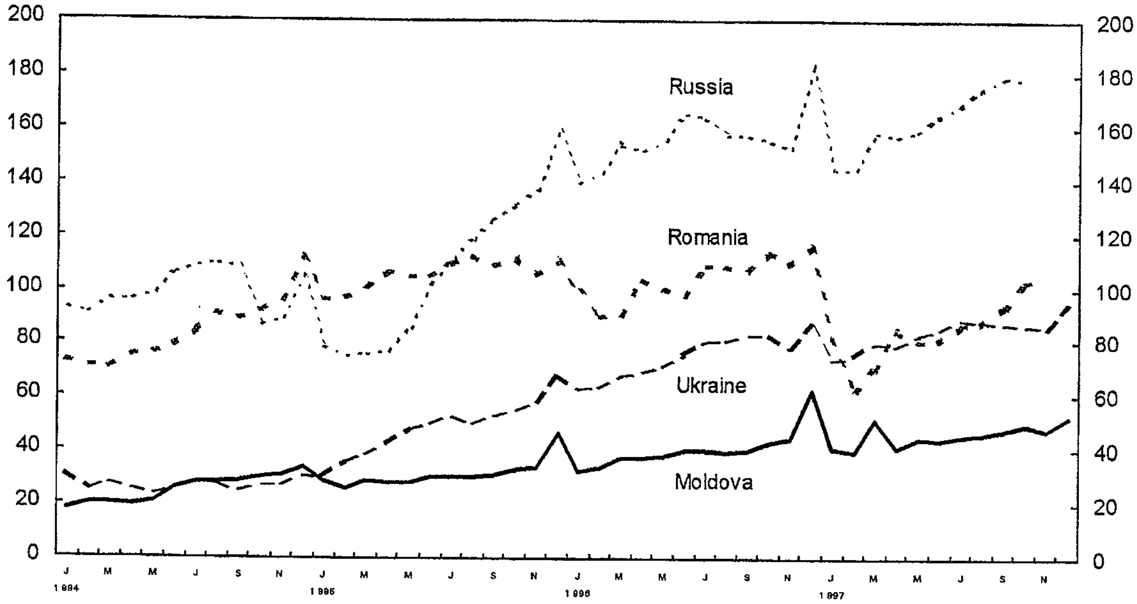
113. Indicators of **price and cost competitiveness** do not suggest that deteriorating competitiveness is a major factor behind the higher current account deficit. The nominal exchange rate of the Moldovan leu against the U.S. dollar has been broadly stable since mid-1995, and the leu has appreciated against the major European currencies over this period. However, the **real effective exchange rate** has appreciated at a moderate rate since 1995, from a level following the introduction of the leu that is generally regarded as having been undervalued (Figure 13). **Dollar wages** have been increasing steadily but at US$47 a month on average they are still low compared to other countries in transition.[28] Moldovan exports have been gaining a larger market share, despite the real appreciation of the leu (Table 15).

114. Undoubtedly, real exchange rate appreciation has been unhelpful to exporters, and there is no shortage of exporters complaining of competitiveness problems. However, these problems appear mainly to reflect **"nonprice" factors**, related to lack of structural reforms, bureaucratic interference, and a weak legal system. Like in other economies in transition, there

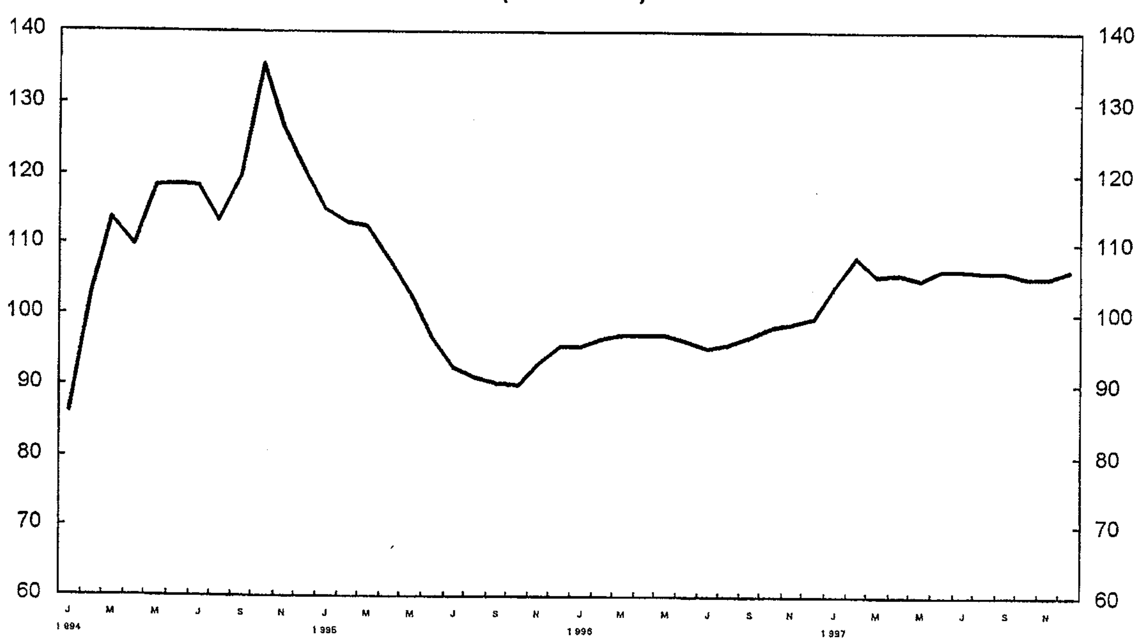
[28]It is recognized that these are only partial indicators of competitiveness but better measures, such as relative unit labor costs, are subject to serious data deficiencies.

Figure 13. Moldova: Competitiveness Indicators

Average Wages
(In U.S. dollars per month)



Real Effective Exchange Rate 1/
(1995 = 100)



Sources: National Bank of Moldova, Moldova Department of Statistics, IMF IFS; and Fund staff estimates.

1/ Increase indicates appreciation.

is great scope for increasing productivity through progress in structural reforms, especially in the agriculture and energy sectors, and through improving the regulatory and legal environments. The importance of these reforms for competitiveness has been confirmed by the experience elsewhere in Eastern Europe, where export expansion and strong local currencies have coexisted in the context of strong structural reforms. Studies have shown that main impediments to Moldova's exports growth are related to industry and trade development, innovation, quality control, and marketing.[29]

Table 15. Relative Exports Performance
(Annual change in U.S. dollar trade, in percent)

	1993	1994	1995	1996	1997	Period average
Moldova's exports	2.8	28.2	19.5	11.2	0.2	12.4
Trade partner's imports	-2.5	9.8	31.7	0.0	-2.4	7.3
World imports	-1.8	13.7	19.3	3.9	2.1	7.4

Sources: NBM, WEO; and Fund staff estimates.

Evolution of external debt

115. The large current account deficits have been financed mainly by **debt accumulation** (Table 16), including borrowing from multilaterals, arrears to energy suppliers, sales of treasury bills to nonresidents, issuance of Eurobonds, and other commercial borrowing. This has led to a rapid accumulation of external debt from zero at the time of independence to the equivalent of 55 percent of GDP (including enterprise energy arrears) at end-1997. Among BRO countries, only Tajikistan has a higher debt to GDP ratio.

116. In contrast, **foreign direct investment** has so far been modest, as reflected in the disappointing results of international tenders for major enterprises, notably the tobacco sector and Moldtelecom. Investors appear to be concerned in particular about inadequate legal protections and lack of transparency in the tax system and the conduct of tenders.

117. Whereas, initially, increases in debt largely reflected fairly long-term borrowing from multilateral and bilateral sources, more recently there has been a switch to **shorter-term commercial debt** (Table 17). The share of commercial creditors increased to about 30 percent of total debt in 1997, while the share of bilateral debt, and to a lesser extent multilateral debt,

[29]See for example "Trade Development strategy 1997-200," ministry of economy and reforms, Republic of Moldova, November 1997; and "Republic of Moldova: Strategy for Development," Center for Strategic Studies and Reforms, Chişinaŭ, January 1997.

Table 16. Financing of Current Account Deficit and Amortization

(In millions of U.S. dollars)

	1994	1995	1996	1997
Total financing needs	-115	-204	-272	-365
Current account	-98	-146	-250	-292
Amortization	-18	-58	-23	-73
Capital inflows	182	194	234	441
Foreign direct investment	18	73	53	64
Portfolio investment 1/	0	0	53	238
Loans disbursements	175	132	119	93
Other capital flows	-83	-75	-17	46
Net use of Fund resources	72	65	25	1
Other financing sources	-67	10	38	-76
Debt rescheduling	0	0	46	8
Debt arrears	18	21	-38	27
Energy arrears	122	47	61	-76
Errors and omissions	-105	21	27	17
Change in reserves	-102	-78	-58	-51

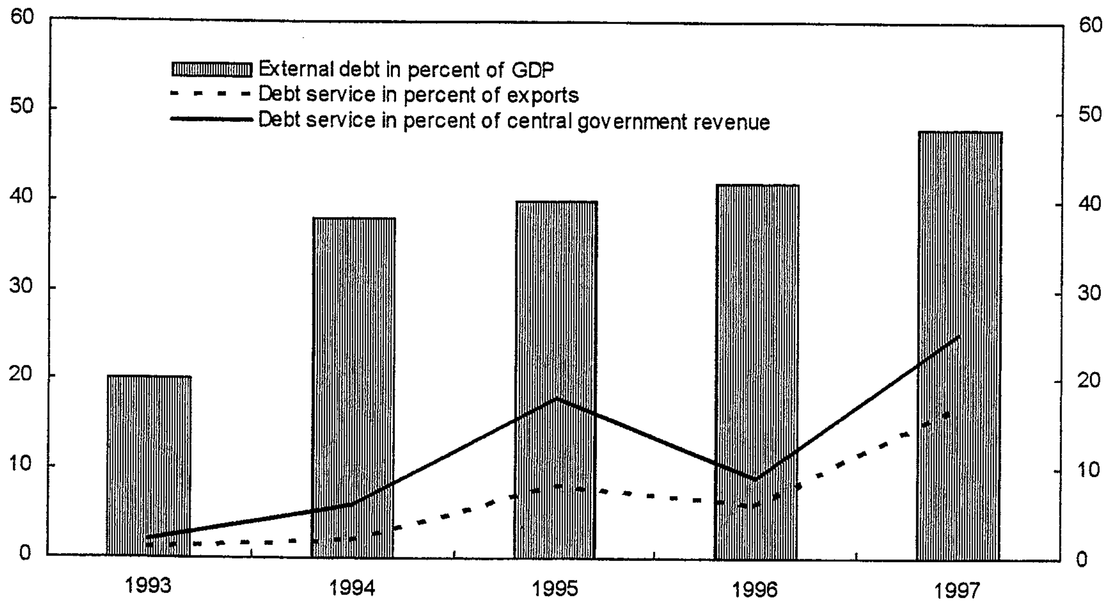
Source: Information provided by the Moldova authorities; and Fund staff estimates.

1/ Includes Eurobond issues.

has declined. Since a large part of the debt is on nonconcessional terms and falls due in the next five years, substantial **debt-service payments** are expected in the next few years. Debt service more than doubled in 1997 to 17 percent of exports and 25 percent of central government revenues, close to levels that would give cause for concern (Figure 14). Just on the basis of payments already scheduled, debt service will continue to grow rapidly in the medium term. For the ratio of debt service to exports to stabilize at 15 percent to 20 percent, exports would probably have to grow over 10 percent annually, significantly faster than in the past two years.

118. Moldova was faced with relatively **favorable capital markets conditions** until recently. While markets were concerned about the current account position, high external debt and the delayed recovery in output, there was also much hope about the potential that economic reforms would eventually uncap. In December 1996 Moldova issued a US$30 million private placement and in June 1997 a US$75 million Eurobond. The latter was more than four times oversubscribed, and began trading with a spread of 350 basis points over U.S. Treasuries. Foreign purchases of Moldovan treasury bills have also been strong. In 1997, nonresidents bought about US$20 million worth of treasury bills, constituting nearly 40 percent of total bills issued. In advance of the Eurobond issue, Moldova received a relatively strong rating from international rating agencies.

Figure 14. Moldova: External Debt Indicators 1/



Sources: Moldovan authorities; and Fund staff estimates.

1/ Excludes enterprises sector arrears to energy suppliers.

Table 17. External Debt Indicators 1/

(In millions of U.S. dollars)

	1993	1994	1995	1996	1997 Prel.
Total	256	509	671	821	1,045
Multilateral creditors	149	326	441	511	558
IMF	88	165	231	249	238
World Bank	29	96	146	146	183
EBRD	0	0	5	40	68
EU	32	65	59	76	69
Bilateral creditors	108	182	201	204	175
Japan	0	30	39	39	39
Russia	82	93	90	79	49
USA	20	40	50	64	65
Others	6	19	22	22	22
Commercial creditors	0	0	27	108	312
			(In percent)		
Debt/GDP	20	38	40	42	48
Net present value of debt/GDP	16	31	33	36	42
Debt service/exports	1	2	10	6	17
Debt service/government revenue	2	6	18	9	25

Source: the National Bank of Moldova.

1/ Excludes enterprise sector arrears to energy suppliers.

119. Capital markets started to take a more pessimistic view of emerging economies starting in July with the crisis in Thailand. In late October, with the turmoil in the Hong Kong market, interest rates spreads for all emerging economies widened significantly. For Moldova's Eurobond, the spread widened to about 800 points and it remains only a little below that level now. Markets are likely to remain cautious for some time and will be examining more critically developments in Moldova's external position. In the wake of the Asian crisis, the rating agencies have announced that they will be reviewing Moldova's rating with a view to a possible downgrading.

Conclusions

120. Analysis of the evolution and structure of the current account and of competitiveness indicators suggests that the widening current account deficit is a result of an inappropriate balance between fiscal and monetary policy, and slow structural reforms, not rapid investment growth. Loose fiscal policy has stimulated consumer demand and forced monetary policy to be tighter than otherwise desirable, and so added to the pressures for real appreciation, though there is little sign that the level of the exchange rate has been a major problem. Although costs (e.g., dollar wages) have remained relatively low, productivity gains are lagging and nonprice factors, such as barter, bureaucratic interference, and a weak legal system are a hindrance. This has resulted in weak export growth, limited penetration of new markets, and rapid import growth concentrated in consumer goods. At the same time, there has been little growth in imports of investment goods and in foreign direct investment. It therefore seems unlikely that economic growth will strengthen sufficiently in the next few years to allow an external deficit of the present size to be maintained.

121. The large fiscal and external deficits, with little foreign direct investment, have led to rapid growth of external debt. As a result, even on cautious assumptions about the future path of the current account and foreign direct investment, the key debt-service indicators, such as the ratios of debt service to exports and to central government revenue, are likely to remain uncomfortably high. This would likely contribute to raising the cost of new external market borrowing, which has already increased substantially following the Asian crisis. This highlights the urgent need for fiscal consolidation and structural reforms, and for great caution in further contracting of nonconcessional external debt.

Adjustments to GDP for Transnistria and the Shadow Economy

Introduction

1. The figures for GDP in this Recent Economic Developments and the accompanying Staff Report reflect adjustments to the figures shown in earlier reports. The **first** is a *reduction in the GDP figures to exclude the GDP of Transnistria*. This will put the ratios of monetary and fiscal aggregates, as well as that of the current account of the balance of payments, on a comparable basis, reflecting the *de facto* separation of the economy of the two regions in recent years. The numerator of these ratios refers in each case to Moldova excluding Transnistria. The **second** is an *upward adjustment to more fully take into account the shadow economy*. While some allowance for the shadow economy is made in the official statistics, these seem too small to fully reflect the extent of activity outside the formal sector. Both of these adjustments are discussed below.

Excluding Transnistria from GDP

2. The Transnistrian region of Moldova proclaimed its independence at the end of 1990. After growing tensions, there was a brief period of hostilities in 1992, followed by a ceasefire. Since then, the central government in Chişinaŭ has received only scanty information concerning economic developments in the region; and economic policy instruments, e.g., the budget and operations of the NBM, have applied only to Moldova excluding the Transnistrian region.

3. In the period following the *de facto* separation of Transnistria, GDP figures were produced which included estimates for Transnistrian GDP based on historical shares of the region in Moldovan GDP. Fund reports have used these official nominal GDP estimates that include Transnistria. As time has gone on, however, and the Transnistrian region has operated with its own economic institutions and policies, this procedure has become more tenuous. At the same time, the case for restating GDP on a basis comparable with the other financial and external aggregates is strong.

4. National accounts figures published by the department of statistics for the years from 1993 now exclude Transnistria, but the ministry of economy prepares estimates of GDP both excluding and including Transnistria, and these are included in the budget presentation of the ministry of finance to parliament. Official estimates of GDP including and excluding Transnistria for 1993-96 put the Transnistrian economy at about a fifth of the rest of Moldova (Table 18).

Table 18. GDP by Expenditure
(In millions of lei at current prices)

	1993	1994	1995	1996
Excluding Transnistria 1/	1821	4737	6480	7658
Including Transnistria 2/	2210	5784	7741	9341
Transnistrian share (percent)	21	22	19	22

Source: Information provided by the Moldovan authorities.

1/ Department of statistics.
2/ Data provided by the authorities to staff missions (1995 and 1996 adjusted for official revisions in December 1997).

Including the shadow economy

5. The GDP figures compiled by the department of statistics have included since 1993 an allowance for the shadow economy. This amounted to 12 percent in 1993, 14 percent in 1994, 15 percent in 1995, and 17 percent in 1996 and for the preliminary calculation of 1997 GDP.

6. The estimates of shadow activity by the department of statistics include allowances for health care, education, construction, and wholesale and retail trade, but make no allowance for illegal activities on the grounds that these cannot be measured. The allowances are typically based on "unofficial observation" of such activities as undeclared income of doctors, teachers, dressmakers and construction workers for services rendered. The observations come from the experiences (and payments) made by those known to the staff of the department of statistics, e.g., the price of an "off-the-record" visit to a doctor multiplied by an estimate of the number of such transactions. These estimates are, by their nature, quite imprecise and tend to be underestimates, in the sense that allowance is made only for the types of activity that can be documented.

7. The allowance for shadow activities in the GDP estimates seem clearly to be too low, but the question remains how much additional allowance should be made. Two studies cast some light on this. The first, by Kaufmann and Kaliberda,[30] estimates GDP growth by looking at electricity consumption in the period 1989-94. On what the authors consider to be

[30]*Integrating the Unofficial Economy into the Dynamics of Post-Socialist Economies: A Framework of Analysis and Evidence* by Daniel Kaufmann and Aleksander Kaliberda, in Economic Transition in Russia and the New States of Eurasia, Bartlomiej Kaminski, editor.

conservative assumptions,[31] they estimate the size of the shadow economy in Moldova as about 40 percent in 1994.[32] The second, a study sponsored by the ministry of economy and the Market Problems Research Center of the Moldovan Academy of Sciences, examined several indicators of the shadow economy, and put the share of the shadow economy in the total economy at 33 percent (or 50 percent compared to the formal economy) in 1995. Their study cited, *inter alia*, the large share of currency relative to bank deposits and to GDP. The widespread use of barter may also reflect, *inter alia*, the presence of the shadow economy. A further indicator is household expenditure surveys, which indicate that since 1994, nonsalary income has comprised about a quarter of the total in household income surveys.[33] While these estimates must be regarded as indicative rather than conclusive, taken together they suggest that an allowance for the shadow economy should be substantially larger than in the official statistics.

Adjusted GDP

8. On balance, while it seems desirable to increase the official allowance for the shadow economy, which gives only partial coverage of this sector, the tentative nature of the other estimates of the size of the shadow economy should also be kept in mind. As a working assumption, Table 19 raises the estimate of the size of the shadow economy to 25 percent of GDP excluding Transnistria in 1993, and increases this adjustment by one percentage point each year, reaching 29 percent by 1997. While crude, these adjustments probably give a more accurate picture of the development of nominal GDP over the last five years. The estimates are, however, fairly close to the previously used GDP figures that included Transnistria and the smaller department of statistics allowance for shadow activities.

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[31]The authors' basic assumption is that the elasticity of electricity consumption with respect to GDP is close to one. However, in estimating GDP for Moldova (and other CIS countries, assumed to be "energy inefficient"), they employ a "conservative" central scenario, in which the elasticity of electricity consumption with respect to GDP is assumed to be 1.15. This states the growth of GDP conservatively, which is appropriate where arrears build-ups, electricity theft, and delayed or insufficient pass-through of electricity price increases favor less efficient use of electricity.

[32]Source: Johnson, Kaufmann and Schleifer (1997), "Politics and Entrepreneurship in Transition Economies," Working Paper Series #57, The William Davidson Institute, University of Michigan, quoted in EBRD, Transition Report 1997. The estimates for earlier years ranged from 12 percent to 37 percent.

[33]The annual household income surveys of the department of statistics distinguish income from salaries, pensions, sale of own produce, sale of foreign exchange, and other income.

Table 19. Adjusted GDP

	1993	1994	1995	1996	1997
GDP excluding Transnistria	1821	4737	6480	7658	8655
Additional staff adjustment in shadow economy	316	768	1065	1170	1463
Adjusted GDP	2137	5505	7545	8828	10118

OVERVIEW OF THE CURRENT TAX SYSTEM IN MOLDOVA

1. The major current sources of revenue in Moldova are:

- **Income taxes**, in the form of a business profit tax and individual income tax;
- **Consumption taxes**, in the form of VAT, excise taxes, and customs duties;
- **Social security taxes**, in the form of employer and employee monthly payroll contributions to the social fund; and
- **Property taxes**, in the form of land and real estate tax.

Income taxes

2. The **corporate profit tax** is levied on net profits defined as total revenue after deductions of authorized expenses; profits are taxed at 32 percent rate. The new tax code was implemented starting January 1998; it introduced accelerated depreciation on fixed assets (replacing the prior straight line basis depreciation) and depreciation rates were simplified into five categories ranging from 3 to 30 percent, (which replaced the previous 1500 different depreciable categories). There are several tax exemptions that provide either a tax holiday or other tax relief in the tax code, but many other exemptions are granted on a yearly basis in the annual budget document. Small businesses enjoy tax relief for up to five years, while farms enjoy reduced rates over a transition period.

3. The **personal income tax** was simplified under the new code introduced in January 1998: the definition of income was widened to include all remuneration forms, as well as commissions, fees, capital gains, interest, rents and dividends from nonresident enterprises. There are two tax brackets: a basic 20 percent rate and a higher 32 percent rate for taxable incomes exceeding Mdl 10,800 per year, (compared to four brackets ranging from 10 to 40 percent in the old system). The tax is collected through final withholding on wages, which facilitates tax administration. Tax returns have to be filed by the self-employed, but for the vast majority of individuals (over 1.3 million employees) whose only income is wages, the tax withholding is final and they are not required to file an additional tax return.

Value added tax

4. A new value added tax law will be implemented from July 1, 1998, introducing important improvements over the existing legislation while retaining the 20 percent rate. The new tax will cover most business activities; exemptions include financial services and educational and health activities, some food products (bread, bakery products, milk), children's books and services by casinos and gaming machines. Furthermore, the 1998 budget law provides for additional exemptions (though, temporary) to special enterprises and specific operations such as imported equipment and spare parts for transportation. The new VAT law maintains taxation on capital goods, but the exemption provided for 1998 will exclude from the

tax transportation equipment and related spare parts. The new tax fully applies the destination principle, except for trade with Russia where the change from the origin principle is suspended for 1998 until completion of a bilateral agreement. The new VAT will require the issuing of invoices to determine tax liabilities and credits; this is a significant improvement over current procedures based on less transparent methods. There are also other improvements to operating provisions: net credit positions are carried over to the next billing period, while taxpayers subject to the zero-rate are entitled to actual refunds on related export credits.

Excise taxes

5. Excise taxes were first introduced in 1992. Over time, excises were extended to a wide range of goods, and rates differed for domestic or imported goods. From 1997, however, excises were limited to only 14 goods, such as wine, champagne, gasoline and jewelry. Unified taxes now apply to all goods. Excise levies are defined in lei, at specific rates; in the 1998 budget, the 1997 nominal levies were not adjusted to take account of inflation. Characteristic excise taxes (and approximate percentage equivalences) are as follows:

Gasoline	Mdl 600	per Mt	48 percent
Diesel	Mdl 200	per Mt	14 percent
Vodka	Mdl 0.75	per bottle	18 percent
Beer	Mdl 0.20-0.50	per can/bottle	5-10 percent
Cigarettes, superior	Mdl 20	per 1000 pieces	4 percent
Cigarettes w/filter	Mdl 5.0-12.50	per 1000 pieces	2 percent

Custom tariffs

6. Custom duties are imposed on goods imported from all countries other than Romania and CIS countries which have ratified free trade agreements. There are several other exceptions including a personal exemption of US$250, but a previous special exemption on transportation vehicles was eliminated recently. Import duties are levied at four main rates (5, 10, 15 and 20 percent) with very few exceptions charged at higher rates. Many goods, however, including energy, are zero-rated.

Social security taxes

7. Employers must pay a 30 percent contribution to the social fund on salaries and wages paid to their employees, and employees pay an additional 1 percent through withholding. A number of organizations are granted lower rates ranging from 4½ percent to 25 percent. Agricultural enterprises pay much reduced contributions, based on the land area of the farm. Cash contributions are collected by the state tax inspectorate, but the social fund also collects considerable revenues in kind.

Real estate and land tax

8. Real estate and land taxes were introduced in 1993. The tax for agricultural land is based on its size and estimated potential.

Selected Bibliography

Coats, Warren, Faulk, B., and Faulk, W., Building a Strong Banking Sector in Transitional Economies: The Case of Moldova, Paper presented at a seminar on Bank Failures and Bank Insolvency Law in Economies in Transition at the EBRD, October 16-17, 1997.

Center for Strategic Studies and Reforms, "Republic of Moldova: Strategy for Development," Chisinau, January 1997.

Department of Statistics, Republic of Moldova, 1998, "Socio-Economic Situation in the Republic of Moldova in 1997."

Department of Statistics, Republic of Moldova, 1997, "National Accounts, 1993-95."

Department of Statistics, Republic of Moldova, September 1997, "Bulletin of External Trade Statistics."

Department of Statistics, Republic of Moldova, 1996, "Annual Statistics of External Trade."

Havrylyshyn and Al-Atrash 1998 (forthcoming) IMF Working Paper "Opening-Up and Geographic Diversification of Trade in Transition Economies."

International Monetary Fund, September 1996, "Republic of Moldova - Recent Economic Developments," SM/96/232.

Johnson, Kaufmann and Scleifer, 1997, "Politics and Entrepreneurship in Transition Economies", The William Davidson Institute, University of Michigan, Working Paper Series #57, quoted in EBRD, *Transition Report, 1997.*

Kaminski, Bartolomiej, editor, 1996, *Economic Transition in Russia and the New States of Eurasia,* "Integrating the Unofficial Economy into the Dynamics of Post-Socialist Economics"

Ministry of Economy and Reform, "Trade Development Strategy 1997-2000."

Ministry of Economy and Moldovan Academy of Sciences, 1996, "Estimation of the Proportions of the Shadow Economy and Ways to Reintegrate it Into the Official Economy", (conclusions).

US Department of State, 1997, "Shadow Economy in Moldova" (cable).

Table 20. Moldova: Gross Domestic Product by Expenditure 1/
(In millions of lei at current prices)

	1993	1994	1995	1996	1997 prelim.
Gross Domestic Product, official	1,821	4,737	6,480	7,658	8,655
Final consumption expenditure	1,018	3,573	5,371	7,337	8,361
Private	728	2,486	3,616	5,258	6,102
Public	290	1,087	1,755	2,079	2,259
Gross capital formation	1,016	1,366	1,612	1,867	2,094
Fixed capital	282	914	1,034	1,517	1,696
Stockbuilding	734	452	578	351	398
Net exports	-213	-202	-503	-1,547	-1,800
Additional staff adjustment for shadow economy 2/	316	768	1,065	1,170	1,463
Gross Domestic Product, adjusted	2,137	5,505	7,545	8,828	10,118
Memorandum items:					
	(Percentage change from previous period)				
Real GDP	-1.2	-31.2	-1.4	-7.8	1.3
Implicit GDP deflator	1,065.6	278.4	32.4	26.9	13.1

Source: Information provided by the Moldovan authorities; and Fund staff estimates.

1/ Excludes Transnistria.
2/ See Annex I.

Table 21. Moldova: GDP by Sector 1/
(In million of lei at current prices)

	1993	1994	1995	1996	1997 Prelim
Value added	1,803.5	4,425.2	5,744.1	6,835.4	7,521.0
Agriculture & fishing	568.7	1,292.8	1,896.8	2,088.5	2,248.0
Processing industry	629.1	1,354.8	1,476.7	1,783.9	1,992.0
Gas, electricity and water	79.0	117.7	133.0	146.4	163.0
Construction	60.6	213.4	228.2	290.8	349.0
Repairs and personal services	144.1	367.1	517.8	570.1	652.0
Transport, warehouses	67.8	192.8	225.8	282.8	293.0
Financial services	87.7	244.2	237.9	291.7	341.0
Education	79.2	219.1	330.7	444.6	445.0
Public health and social assistance	81.5	288.0	467.9	540.7	598.0
Other	5.8	135.4	229.3	395.9	440.0
plus: Taxes on production and imports	159.0	485.4	823.1	926.0	1,276.0
less: Subsidies	-141.4	-173.8	-87.5	-103.4	-142.0
GDP	1,821.1	4,736.8	6,479.7	7,658.0	8,655.0

Source: Information provided by the Moldovan authorities.

1/ Excludes Transnistria and additional staff adjustment for shadow economy (see Table 20).

Table 22. Moldova: Agricultural Production by Product 1/

(In thousands of metric tons)

	1993	1994	1995	1996	1996 2/	1997 2/ Prelim.
Grain 1/	3,219	1,684	2,612	1,978	1,793	3,091
Wheat (winter)	1,393	659	1,277	784	674	1,149
Rye	3	3	5	8	6	6
Corn	1,324	629	979	1,037	989	1,692
Barley (winter)	363	130	206	85	72	144
Oats	11	7	9	4	3	8
Oilseeds	203	153	234	318	279	178
Sunflower seeds	194	149	231	316	277	175
Soybeans	9	4	3	2	2	3
Sugarbeets	2,248	1,527	2,084	1,917	1,807	1,742
Potatoes	726	475	401	383	343	392
Pulses	122	70	56	32	29	59
Vegetables	777	599	607	394	319	354
Grapes	928	670	876	789	767	301
Other (fruits and berries)	1,088	665	610	573	521	930
Tobacco	50	42	27	19	19	23

Source: Data provided by the Moldovan authorities.

1/ Clean weight.
2/ Excludes Transnistria.

Table 23. Moldova: Animal Husbandry

	1993	1994	1995	1996 1/	1997 1/ Prelim.
			(In thousands)		
Livestock inventory					
Cows	411	399	381	318	289
Pigs	1,165	1,061	1,015	866	728
Sheep	1,366	1,411	1,320	1,247	1,145
Goats	78	96	103	97	89
Horses	55	59	61	59	58
Poultry	14,544	14,415	14,740	11,423	...
			(In thousands of metric tons)		
Production					
Meat 2/	180	153	137	115	110
Beef	68	62	47	35	...
Pork	79	61	60	57	...
Lamb	4	5	5	4	...
Poultry	26	24	24	18	...
Other	2	1	1	1	...
Milk	976	909	837	682	620
Eggs (millions)	618	575	563	526	513
Wool	2,636	2,851	2,924	2,808	2,728
Productivity measures 3/					
Eggs per laying hen	145	152	181	202	219
Milk per cow (kilograms)	2,413	2,245	1,984	2,003	1,689

Source: Data provided by the Moldovan authorities.

1/ Excluding Transnistria.
2/ Slaughter weight.
3/ Productivity measures exclude production on garden plots.

Table 24. Moldova: Agricultural and Industrial Production Indices
(Percentage change from same period of the previous year; period averages)

	Agricultural production	Industrial production
1993	9.9	0.3
1994	-24.3	-27.7
1995	3.7	-3.9
1996	-11.9	-6.5
1997	10.7	-7.0
1993 I	-32.4	1.1
II	-29.6	1.9
II	5.3	18.6
IV	46.4	-5.1
1994 I	5.4	-24.2
II	-17.6	-34.1
II	-15.0	-33.0
IV	-42.1	-33.4
1995 I	-13.0	-25.9
II	11.0	-13.9
II	-12.3	7.9
IV	33.8	6.7
1996 I	0.4	4.5
II	-1.0	13.5
II	-14.4	-18.2
IV	-14.0	-17.0
1997 I	-8.7	-14.9
II	-13.2	-8.3
III	14.5	6.1
IV	17.7	3.8

Source: Information provided by the Moldovan authorities, excluding Transnistria.

Table 25. Moldova: Industrial Production by Industry 1/

	1993	1994	1995	1996
	(In percent change from the previous year)			
All industries	0.3	-27.7	-3.9	-6.5
Heavy industry	-3.4	-24.6	-7.4	-4.1
Fuel and energy	-17.6	-18.3	-6.4	5.6
Machinery and metalworking	11.3	-39.5	-4.8	-19.8
Petrochemical	-23.1	-41.6	-63.6	5.6
Forestry/wood	-3.0	-22.9	-13.3	-21.2
Construction materials	-21.2	-1.2	-2.6	26.8
Other	-4.7	0.2	-7.5	0
Light industry	-18.7	-47.4	-29.2	-0.2
Textiles	-19.4	-41.4	-48.6	-0.1
Clothing	-22.0	-41.5	-2.7	6.2
Leather and shoes	-14.8	-61.8	-10.5	-9
Food industry	7.0	-31.1	4.5	-8.1
Food processing	21.8	-31.6	8.0	-9
Meat and dairy	-38.2	-29.8	-16.6	-5.6
Fish	14.8	-30.0	-20.4	137
Other	-21.7	-21.4	3.1	5.2

Source: Data provided by the Moldovan authorities.

1/ Excluding Transnistria.

Table 26. Moldova: Unemployment, Unpaid Leave, and Part-time Employment
(In thousands; excludes Transnistria)

End of Period		Unemployed	Of which receiving benefit	Vacancies	Official Unemployment rate (Percent)	Workers on unpaid leave	Workers on Part-time Employment
1993		14.1	4.1	7.3	0.7	36.3	...
1994		20.6	6.3	6.5	1.1	220.3	34.4
1995		24.5	8.0	5.5	1.4	224.0	43.5
1996		23.4	7.0	6.6	1.8	197.8	35.5
1997		28.0	7.5	...	...	...	...
1995	I	23.4	7.2	5.3	1.4	120.9	35.1
	II	22.4	7.7	6.3	1.4	149.4	32.3
	III	24.2	8.3	5.5	1.4	179.0	42.3
	IV	24.5	8.0	5.5	1.4	224.0	43.5
1996	I	27.1	7.7	6.5	1.5	124.4	39.7
	II	26.1	7.3	7.2	1.5	142.0	35.1
	III	26.3	7.7	7.0	1.6	165.7	36.3
	IV	23.4	7.0	6.6	1.8	197.8	35.5
1997	I	22.9	6.5	6.2	1.3	117.3	42.4
	II	22.8	5.7	6.2	1.5	131.8	37.4
	III	27.1	6.9	8.0	...	155.3	40.0
	IV	28.0	7.5	...	...	...	...

Sources: State Department of Statistics; and Ministry of Labour and Social Protection.

Table 27. Moldova: Nominal Wages in Different Sectors 1/
(In lei/month)

	1993	1994	1995	1996	1997 Prelim.
	(Period average)				
Total	31.2	108.4	143.2	187.1	220.0
Agriculture 2/	28.6	82.4	106.7	121.5	...
Forestry	22.3	90.0	120.3	...	...
Industry	...	153.0	209.7	286.5	...
Construction	33.4	149.7	187.5	247.7	...
Transport 3/	29.7	137.7	191.2	258.3	...
Telecommunications	28.4	145.8	190.7	...	...
Trade, hotels, and restaurants	28.2	105.1	143.2	183.5	...
Material and technical supplies and sales	46.4	203.3	243.2	...	...
Acquisitions	34.2	134.4	202.5	...	...
Data processing service	26.0	137.7	189.4	...	...
Real estate activity	60.8	...	240.8	246.8	...
General commercial activity for insuring market functioning	62.1	244.6	352.5	...	...
Geology, hydrometeorologic services and survey	24.3	110.3	167.3	...	...
Communal husbandry	30.5	130.6	189.0	...	...
Consumer services	19.4	92.8	132.8	...	...
Health care, physical training and social assistance	27.5	102.9	127.4	161.1	...
Education	25.5	83.8	108.8	156.7	...
Culture and art	28.7	87.9	104.6	...	...
Science	34.0	135.0	196.5	...	...
Banking, credit and insurance	96.7	299.6	494.1	687.0	...
Administration	40.3	156.3	230.2	295.5	...

Source: State Department of Statistics

1/ Excludes Transnistria.
2/ 1996 data includes fishery, forestry and hunting.
3/ 1996 data includes transport, warehouses, and communication.

Table 28. Moldova: Prices

	Consumer Prices Index					Producer Prices Index	
	Overall 1/		Goods		Services	Index	Percent Change
	Index	Percent Change	Food	Nonfood			
1994							
January	100.0	21.3	100.0	100.0	100.0	100.0	57.2
February	124.5	24.5	124.8	118.2	127.1	122.9	22.9
March	138.4	11.2	137.2	127.0	154.3	133.7	8.8
April	145.4	5.0	135.9	135.7	179.4	142.0	6.2
May	149.3	2.7	138.8	138.8	189.3	151.1	6.4
June	153.4	2.7	143.8	140.6	191.3	154.1	2.0
July	156.7	2.2	141.7	146.7	205.9	153.7	-0.3
August	156.6	-0.1	139.7	148.0	207.9	152.1	-1.0
September	160.5	2.5	144.7	151.2	208.1	156.5	2.9
October	167.2	4.2	149.0	160.2	214.6	163.1	4.2
November	173.1	3.5	155.0	165.8	218.7	174.2	6.8
December	178.1	2.9	161.4	168.9	223.5	178.2	2.3
1995							
January	183.3	2.9	168.8	171.0	226.6	195.3	9.6
February	187.5	2.3	174.9	172.5	230.5	203.7	4.3
March	188.8	0.7	175.7	173.4	234.4	209.6	2.9
April	189.9	0.6	176.6	173.9	238.1	212.1	1.2
May	190.7	0.4	177.1	174.6	240.5	215.5	1.6
June	191.1	0.2	176.4	174.9	246.3	218.3	1.3
July	191.5	0.2	176.1	175.6	249.0	223.8	2.5
August	191.9	0.2	175.9	176.9	249.7	233.2	4.2
September	196.8	2.6	181.5	180.0	255.7	240.9	3.3
October	202.2	2.7	187.0	183.8	264.2	254.4	5.6
November	214.3	6.0	196.3	186.4	327.3	257.4	1.2
December	220.5	2.9	200.9	189.2	353.2	261.3	1.5
1996							
January	228.2	3.5	209.1	192.6	375.4	267.5	2.4
February	233.9	2.5	214.5	197.8	380.7	276.1	3.2
March	236.5	1.1	216.0	201.4	383.0	284.9	3.2
April	239.1	1.1	218.2	203.8	388.7	288.1	1.1
May	241.0	0.8	215.8	206.4	414.0	294.7	2.3
June	241.2	0.1	214.7	207.4	417.3	300.9	2.1
July	241.5	0.1	213.8	208.7	421.0	305.1	1.4
August	240.8	-0.3	210.9	209.9	424.0	306.9	0.6
September	244.4	1.5	213.2	211.8	443.5	310.3	1.1
October	248.3	1.6	217.2	214.2	452.4	312.2	0.6
November	251.8	1.4	221.8	215.7	455.5	314.4	0.7
December	253.8	0.8	224.2	217.0	458.7	314.7	0.1
1997							
January	258.6	1.9	231.4	218.3	461.9	317.5	1.0
February	262.2	1.4	234.9	219.6	473.0	324.2	2.1
March	264.8	1.0	233.7	220.2	506.1	328.7	1.4
April	267.0	0.8	234.4	220.9	520.8	333.6	1.5
May	268.6	0.6	235.3	221.1	532.8	341.6	2.4
June	273.9	2.0	231.8	221.3	612.7	348.5	2.0
July	271.2	-1.0	225.1	222.4	619.4	349.5	0.3
August	269.0	-0.8	221.9	223.5	610.8	350.9	0.4
September	272.3	1.2	224.6	224.7	625.4	353.7	0.8
October	274.7	0.9	228.2	225.8	624.8	358.7	1.4
November	277.7	1.1	232.3	227.4	626.1	356.9	-0.5
December	281.9	1.5	238.3	228.5	629.2	358.7	0.5
Memorandum items:				(Percent changes)			
Annual average							
1993	...	788.5	1,317.9	1,814.7	1,692.4	...	...
1994	...	329.7	453.0	466.1	721.9	...	205.1
1995	...	30.2	29.6	25.3	40.3	...	255.3
1996	...	23.5	19.5	16.6	60.9	...	31.2
1997	...	13.6	7.0	7.5	36.5	...	15.3
End Period (December)							
1993	...	837.0	1,750.4	3,750.1	2,543.1	...	6,947.4
1994	...	116.1	105.1	85.6	219.9	...	214.5
1995	...	23.8	24.5	12.0	58.0	...	46.6
1996	...	15.1	11.6	14.7	29.9	...	20.4
1997	...	11.1	6.3	5.3	37.2	...	13.4

Sources: Department of Statistics; and Fund staff estimates.

1/ Data from January 1993 through March 1994 adjusted to correct for bias in the official Sauerbeck price index and to exclude price developments in Transnistria throughout.

Table 29. Moldova: General Government Budget, 1993-97 1/
(In millions of lei unless otherwise indicated)

	1993	1994	1995	1996	1997 Prelim.
REVENUES	**488**	**1,847**	**2,556**	**2,835**	**3,473**
Tax revenues	449	1,454	2,171	2,417	2,857
Direct taxes	132	480	594	578	514
Indirect	158	433	755	810	1,369
Foreign trade taxes	19	30	51	95	124
Social fund contributions	124	474	640	761	673
Other taxes 2/	17	36	130	174	176
Non-tax revenues and grants 3/	38	393	385	417	616
EXPENDITURE and NET LENDING	**651**	**2,347**	**2,993**	**3,418**	**4,165**
Expenditures	636	2,212	2,927	3,546	4,129
National economy	27	135	167	178	242
Social sphere	306	953	1,113	1,539	1,594
Interest	23	164	265	243	377
Domestic	18	120	173	132	212
Foreign	5	44	93	111	165
Capital expenditures	49	110	135	149	228
Other expenditures 4/	135	389	530	644	698
Social fund expenditures	93	452	648	766	983
Net lending	10	111	71	-137	36
DEFICIT (cash)	**163**	**501**	**437**	**583**	**691**
Change in expenditure arrears	**26**	**110**	**145**	**364**	**-290**
DEFICIT (commitment)	**189**	**611**	**582**	**947**	**401**
FINANCING	**163**	**501**	**437**	**583**	**691**
Net domestic	110	117	189	131	407
Net Central Bank	110	107	112	-62	142
Net commercial banks 5/	--	9	69	42	189
Net nonbank 5/	--	--	9	151	76
Net foreign	53	384	248	452	284
Drawings	54	384	422	505	596
Amortization	1	0	174	53	312
			(In percent of GDP)		
Revenue	22.8	33.5	33.9	32.1	34.3
Tax revenue	21.0	26.4	28.8	27.4	28.2
Non-tax revenue	1.8	7.1	5.1	4.7	6.1
Expenditure and net lending	30.5	42.6	39.7	38.7	41.2
Expenditure	29.8	40.2	38.8	40.2	40.8
Net lending	0.4	2.0	0.9	-1.5	0.4
Surplus/deficit (cash)	-7.6	-9.1	-5.8	-6.6	-6.8
Surplus/deficit (commitment)	-8.8	-11.1	-7.7	-10.7	-4.0
Memorandum items (in millions of lei):					
Stock of expenditure arrears	344	454	599	963	673
Nominal GDP	2,137	5,505	7,545	8,828	10,118

Sources: Data provided by authorities, and Fund staff estimates.

1/ The accounts comprise the republican government, local governments, extrabudgetary funds and the Social Fund.
2/ Includes land tax, real estate tax, natural resources tax, state tax, and private tax.
3/ This includes profit remittances from the National Bank of Moldova and privatization revenues.
4/ Includes extradudgetary funds on a net basis, administrative, military, indexation of deposits, environment, and unallocated.
5/ Includes treasury securities (1995-1997).

Table 30: Moldova: General Government Revenue, 1993-97 1/
(In millions of lei unless otherwise indicated)

	1993	1994	1995	1996	1997 Prelim.
TOTAL REVENUE	**488**	**1,847**	**2,556**	**2,835**	**3,473**
Tax revenues	449	1,454	2,171	2,417	2,857
Direct taxes	132	480	594	578	514
Profit tax	97	351	392	359	236
Personal income tax	35	130	201	219	278
Indirect	158	433	755	810	1,369
VAT	95	282	568	614	900
Excises	63	151	186	197	470
Foreign trade taxes	19	30	51	95	124
Social fund contributions	124	474	640	761	673
Other taxes 2/	17	36	130	174	176
Non-tax revenues and grants	38	393	385	417	616
Of which Privatization revenue	--	24	24	38	222
Of which Central Bank profits	--	0	190	106	131
			(In percent of GDP)		
TOTAL REVENUE	**22.8**	**33.5**	**33.9**	**32.1**	**34.3**
Tax revenue	21.0	26.4	28.8	27.4	28.2
Direct taxes	6.2	8.7	7.9	6.5	5.1
Profit tax	4.6	6.4	5.2	4.1	2.3
Personal income tax	1.6	2.4	2.7	2.5	2.7
Indirect taxes	7.4	7.9	10.0	9.2	13.5
VAT	4.4	5.1	7.5	7.0	8.9
Excises	2.9	2.8	2.5	2.2	4.6
Foreign trade taxes	0.9	0.5	0.7	1.1	1.2
Social fund contributions	5.8	8.6	8.5	8.6	6.7
Other taxes 2/	0.8	0.7	1.7	2.0	1.7
Non-tax revenue and grants	1.8	7.1	5.1	4.7	6.1
o/w Privatization revenue	...	0.4	0.3	0.4	2.2
o/w Central Bank profits	...	0.0	2.5	1.2	1.3
Memorandum items (in millions of lei):					
Tax arrears	...	...	584	1,174	915
Nominal GDP	2,137	5,505	7,545	8,828	10,118

Sources: Data provided by authorities, and Fund staff estimates.

1/ The accounts comprise the republican government, local governments, extrabudgetary funds and the Social Fund.

2/ Includes land tax, real estate tax, natural resources tax, state tax, and private tax.

Table 31. Moldova: General Government Expenditures, 1993-97
(In millions of lei unless otherwise indicated;cash basis)

	1993	1994	1995	1996	1997 Prelim.
TOTAL EXPENDITURE and NET LENDING	**651**	**2,347**	**2,993**	**3,418**	**4,165**
Total Expenditures	636	2,212	2,927	3,546	4,129
Current expenditure					
National economy	27	135	167	178	242
Environment	2	8	8	14	7
Social sphere	306	953	1,113	1,539	1,594
Education	127	414	567	799	844
Health care	80	292	366	521	518
Other	99	246	180	220	232
Interest	23	164	265	243	377
Domestic	18	120	173	132	212
Foreign	5	44	93	111	165
Capital expenditures 1/	59	162	200	216	228
Other expenditures 2/	125	331	465	577	698
Social fund expenditures	93	452	648	766	983
Net lending	10	111	71	-137	36
			(In percent of GDP)		
Total expenditure and net lending	**30.5**	**42.6**	**39.7**	**38.7**	**41.2**
Total Expenditures	29.8	40.2	38.8	40.2	40.8
Current expenditure	0.0	0.0	0.0	0.0	0.0
National economy	1.3	2.4	2.2	2.0	2.4
Environment	0.1	0.2	0.1	0.2	0.1
Social sphere	14.3	17.3	14.8	17.4	15.8
Education	5.9	7.5	7.5	9.0	8.3
Health care	3.8	5.3	4.9	5.9	5.1
Other	4.6	4.5	2.4	2.5	2.3
Interest	1.1	3.0	3.5	2.8	3.7
Domestic	0.9	2.2	2.3	1.5	2.1
Foreign	0.2	0.8	1.2	1.3	1.6
Capital expenditures	2.3	2.0	1.8	1.7	2.3
Other expenditures 1/	6.3	7.1	7.0	7.3	6.9
Social fund expenditures	4.4	8.2	8.6	8.7	9.7
Net lending	0.4	2.0	0.9	-1.5	0.4
Memorandum items (in millions of lei):					
Stock of expenditure arrears	344	454	599	963	673
Nominal GDP	2,137	5,505	7,545	8,828	10,118

Sources: Data provided by authorities, and Fund staff estimates.

1/ Includes Road Fund outlays.

2/ Includes indexation of deposits, administrative, military, extra-budgetary and other expenditures.

Table 32. Moldova: Accounts of the National Bank of Moldova
(In millions of Lei; end period at current exchange rates)

	1993	1994	1995	1996				1997			
	Dec.	Dec.	Dec.	Mar.	Jun.	Sep.	Dec.	Mar.	Jun.	Sep.	Dec.
Net foreign assets	**-15.1**	**85.9**	**129.5**	**113.0**	**93.1**	**157.3**	**313.7**	**243.0**	**471.6**	**538.4**	**605.6**
NFA (convertible)	-38.9	72.2	117.4	100.7	87.3	150.6	308.1	237.7	466.2	532.5	599.7
Assets	279.1	767.5	1154.1	1143.9	1188.3	1310.9	1458.2	1305.5	1540.3	1660.7	1704.2
Liabilities	-318.0	-695.4	-1036.7	-1043.2	-1101.0	-1160.3	-1150.1	-1067.8	-1074.1	-1128.2	-1104.5
NFA (non convertible, net)	23.8	13.8	12.1	12.3	5.8	6.7	5.6	5.3	5.4	5.9	5.9
Net domestic assets	**257.4**	**466.2**	**652.0**	**653.3**	**717.3**	**685.5**	**540.3**	**591.8**	**467.9**	**467.1**	**517.0**
Domestic credit	244.7	594.2	797.9	768.3	875.7	860.5	732.4	782.1	690.7	695.0	785.1
Net claims on general government	146.0	319.5	431.4	464.7	502.1	461.0	369.7	508.7	419.7	453.6	511.8
Credit to banks	98.7	274.7	366.5	303.6	373.5	399.5	362.6	273.4	271.0	241.4	273.3
Other items (net)	12.7	-127.9	-145.9	-115.0	-158.4	-175.0	-192.1	-190.3	-222.8	-227.9	-268.1
Reserve money	**242.3**	**552.1**	**781.5**	**766.4**	**810.4**	**842.8**	**854.0**	**834.8**	**939.5**	**1005.5**	**1122.6**
Currency in circulation	119.4	345.4	638.8	655.8	702.7	727.7	731.1	693.0	784.4	868.7	972.1
Bank reserves	120.3	201.4	140.4	107.9	103.5	110.9	118.6	141.8	155.1	136.8	150.6
Of which: Cash in vault	11.0	9.4	15.8	19.1	17.2	27.0	20.5	28.6	26.4	31.5	32.4
Enterprise deposits	2.5	5.3	2.3	2.7	4.1	4.2	4.3	0.0	0.0	0.0	0.0

Source: National Bank of Moldova.

Table 33. Moldova: Monetary Survey
(In millions of lei, end-of-period, at current exchange rates)

	1993	1994	1995	1996				1997			
	Dec.	Dec.	Dec.	Mar.	Jun.	Sep.	Dec.	Mar.	Jun.	Sep.	Dec.
Net foreign assets	**39.7**	**191.5**	**238.9**	**141.0**	**109.5**	**145.2**	**270.8**	**186.6**	**378.6**	**436.0**	**465.8**
NFA (convertible)	13.6	146.6	217.1	116.4	94.9	126.8	245.6	175.5	359.9	424.9	439.7
Assets	333.4	848.1	1,301.5	1,270.5	1,330.2	1,451.0	1,632.7	1,435.7	1,668.2	1,826.9	1,815.0
Liabilities	-319.8	-701.5	-1,084.4	-1,154.1	-1,235.3	-1,324.2	-1,387.1	-1,260.2	-1,308.3	-1,402.0	-1,375.3
NFA (other than convertible)	26.1	44.9	21.8	24.6	14.6	18.4	25.2	11.1	18.7	11.1	26.1
Net domestic assets	**309.6**	**561.7**	**1,004.9**	**1,102.1**	**1,233.3**	**1,249.6**	**1,163.3**	**1,219.2**	**1,190.9**	**1,352.4**	**1,456.4**
Domestic credit	507.3	973.1	1,522.8	1,648.9	1,849.7	1,884.3	1,803.9	1,895.5	1,912.2	2,127.6	2,305.2
Net claims on general government	173.0	304.4	488.9	513.3	564.1	542.4	468.8	632.0	599.9	708.9	799.6
Net claims on central government budget	199.2	303.6	514.4	531.1	579.7	553.2	484.2	644.8	594.5	691.4	787.9
Net claims on local government	-1.9	13.8	-9.3	-7.7	-7.2	-2.8	-4.9	-5.6	12.9	24.5	21.3
Net claims on pension fund	-24.3	-13.0	-16.3	-10.1	-8.3	-8.1	-10.5	-7.3	-7.5	-7.0	-9.5
Claims on state enterprises	243.3	493.9	600.3	640.0	731.6	732.6	734.2	754.3	801.3	863.3	888.5
Claims on private sector	91.1	174.8	433.6	495.6	554.0	609.2	600.9	509.2	511.1	555.4	617.1
Other items (net)	-197.8	-411.4	-517.9	-546.8	-616.4	-634.7	-640.6	-676.3	-721.3	-775.2	-848.8
Broad money	**349.2**	**753.1**	**1,243.8**	**1,243.1**	**1,342.8**	**1,394.7**	**1,434.1**	**1,405.9**	**1,569.5**	**1,788.4**	**1,922.2**
Currency in circulation	119.4	345.4	638.8	655.8	702.7	727.7	731.1	693.1	784.4	868.7	972.0
Demand deposits	122.6	179.0	246.9	233.9	245.5	251.4	267.5	251.1	268.6	304.6	326.3
Time deposits	54.0	151.4	221.5	220.4	237.3	267.2	293.6	316.9	357.8	411.4	440.7
Foreign currency deposits	53.2	77.3	136.6	133.0	157.3	148.5	141.9	144.8	158.7	203.7	183.1

Source: National Bank of Moldova.

Table 34. Moldova: Balance of Payments, 1993-97
(In millions of U.S. dollars)

	1993	1994	1995	1996	1997 Prelim
Current account	**-182**	**-98**	**-146**	**-250**	**-292**
Trade balance	-180	-54	-55	-234	-319
Exports of goods	451	618	739	822	823
Imports of goods	-631	-672	-794	-1056	-1142
o/w: Energy products	-242	-287	-293	-316	-333
Balance of services	-24	-51	-96	-78	-90
Income (net)	...	-16	-29	-40	-45
Current transfers (net)	22	24	35	103	162
Capital and financial account	**93**	**93**	**71**	**186**	**367**
Capital transfers	0	0	0	0	40
Direct investment	14	18	73	53	64
Portfolio investment 1/ 2/	0	0	0	53	238
o/w: Government securities 1/ 2/	0	0	0	53	238
Medium and long-term loans	79	157	74	96	20
Disbursements	79	175	132	119	93
o/w: World Bank	...	67	50	0	38
E.B.R.D.	...	0	5	34	27
European Union	...	32	26	19	0
Russia	...	12	1	0	0
United States	...	20	10	13	1
Private creditors	...	0	27	53	27
Amortization	...	-18	-58	-23	-73
Other capital flows	...	-83	-75	-17	46
Errors and omissions	**34**	**-105**	**21**	**27**	**17**
Overall balance	**-31**	**-110**	**-54**	**-37**	**92**
Financing	**31**	**110**	**54**	**37**	**-92**
Use of IMF credit (net)	87	72	65	25	1
Gross official reserves	-74	-102	-78	-58	-51
Debt rescheduling	0	0	0	46	8
Debt arrears	...	18	21	-38	27
Arrears on energy deliveries 2/	...	122	47	61	-76
Memorandum items:					
Gross official reserves	77	179	257	315	366
(In months of imports)	1.0	2.9	3.0	3.0	3.3

Sources: National Bank of Moldova; and Fund staff estimates.

1/ Includes Eurobond issues.

2/ Entries for 1997 reflect issuance of $140 million of securities to Gazprom in settlement of energy arrears.

Table 35. Moldova: Composition of Trade, 1994-97
(In percent of total)

	Exports				Imports			
	1994	1995	1996	1997 Estimate 1/	1994	1995	1996	1997 Estimate 1/
Agricultural and food products	69.2	74.2	74.8	77.9	9.3	11.3	14.6	15.2
Mineral products	2.6	1.1	0.3	0.3	55.6	46.5	36.8	34.9
Chemical products	1.4	1.1	1.5	1.0	5.8	7.8	6.6	9.3
Plastics	0.6	0.6	0.8	0.6	1.7	2.5	3.4	3.1
Paper and cardboard products	1.4	1.1	1.1	0.4	2.2	3.5	4.5	4.2
Textiles	5.2	4.7	6.2	7.3	5.9	4.9	5.1	5.3
Cement and stone products	1.0	2.1	3.6	1.5	1.5	2.6	3.9	4.1
Metals and metal products	3.3	4.3	1.7	1.2	3.1	4.0	4.7	4.7
Machinery, electric equipment, etc	9.6	6.2	5.3	5.7	9.8	12.4	14.5	12.9
Transport equipment	1.9	1.7	1.7	1.4	2.9	2.6	3.3	2.9
Other	3.7	2.9	3.0	2.7	2.2	1.8	2.5	3.4

Source: Data provided by the Moldovan Department of Statistics.

1/ Based on preliminary data for the first 11 months of the year.