

### **Republic of Armenia: Recent Economic Developments and Selected Issues**

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REPUBLIC OF ARMENIA

**Recent Economic Developments and Selected Issues**

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Approved by the European II Department

April 27, 2001

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Armenia: Basic Data, 1996-2000

I. Social and Demographic Indicators

Area	29,743 sq. km.
Population density (1998)	128 person per sq. km
Population (1998)	3,798 thousands of persons
Rate of population growth (1998)	4.2 per thousand
Percent of population 0-15 years old (1996)	30
Percent of population 55 or older (1996)	16
Life expectancy at birth (1997)	73.7
Infant mortality rate (1999 Q1)	16.6 per 1000
Doctors per ten thousand persons (1997)	344
GDP per capita (in USS, 1998)	496

II. Economic Indicators

	1996	1997	1998	1999	2000
GDP (in billions of dram)	660	804	959	988	1,032
Real GDP growth (percent change) 1/	5.8	3.3	7.3	3.3	6.0
GDP (in millions of U.S. dollars)	1,597	1,628	1,899	1,847	1,915
Inflation (in percent)					
Period average	18.7	14.0	8.7	0.7	-0.8
End-of-period 2/	5.8	21.9	-1.2	2.1	0.4
Exchange rates (drams/U.S. dollar)					
Period average	413	491	505	535	539
End-of-period	435	495	522	524	552
Fiscal sector (in percent of GDP)					
State budget					
Revenue and grants	17.7	19.8	17.1	19.3	16.5
<i>Of which</i> : Tax revenue	12.9	16.4	13.6	16.1	14.8
Expenditure	26.3	25.7	21.9	26.5	22.8
<i>Of which</i> : Current expenditure	19.6	21.5	16.3	19.2	17.5
Cash deficit 3/	-9.3	-5.8	-4.7	-5.5	-4.0
Monetary sector					
Net domestic assets of the CBA 4/	15.6	-45.0	4.2	0.7	-0.3
Reserve money (end-of-period growth rate, in percent)	40.5	22.5	6.5	0.0	34.4
Broad money (end-of-period growth rate, in percent)	35.1	29.2	36.0	13.6	38.7
Broad money velocity	13.8	12.8	10.0	9.1	6.9
Dram broad money (end-of-period growth rate, in percent)	34.1	8.7	23.3	-2.2	36.3
Dram broad money, velocity	17.4	19.3	16.7	17.6	13.5
External Sector					
Current account balance 5/					
in millions of U.S. dollars	-404	-445	-515	-401	-382
in percent of GDP	-25.3	-27.1	-27.1	-21.7	-19.9
Total public sector external debt					
in millions of U.S. dollars	613	806	787	855	862
in percent of GDP	38.5	49.5	41.4	46.3	45.1
External debt service paid (in percent of exports of G&NFS)	20.3	14.2	19.0	14.3	10.7
Gross official international reserves (in mlns of U.S. dollars)	171	243	298	305	314
In months of next year's imports of goods and services	2.3	3.1	3.9	3.8	3.6

Sources: Armenian authorities; Armenia Human Development Report (May 1996), World Bank: World Development Indicators, 1999; Social Indicators of Poverty, National Statistics Service, Armenia; and Fund staff estimates.

1/ With respect to the same period in the previous year.

2/ Inflation during the last 12 months.

3/ Deficit as measured by financing.

4/ Change in percent of reserve money at the beginning of the period.

5/ Excludes official transfers.

## I. AN OVERVIEW OF RECENT ECONOMIC DEVELOPMENTS IN 1999 AND 2000

### A. Introduction

#### Background

1. Following the cease-fire in the conflict over Nagorno-Karabakh, real GDP began to recover in 1994, growing on average by nearly 6 percent a year during 1994-98 (Table 7). Armenia experienced a dramatic decline in inflation since 1994, with period average consumer price inflation dropping from over 5,000 percent in 1994 to near 200 percent in 1995 and to less than 9 percent in 1998.
2. The fiscal deficit declined steadily from 1995-98, with most of the adjustment coming from expenditures. Increases in tax revenues were partly offset by declining nontax revenues and grants. Throughout this period, the deficit was financed primarily by external sources, although net external financing declined over the period in relation to GDP.
3. The external current account deficit declined from 1995-98, supported by the fiscal adjustment during the period. Capital flows strengthened during this period, reflecting increased foreign direct investment (FDI). The net result was a substantial increase in gross official international reserves, from 1½ months of imports at end 1995 to nearly 4 months of imports at end-1998.
4. Following reserve money growth of 700 percent in 1994, monetary policy was tightened significantly, and by 1998 the rate of growth of reserve money had been reduced to 6½ percent. The management of reserve money was complicated by volatile capital flows from abroad.

#### Overview

5. The Armenian economy experienced a number of shocks during the 1999-2000 period, first in the aftermath of the Russian economic crisis in August 1998, and later as a result of the political assassinations in October 1999. Developments during the period reviewed will generally be divided into the periods before and after October 1999.
6. In the first quarter of 1999, the exchange market came under considerable pressure and the Central Bank of Armenia (CBA) responded by selling foreign exchange in the interbank market, thereby averting a potentially significant depreciation of the dram. Following this, in the run-up to the parliamentary elections in May 1999, revenue shortfalls and slippages in implementation of measures subject to World Bank conditionality led to a build-up of budgetary expenditure arrears. The revenue shortfalls were addressed by means of a package of tax increases and expenditure cuts effective in August 1999.
7. The assassination in October 1999 of the prime minister and the speaker of parliament, along with six other parliamentarians and cabinet members, led to a period of

political instability, a decline in economic activity, and a rapid build-up of budgetary expenditure arrears. Political uncertainty continued in the first half of 2000 leading to shortfalls in tax revenues, further slippages in the implementation of measures subject to World Bank conditionality, and a continued rapid accumulation of arrears. The political situation stabilized beginning in June 2000, when the president appointed a new prime minister and parliament approved a new government. Since June, tax revenues have shown a steady recovery and, by end-2000, budgetary arrears had stabilized.

## **B. Output Growth, Prices, Wages, and Employment**

8. The economy grew by 6.2 percent in the first nine months of 1999 (compared to the same period of the previous year), led by industry, construction, and trade and services (Table 8). However, real GDP fell by 2.3 percent in the last quarter in the wake of the political assassinations, due especially to contraction in the construction and industry sectors. Real GDP increased by 3.3 percent for 1999 as a whole. In 2000, despite economic stagnation in the first quarter and a severe drought, real GDP grew by 6.0 percent. This growth was led by industry, construction, and trade and services.

9. Consumer price inflation in 1999 was substantially lower than anticipated, with end-period inflation of only 2.1 percent (Table 12). This low inflation reflected both the drop in consumer prices during the first quarter of 1999, related to the sharp contraction in reserve money following the Russian crisis (as described in Section D below), as well as the sharp decline in economic activity in the fourth quarter. Consumer prices during the first nine months of 2000 were influenced by a favorable agricultural harvest (the drought did not begin to affect agricultural prices until the fourth quarter), and to an extent by the appreciation of the dram vis-à-vis the euro which put downward pressure on prices of imports from the EU expressed in local currency. In the event, the consumer price index fell by 2.8 percent cumulatively in the first nine months of 2000. Although consumer prices rose by almost 3½ percent in the last two months of the year due largely to the catch-up in government spending (resulting, inter alia, from dram 8.25 billion bridge financing from the Special Privatization Account (SPA) to clear budgetary expenditures arrears in the fourth quarter), cumulative inflation for 2000 as a whole was only 0.4 percent. The full impact of the monetary expansion that accompanied bridge financing from the SPA in the fourth quarter may not have worked itself fully through to prices by end-2000. Consumer price inflation in the first three months of 2001 was 3.7 percent cumulatively, reflecting both seasonal and special factors, including the impact of the drought on food prices and the increase in health care prices due to the introduction of the VAT on medical goods and the very rapid growth in money in the fourth quarter of 2000.

10. After having doubled between 1994 and 1998,<sup>1</sup> real wages in state owned corporations continued to increase by 18 and 14 percent in 1999 and 2000, respectively

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<sup>1</sup> Time series data on wages in private sector companies are not available.

(Table 15). Wages vary dramatically across sectors. While the wage differential between the highest paid sector and the lowest paid sector had declined gradually between 1994 and 1997, this spread (measured as a percent of the average finance sector wage) increased from 76 percent in 1997 to 82 percent in 1998 and 87 percent in 1999 (Table 16).

11. Estimated total employment declined by 4 percent in 2000, compared to 1998. The unemployment rate (defined as the number of registered unemployed persons as a percent of the actual labor force) increased from 9.4 percent in 1998 to 11.2 percent in 1999 and 11.7 percent in 2000.<sup>2</sup> The percentage of total employed persons in the state sector continued to decline (Table 17).

### **C. Public Finances and Social Safety Net**

#### **Overview and Background**

12. The fiscal sector in Armenia consists of the central government, local governments, and the State Fund for Social Insurance (SFSI). Budget data for each level of government, as well as the consolidated government budget, are shown in Tables 20-26. Local governments and the SFSI are required by law to run balanced cash budgets, so the fiscal deficit (on a cash basis) is the same (except for small changes in deposits) for the central government, whose budget is referred to below as the "state budget," and the general government (which includes the central government, local governments, and the SFSI).

#### **Fiscal Operations from January to September 1999**

13. The 1999 state budget projected an increase in revenues of 2½ percent of GDP in 1999, based on an increase in excise tax rates (Text Table 1), environmental taxes, and fees in late 1998 and early 1999, as well as further improvements in tax administration. However, revenue performance fell short of expectations in the first half of 1999 due to lower than expected inflation and growth, as well as collection problems partly caused by expectations of tax amnesties prior to the May elections.

14. On the expenditure side, the government was confronted with the need to finance unbudgeted energy expenditures of budgetary institutions and quasi-fiscal entities, and increasing domestic interest costs following the Russian crisis. To prevent a further increase of treasury bill yields, the government issued less domestic debt than budgeted. Shortfalls in external financing and grants further aggravated the situation. As a result of these factors,

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<sup>2</sup> There are indications that hidden unemployment may also be rather high. The official unemployment rate does not take into account whether people are actively seeking employment or not. For instance, the Health and Education Survey conducted in November 1996 estimated that unemployment was 25 percent, compared to the official figure of 9.3 percent. The National Statistical Service (NSS) is planning to undertake surveys to determine the actual labor force as those actively seeking employment.



central government arrears increased, by nearly 4 percent of seasonally unadjusted first half GDP, in the first six months of 1999.

15. In response, following the May elections, the government amended the budget in August 1999. The measures in the amended budget focused on expenditure cuts (equivalent to 2.6 percent of GDP) and the following tax measures (equivalent to 1.3 percent of GDP):

Table 1. Changes in Excise Tax Rates and Environmental Fees, 1999-2000

	Until July 1999	August 1999 to April 2000	Since April 2000
<i>(U.S. dollars per thousand boxes)</i>			
Imported filtered	43	150	100
Domestic filtered	35.8	104	80
Domestic unfiltered	15.1	21	22
<i>(U.S. dollars per ton)</i>			
Gasoline	120	205	222

Source: Armenian authorities.

Recurrent expenditures increased by 1 percent of GDP in the amended budget, due to higher interest expenditures and higher subsidies to the quasi-fiscal sectors. In parallel, capital expenditures and net lending declined.

16. In response to the increase in the excise rates and increased political stability, tax revenues recovered in August and September 1999, with average collections of more than dram 16.5 billion, compared to average monthly collections of dram 10.8 billion from January to July. The increase in revenues, and the disbursement of \$23.5 million under the SAC III in September, enabled the government to pay down dram 11.4 billion of arrears in the third quarter.

#### **Fiscal Operations from October 1999 to December 2000**

17. After the October assassinations, state budgetary tax revenues declined to an average monthly level of dram 16 billion,<sup>3</sup> in contrast to the usual improvement in collections toward the end of the year. The revenue shortfall was mainly on custom duties and excises. In

<sup>3</sup> This includes more than dram 5 billion of tax revenues that were reported as 1999 revenues due to the extension of the fiscal year into January 2000.

particular, the increase in the tax rates for cigarettes did not have the expected revenue effect due to a very strong volume reaction, especially for imported cigarettes, on which excise rates had increased more than 3 times, while domestic (filtered) cigarettes were taxed at a rate one third below the rate on imports. The strong volume reaction was partly caused by import substitution and partly by administrative problems.<sup>4</sup> Other tax revenues were in line with the revenue targets. For instance, income tax collections and VAT were as envisaged due to high receipts from the energy sector, financed by higher state budget subsidies. In addition, VAT receipts benefited from the one quarter lag between sales and VAT collections.

18. For 1999 as a whole, compared to the amended 1999 budget, arrears equivalent to almost 2 percent of GDP were accumulated (Text Table 2):

Table 2. Recent State Budget Developments, 1998-2000

	1998 Actual	1999 Actual	1999 Diff. from Amended Budget	2000 Prelim. Actual	2000 Diff. from Budget
(In percent of GDP)					
Total revenue and grants	17.1	19.3	-0.5	16.5	-3.1
<i>of/w tax revenue</i>	13.6	16.1	-0.3	14.8	-1.8
Total expenditure	21.9	26.5	0.2	22.8	-2.3
<i>of/w current expenditure</i>	16.3	19.2	-0.3	17.5	-0.9
Overall balance (accrual basis)	-4.8	-7.2	-0.7	-6.4	-0.8
Change in arrears (+ = increase)	0.5	2.0	2.0	1.9	2.6
Statistical discrepancy	-0.4	-0.2	-0.2	0.5	0.5
Overall balance (cash basis)	-4.7	-5.5	1.0	-4.0	2.2
Financing	4.7	5.5	-1.0	4.0	-2.2
<i>of/w Domestic</i>	2.1	0.8	-0.6	2.5	0.9
<i>External</i>	2.6	4.7	-0.4	1.5	-3.1

Source: Armenian authorities and Fund staff estimates.

The build up of arrears resulted from a combination of revenue shortfalls, expenditure overruns, and shortfalls in domestic and external financing.<sup>5</sup> The arrears of particular social

<sup>4</sup> On average, monthly volume declined, from 12,908 boxes per month during January to July 1999, to 3,747 boxes per month from August 1999 to March 2000.

<sup>5</sup> The shortfall in external financing was mainly due to the smaller than envisaged tranche of the SAC III, which was \$20 instead of \$25 million, due to delays in energy sector privatization. The SAC tranche was delayed until January 2000, but due to the extension of  
(continued)

relevance (family allowances, health, and education) increased by dram 4.8 billion, to a stock of dram 7 billion at end-1999.

19. The projections for tax revenues in the 2000 budget assumed that the drop in revenues observed in October through December would be only a short-term reaction to political instability, and that the overall trend of an increasing tax revenue/GDP ratio would continue. Therefore, the government projected tax revenue equivalent to 16.6 percent of GDP, compared to 16.1 percent in 1999, based on the fact that the increase in the excise tax rates would be effective for the whole of 2000, whereas it had only been in effect during the second half of 1999.

20. In the event, the government's expectation of a resumption in trend growth of tax revenues in relation to GDP was not realized. First, cigarette imports declined further. In response, the government revised cigarette excises effective in April 2000. The rate for imported cigarettes was reduced by one third and the gap between domestically produced and imported cigarettes narrowed. Consequently, cigarette import volumes increased. Second, gasoline imports declined sharply in early 2000, reaching only 60 percent of import levels in the first half of 1999. In the reform of excise rates in April 2000, the government increased the rates slightly and started to apply excise rates on close substitutes for gasoline. Gasoline volumes increased starting in August, but neither developments in retail prices nor the change in tax rates adequately explain the volatility of volumes. Presumably, administrative problems were at least partly responsible for the shortfall in volumes. Third, VAT revenues were lower than envisaged because of the decline in GDP in the fourth quarter of 1999, the economic stagnation in the first quarter of 2000, and inflation near zero.

21. In total, tax revenues relative to GDP in the first half of 2000 were equal to the level in the first half of 1999 despite the increase in excise rates. Due to the revenue shortfall, arrears of the central government increased, by dram 21.4 billion in the first half of 2000—of which dram 7.6 billion were accumulated in expenditure categories of particular social relevance—to dram 45.8 billion (or 4.4 percent of GDP) at end-June 2000. However, the government decided against proposing an amendment of the budget, thereby missing an opportunity to make adjustments in expenditure commitments to help compensate for the revenue shortfall.

22. Tax collections started to recover in June (albeit with an interruption in September), mainly due to improvements in current collection (tax arrears were broadly unchanged during this period) and the increase of GDP (growth started to increase in the second quarter and tax revenues, in particular the VAT, reacted with the usual time lag in the third and fourth

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the fiscal year into January, the government reported it as a 1999 inflow. To prevent an accumulation of arrears during the delay of disbursement of the SAC, the government issued treasury bills mainly in November and used money from the SPA to redeem the bills (\$17 million in total).

quarters). However, despite the recovery since June, tax revenues as a percent of GDP in the second half of 2000 fell short of the corresponding period in 1999, for a number of reasons. First, revenues in the second half of 1999 included the short period of relative political stability in the third quarter, allowing the revenue measures that became effective on August 1 to show their full impact. Furthermore, comparison of fourth quarter 1999 performance with the corresponding period in 2000 can be misleading because the 1999 fiscal year was extended into 2000 (the 2000 fiscal year was not extended), and the revenue figures underlying the comparison have been adjusted to shift more than dram 5 billion into the fourth quarter of 1999. Finally, tax collections in the fourth quarter of 1999 benefited from high GDP growth in the third quarter of 1999 as well as the payment of arrears by the energy sector, financed by additional subsidies from the budget.

23. State budget expenditure arrears declined by dram 1.5 billion in the second half of 2000, to dram 44.4 billion (4.3 percent of GDP). This decline of arrears was small despite the improvement in tax collections in the second half of 2000, disbursement of the fourth tranche of the SAC III (\$5.5 million) in December 2000, reductions in expenditure commitments in the fourth quarter equal to 2.6 percent of quarterly GDP, and clearance of socially significant arrears (such as family allowances, pensions, and wages) amounting to 2.3 percent of quarterly GDP starting in November using bridge financing from the SPA.<sup>6</sup> Arrears fell by dram 8.6 billion in the fourth quarter of 2000 due to the SPA bridging. For the year as a whole, arrears grew by almost 2 percent of GDP, largely due to the shortfalls (vis-à-vis the budget) in revenues and grants and external financing,<sup>7</sup> which were only partly offset by the rescheduling of debt service to the EU and Turkmenistan, reduced expenditure commitments, and higher domestic financing.

24. In parallel to the state budget, the SFSI was facing difficulties collecting contributions. Therefore, it ended 1999 with arrears of dram 3.4 billion, which increased to dram 7.9 billion by mid-2000, equivalent to around 2½ months of pensions. Due to the recovery of GDP growth which also increased wage payments and reduced accumulation of wage arrears, the increase of the pension contribution rate by mid-2000, and the clearance of pension contribution arrears from the state budget, the SFSI reduced its arrears by end-2000 to dram 4.4 billion, or around 1¼ months of pensions.

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<sup>6</sup> While the government cleared almost all arrears on wages, there were still dram 7.4 billion of arrears outstanding on contributions to the SFSI and family allowances.

<sup>7</sup> The World Bank disbursed only \$5.5 million under the SAC III to the 2000 budget, compared to a total of \$45 million of combined SAC III/IV disbursements expected in the budget, mainly due to continued slippages in the privatization of the energy distribution network.

### **Box 1. Monetary, Exchange Rate, and Inflation Developments during 1998-2000**

The CBA has managed to attain rates of monetary growth consistent with virtual price stability for the past few years, despite what would appear to have been a rather rapid rate of monetary growth and sizeable fluctuations in monetary aggregates. Moreover, the value of the Armenian dram vis-à-vis the U.S. dollar remained broadly stable despite a number of external and internal shocks. This box explores the factors underlying this performance, focusing on the 1998-2000 period, since this period was characterized by a combination of rapid monetary growth and low inflation.

Quarterly movements in reserve money generally tracked movements in the net foreign asset (NFA) position of the CBA during the period, especially for quarters in which there were large changes in reserve money, as noted in the text and shown in Figure 1:<sup>1/</sup>

- In the first quarter of 1999, NFA and reserve money fell sharply reflecting CBA sales of foreign exchange in the interbank market in the aftermath of the Russian crisis;
- Reserve money rose by 18.7 percent in the third quarter of 1999, reflecting a \$23½ million disbursement under the World Bank SAC III in late September; and
- The increase in reserve money during the fourth quarter of 2000 was mainly due to the bridge loan from the SPA used to pay down expenditure arrears.

The growth in reserve money for the 1998-2000 period (net of the SPA bridge) was in line with the growth in nominal GDP:

- Reserve money growth was distorted by the dram 8.25 billion bridge loan from the SPA in the fourth quarter of 2000. Deducting this amount from the end-2000 stock,<sup>2/</sup> reserve money grew by 26.9 percent during 1998-2000, or at an average rate of 8.3 percent per annum;
- Nominal GDP grew by 28.4 percent during 1998-2000, or by 8.7 percent per annum, mainly due to the increase in real GDP (which grew by 17.5 percent, or by 5.5 percent per annum);

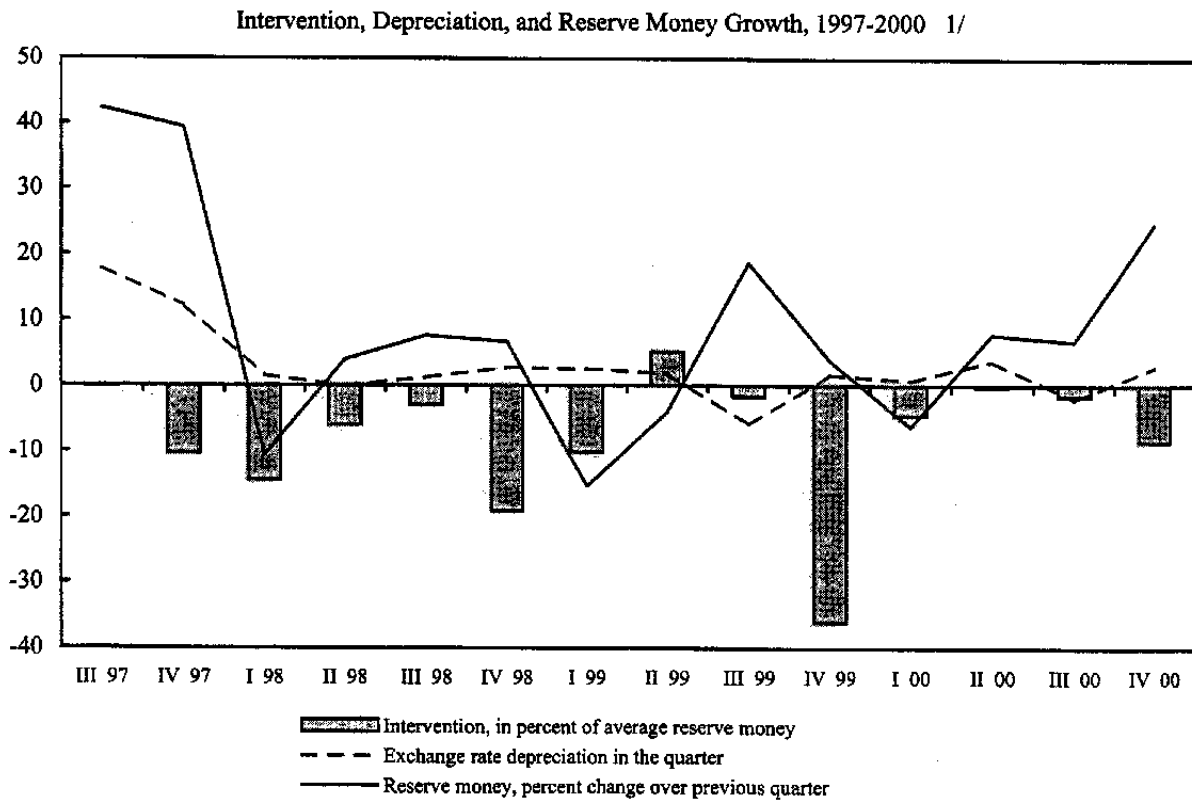
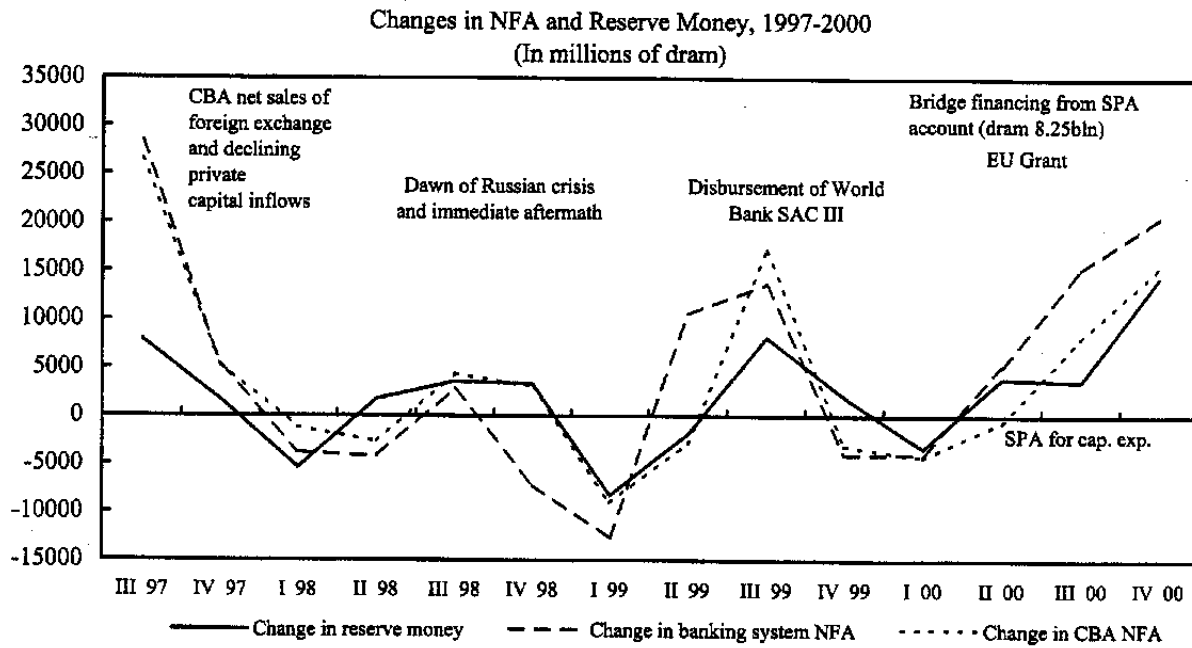
Dram broad money increased by 46.7 percent (excluding the SPA bridge) during the 1998-2000 period, or by 13.6 percent per annum, reflecting an increase in the multiplier of about 5 percent per annum. Consumer prices were virtually stable during the period, having increased by only 1.3 percent in 1998-2000. The value of the dram vis-à-vis the U.S. dollar was also relatively stable, despite the Russian currency crisis in August 1998 and the political assassinations in October 1999 (Figure 1). It is apparent that real money demand increased substantially, given the relative price and exchange rate stability.

Broad money grew much faster than dram broad money during 1998-2000, roughly doubling during the period, due to a rapid increase in foreign currency deposits (see Box 2).

1/ However, the decline in reserve money in the first quarter of 1998 was due mainly to an increase in CBA net credit to banks and to the government.

2/ As the CBA had anticipated, reserve money declined by around 15 percent in the first quarter of 2001, to a level only 6 percent above the third quarter of 2000.

Figure 1: Armenia: Monetary and Exchange Rate Indicators, 1997-2000



Source: Armenian authorities; and Fund staff estimates.

1/ Intervention is defined as net interbank sales of foreign exchange by the CBA. A negative figure indicates liquidity absorption and loss of reserves by the CBA.

### Box 2. An Analysis of Currency Substitution in Armenia

The level of currency substitution (CS) in Armenia remained high in 1999-2000. This high level of currency substitution, compared to other CIS countries, has persisted despite the attainment of macroeconomic stability.<sup>1/</sup> This box considers trends in CS in Armenia, compares these trends with other CIS countries, and discusses possible factors underlying these trends.

In Armenia, the ratio of foreign currency deposits to broad money (or CS ratio), increased from around 20 percent in 1995-1996 to close to 50 percent in 1999-2000 (Table 33), despite the attainment of macroeconomic stability in the mid-1990s.<sup>2/</sup> Throughout the past three years, the CS ratio has remained some 15-20 percentage points above the median CS ratio for all CIS countries (Figure 2).

According to the CBA, the following factors contributed to a relatively high level of measured CS in Armenia:

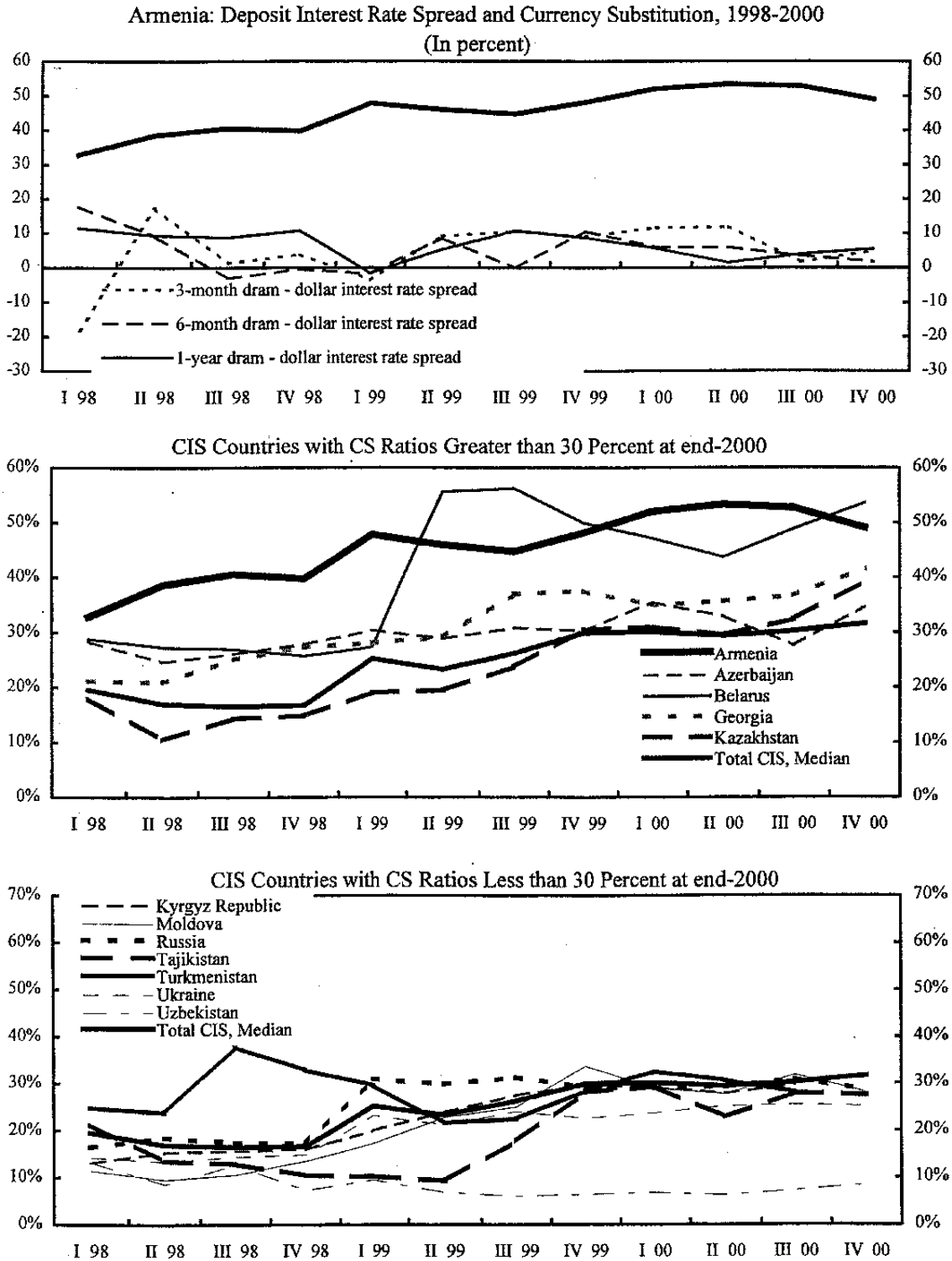
- The population's confidence in the banking system was gradually being restored, as in other CIS countries, hence the rapid growth in deposits overall. Therefore, it is possible that "measured" CS increased, since the CBA does not have data on cash foreign exchange in circulation;
- The banks represent the only real outlet for household savings;
- About one half of household income came from foreign currency remittances, and households tended to put the balance of these remittances directly into dollar bank accounts. The remainder was converted into dram and spent on subsistence needs;
- Only dollars were used for large transactions. Businesses tended to keep their dollars in Armenian bank deposits, instead of placing them abroad, in order to earn the higher yield.
- Apparently there was not much demand for dram credit (Table 47) and, accordingly, banks had little incentive to raise rates to attract dram deposits. This may help explain why the interest rate differential between dram and dollar deposits was insufficient to overcome the population's reluctance to hold additional dram deposits; and
- While the exchange rate had been relatively stable in recent years, there continued to be greater trust in dollars as a long-run savings vehicle.

Citing evidence from Latin America, Mongardini and Mueller (2000) note that it may take a long time for CS to decline in the CIS countries, even though macroeconomic stability has been attained.

1/ See Mongardini, J. and J. Mueller (2000) "Ratchet Effects in Currency Substitution: An Application to the Kyrgyz Republic," IMF Staff Papers, 47 (2): 218-237, for a comparison of currency substitution levels in BRO countries.

2/ There was a modest decline in the CS ratio during 2000 owing to the sharp increase in currency in circulation toward the end of the year.

Figure 2: Currency Substitution in CIS Countries, 1998-2000



Sources: Armenian authorities; and Fund staff calculations.



#### **D. Monetary and Exchange Rate Developments**

25. While monetary aggregates grew substantially during 1999 and 2000, inflation was low, reflecting a rapid growth in real money demand<sup>8</sup>. The variability in reserve money growth, especially in the first and third quarters of 1999 and the fourth quarter of 2000, shows that the stated policy of maintaining reserve money within an indicative corridor with a view to using money as a nominal anchor has been implemented flexibly, with reserve money allowed to move outside the corridor in response to unexpected disturbances associated with delays in external financing, external shocks, and unforeseen fluctuations in government expenditures.

##### **Developments from January to September 1999**

26. In the first quarter of 1999, the CBA had to contend with the pressures on the foreign exchange market in the aftermath of the Russian crisis. The CBA responded to these pressures by selling \$20 million in the interbank foreign exchange market from January through the first 10 days of February, leading to a drop in reserve money of 15.4 percent in the first quarter.<sup>9</sup> During this quarter, the dram depreciated by 2.5 percent in dollar terms (it depreciated by 4.4 percent in January and then appreciated during February and March), CPI deflation deepened to 5.5 percent, and the weighted average treasury bill yield reached 54 percent at end-March.

27. Reserve money increased rapidly (by 18.7 percent) in the third quarter of 1999 due to disbursement of the third tranche of the World Bank SAC III (\$23½ million) on September 21. Government spending to quickly clear budgetary arrears created monetary management problems and disrupted the smooth functioning of the foreign exchange market. In particular, in the last 9 days of September, reserve money exceeded the upper end of the corridor despite active reverse repurchase operations.

##### **Developments from October 1999 to December 2000**

28. During the first half of 2000, the CBA generally succeeded in keeping reserve money within the indicative corridor, although it fell below the lower limit of the corridor at the end of January, February, April, and May. This resulted from a build up of government deposits related to the receipt of a high proportion of tax receipts during the last days of each month.

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<sup>8</sup> Box 1 notes that inflation during 1998-2000 was low despite very rapid, and variable, growth in the monetary aggregates. Box 2 analyzes trends in currency substitution (CS) in Armenia.

<sup>9</sup> This decline in reserve money during the first quarter may to some degree also have been related to the normal seasonal contraction in spending, although it is difficult to disentangle the effects of any seasonal reduction in demand for real balances from the CBA's policy response.

29. Beginning in July 2000, however, reserve money exceeded the upper end of the corridor due mainly to government expenditure financed through a draw-down of the SPA and inflows of foreign grants.<sup>10</sup> Partly offsetting the resulting increase in the net foreign assets (NFA) of the CBA, net credit to government from the CBA fell during July and August, as foreign grant inflows and conversion of privatization receipts from foreign exchange to drams led to a build-up of government deposits in the CBA.

30. Monetary policy in the fourth quarter of 2000 was heavily influenced by government spending from the SPA, both on capital expenditures, and by the dram 8.25 billion bridging operation in November 2000. In the event, reserve money increased by 24.7 percent in the fourth quarter of 2000. In the absence of effective money market instruments, the CBA was unable to keep reserve money within its indicative corridor. While it could have sold foreign exchange in the interbank market, the CBA chose not to because it believed the dram would have appreciated substantially, and because the parliament had only authorized a bridge loan from the SPA through end-March 2001. The dram depreciated by 2.9 percent in U.S. dollar terms during the fourth quarter, after a depreciation of 2.4 percent in the first three quarters.

31. Following the exodus of nonresident investors from the treasury bill market in the wake of the August 1998 Russian crisis, interest rates rose substantially in Armenia. By late 1999, due to improved coordination of monetary and fiscal policy and the record of price and exchange rate stability, interest rates began to fall. In particular, the weighted average yield on treasury bills fell from 53 percent in December 1999 to 43 percent in March, 28 percent in June, and 24 percent in December 2000.

### **E. Balance of Payments**

32. The external current account position continued to improve significantly in 1999 and 2000, with the deficit falling from \$403 million (21.2 percent of GDP) in 1998 to \$279 million (14.6 percent of GDP) in 2000, in line with a lower (goods and services) trade deficit (Table 38). In 1999, the trade balance (goods and services) improved by nearly 5 percent of GDP, owing to a 6.5 percent increase in exports and a 8.1 percent drop in imports. In 2000, exports increased by an additional 15.7 percent, while imports increased by 5.0 percent.

33. These adjustments were supported by a significant real effective exchange rate depreciation of around 9 percent from end-1998 to end-2000, which more than reversed the real appreciation during 1998 following the Russian crisis in August of that year. New FDI into the mining, diamond cutting, and agricultural processing industries also helped fuel the

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<sup>10</sup> In July, in line with the budget, the government withdrew dram 1 billion from the SPA to finance capital expenditures and repair. In August, the government withdrew an additional dram 2 billion from the SPA for capital expenditures and received euro 5.5 million from the EU under the food security grant (equivalent to about 2.7 billion drams).

revival of exports in 1999 and 2000. Indeed, the recovery of exports in 1999 was led by an almost doubling of diamond exports following the sale of a diamond cutting enterprise to a British investor in early 1999. In 2000, merchandise exports increased by 24 percent as agricultural and base metal exports staged a strong recovery and diamond exports continued to expand briskly.

34. Weak import demand has underpinned the adjustment in the external current account. Underlying imports—i.e., total imports less humanitarian imports and imports of uncut diamonds—decreased by 14 percent in 1999<sup>11</sup> to less than \$700 million. Relative to GDP, underlying imports decreased to 37 percent in 1999, reverting about to the level in the mid-1990s. In 2000, underlying imports increased by 4 percent in line with a similar increase in GDP, and overall imports increased by 8 percent.

35. The capital and financial account surplus decreased from around \$400 million in 1998 to around \$300 million in 1999-2000 in the absence of major privatizations, which had boosted FDI in 1998. Notwithstanding the decrease from 1998, FDI inflows were buoyant in 1999-2000, averaging around 6 percent of GDP during the period. Major FDI inflows were directed toward investments in the telecommunications and energy sectors, including by Greek and Russian investors. In 2000, the capital and financial account surplus was slightly lower than in 1999 in part because disbursements to the public sector were negatively affected by the debt service arrears to Russia, which blocked new Russian disbursements, and problems in securing sufficient budgetary counterpart funds, which slowed down the implementation of World Bank projects.

36. In mid-2000, Armenia rescheduled its debt to Turkmenistan. The agreement included a deferment of interest payments for the second through the fourth quarters of 2000, a re-profiling of ongoing repayments from the second quarter of 2000 through 2002 to 2001-2004, and an increase in the interest rate spread over LIBOR from 0.3 to 1 percentage point. Since late 1999, Armenia has serviced almost none of its debt service obligations falling due to Russia and as of end-2000 external arrears to Russia amounted to \$19 million (excluding late interest). Currently, Armenia and Russia are negotiating a regularization of these arrears. Against the background of the difficult budgetary situation, Armenia and the EU agreed in mid-2000 to postpone a planned prepayment and budgetary grant until 2001, resulting in a net cash flow savings of euro 1.5 million.<sup>12</sup> Debt service to other creditors (including interest on the EU credit) was serviced in a timely manner during the year. Total

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<sup>11</sup> Caused in part by lower dollar export prices of Armenia's CIS trading partners.

<sup>12</sup> Following the refinancing of a non-concessional credit from the EU to Armenia in 1998, the EU committed to defraying part of the costs of any acceleration of repayments by providing additional budgetary grants. For 2000, the understanding had been that Armenia would prepay euro 7.0 million and the EU would extend a budgetary grant of euro 5.5 million.

debt service paid amounted to about \$47 million (the equivalent of about 11 percent of exports of goods and services), compared to \$55 million (14 percent of exports) in 1999.

37. Following a \$4 million surplus in 1999, the overall balance of payments surplus in 2000 widened to \$11 million. This surplus, together with a build up of external arrears of \$18 million and debt relief of \$5 million from Turkmenistan, allowed for an increase in net official international reserves (NIR) of \$34 million. Reflecting also revaluation losses (on non-dollar holdings) and repayments to the Fund, gross official international reserves increased by only \$9 million to \$314 million. Relative to the following year's (projected) imports, gross reserves fell from 3.9 months in 1998 to 3.6 months in 2000.<sup>13</sup>

#### F. External Debt Developments

38. In 2000, Armenia succeeded in arresting the very rapid build-up of external debt which began in the early 1990s (Table 43). Following a 9 percent increase in 1999, Armenia's external debt increased by 1 percent in 2000, as modest new net inflows were offset by revaluation adjustments reflecting the strengthening of the U.S. dollar. At end-2000, external debt amounted to \$862 million, the equivalent of 45 percent of GDP or 194 percent of exports. The World Bank was the single largest creditor with outstanding credits of close to \$400 million, followed by the Fund (\$175 million) and Russia (\$115 million). From 1995 to 2000, external debt more than doubled, yet the composition of external debt has remained very stable, with about 75 percent of the debt owed to multilateral institutions and the bulk of the remainder to bilaterals. Reflecting in part the large share of Fund and Bank credits, 74 percent of all credits were concessional, 81 percent were fixed interest rate loans, and 67 percent were denominated in SDRs at end-2000 (Table 44).

39. In spite of the higher nominal debt, the external debt in present value (PV) terms is estimated to have fallen to \$535 million in 2000 from \$549 million the previous year owing to an increase in the level of international interest rates.<sup>14</sup> The PV of debt in 2000 was estimated at the equivalent of 135 percent of exports<sup>15</sup> down from 154 percent of exports in 1999. However, in terms of fiscal revenue, the PV debt burden increased from the equivalent of 167 percent in 1999 to 179 percent in 2000 as a difficult fiscal position was compounded by the real effective exchange rate depreciation which lowered the U.S. dollar value of fiscal revenue.

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<sup>13</sup> The relatively high import coverage ratio achieved in 1998 reflects in part the unanticipated decrease in imports in 1999.

<sup>14</sup> The level of international interest rates affects the discount rates.

<sup>15</sup> This was computed using a three year moving average of exports of goods and services centered on the preceding year.

### **G. Exchange and Trade System**

40. In 1999-2000, Armenia continued to maintain a liberal foreign exchange system as well as a liberal policy on FDI. There are no current account restrictions and the few minor capital account restrictions are mostly imposed for prudential reasons.

41. The trade regime is also very liberal. There are no export taxes or export subsidies and most imports enter the country duty-free, while goods subject to import duties are assessed a uniform 10 percent import duty. Minor changes in the tariff schedule took place in January 1999.

42. Nontariff restrictions are limited to the importation of goods that pose health, security, or environmental hazards. Import license requirements are limited to medicines (subject to approval by the Ministry of Health) and agricultural chemicals (administered by the Ministry of Agriculture). Export licenses are required for textiles destined for the EU, nuclear and nuclear-related products, military goods, medicines, and selected live animals and plants.

### **H. Structural Reforms**

43. Armenia made significant progress in structural reforms in the 1990s. The Russian crisis and the political turmoil starting in late 1999 slowed these reforms, but the pace of reform started to recover thereafter.

#### **Privatization**

44. The privatization process slowed in 1999-2000 as the emphasis shifted from quick sales toward attraction of suitable strategic investors. The government sold 196 additional small enterprises in 1999 and 44 in 2000. In 1999, the government finalized the sale of the Yerevan Brandy factory, and sold its remaining shares in a large commercial bank. In 2000, the government sold a major chemical plant, a precious stone company, and a hotel to foreign investors.

45. To improve the efficiency of the privatization process, the government approved a decree in April 1999 that addressed the issue of the outstanding debt of the privatized enterprises. Also, companies that cannot be sold in three attempts are now liquidated in accordance with the privatization law. In July 2000, the parliament adopted a law that specifies the procedures for privatizing the energy distribution companies (EDCs). Finally, the government established an inter-departmental committee to privatize Armenian Airlines and Armenian Press.

#### **Banking and Payments Systems**

46. Armenia's banking system at end-2000 consisted of the CBA and 31 commercial banks (of which only 29 were operating), including 5 branches of foreign banks and one state-owned bank. Foreign participation in the banking system increased following the

removal in June 1995 of the 35 percent limit on foreign ownership of banks. However, with one key exception, foreign investors are mainly Armenian expatriate individuals. The Savings Bank, the only state-owned bank, accounted for only 2½ percent of banking system assets and about 7 percent of household deposits in mid-2000. The government has announced its intention to sell the majority of the bank's shares in 2001.

47. As discussed in the Financial System Stability Assessment (FSSA), while reported data for the Armenian banking system indicate a relatively healthy financial system, these may not reveal the extent of weaknesses in the banking system due to shortcomings in the regulatory reporting and supervisory practices.<sup>16</sup> Notwithstanding these caveats, reported prudential indicators show a high capitalization of the banking system, a relatively healthy loan portfolio, and adequate liquidity coverage (Table 46). The efforts to recapitalize banks, especially through the gradual increase in the minimum capital requirement, helped to increase the capital adequacy ratio for the banking system between 1995 and 1999, although the ratio fell to 25 percent at end-2000. While Armenia's commercial banks were characterized by large volumes of non-performing loans prior to 1996, significant progress was made in improving the quality of their loan portfolios in 1996-1997, and as a result the level of non-performing loans fell to around 6 percent in December 2000. Banks appeared to have adequate liquidity, reflecting large holdings of government securities by commercial banks in the absence of sufficient profitable lending opportunities elsewhere in the economy.

48. The level of both off-site and on-site supervision has increased. Following the introduction of a new chart of accounts in January 1998, all banks adhere to International Accounting Standards (IAS). The CBA strengthened the prudential regulations in April 1999, raising the minimum general and core capital-adequacy ratios, respectively, to 12 and 8 percent, changing the risk weighting on some items, and reducing the maximum open foreign currency exposure from 40 to 30 percent after April 1, 1999, and to 25 percent after April 1, 2000.

49. Most payments in Armenia are settled through CBANET, an electronic payments system based on the SWIFT format and covering the entire country. The CBA and major commercial banks also maintain access to international markets through the SWIFT system.

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<sup>16</sup> These include, inter alia: reliance upon possibly inflated collateral for lending decisions; loan classification practices based solely on past performance and collateral, rather than on borrowers' ability to service loans; lending in foreign currency to borrowers whose earnings are denominated in drams; rolling over of overdue loans to the same or to third parties; and non-transparencies in financial reporting and practices of enterprises.

### Quasi-fiscal Sectors<sup>17</sup>

50. Despite some signs of improved financial performance, the energy sector continues to require substantial budgetary resources and more generally impedes efficient resource allocation and economic growth prospects of the Armenian economy. Collection rates of the energy sector have increased since 1995 but remain insufficient, and loss rates (both technical and "excess" losses, the latter including theft) have fallen but remain high. These improvements reflect, inter alia, the financial monitoring of the energy sector starting in 1998, installation of meters financed mainly by foreign donors, establishment of an independent Energy Regulatory Commission that is responsible for setting tariff rates, having secured a reliable source of imported gas, and separation of different segments of the energy sector (generation, transmission, dispatch, and distribution). Nevertheless, the estimated financing gap of the energy sector remains high (nearly 4 percent of GDP in 2000, before budgetary subsidies, restructured debt service, and arrears accumulation).

51. According to the government and the World Bank staff, privatization of the energy distribution network is essential for achieving a significant further improvement in the financial performance of the energy sector. The government has, with the support of the World Bank, been preparing for the privatization of the EDCs, including by consolidating the number of EDCs to four, passing a law in the summer of 2000 that provides the legal basis for the privatization, and establishing a tender committee to supervise the privatization process.

52. The government has also announced its intention to improve the financial performance of other quasi-fiscal sectors (including the irrigation sector, drinking water and sewage companies, district heating, and the Nairit company). The financing gaps of the irrigation and water sectors arise from low collection rates, high loss rates, and tariffs that fall short of full cost recovery. Despite modest improvements in the overall deficits of some of these sectors in 1999-2000, financing gaps in the irrigation and drinking water and sewage sectors remained high in 2000 (around 1½ percent of GDP, excluding budgetary subsidies, restructured debt service, and arrears accumulation). District heating, whose deficit is caused primarily by a low collection rate, also had a significant financing gap (estimated roughly at 0.7 percent of 2000 GDP for the 1999/2000 heating season). The Nairit company, whose output is only about a quarter of the amount demanded during Soviet times, was only able to pay around 30 percent of its electricity bills during January-September 2000, and the energy sector effectively accepted barter payments from Nairit. Financial rehabilitation of these quasi-fiscal sectors is important in macroeconomic terms, because non-payment of energy bills by these sectors are a major cause of the financial difficulties of the energy sector.

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<sup>17</sup> Chapter III discusses the structure, macroeconomic significance, and financial performance of the energy sector in detail. It also describes performance in several other quasi-fiscal sectors (drinking water and sewage companies, irrigation, district heating, and the chemical company Nairit).

## **II. TAX SYSTEM REFORM**

### **A. Introduction and Background**

53. Due to the ongoing tax reform efforts since the transition to a market economy, the Armenian tax system is broad based and has a rate structure which is generally in line with international standards. The tax reform in 2000 focused on streamlining the tax system by rationalizing the rate structure, further broadening the tax base and improving administrative procedures. The first step was taken in mid-2000 with the reform of the excise tax and the introduction of the Simplified Tax, a presumptive tax that offers small businesses the possibility of a turnover based taxation. With the 2001 budget, the parliament agreed on the reform of the Personal Income Tax, (PIT) and the Corporate Profit Tax, (CPT) as well as changes in the VAT regime, effective January 1, 2001. On tax administration, the government made progress in consolidating the merger of the inland revenue service and customs administration.

### **B. Reform of Tax Policy**

54. Under the old tax regime, the marginal tax rate on labor varied significantly over income levels. For lower incomes, the rate structure was highly regressive in contrast to the progressive rate structure for some higher income brackets. This was due to the combination of the pension contributions and the income tax. The pension contribution scheme applied a quite substantial minimum contribution for low incomes and a maximum contribution above a certain cap. Between these income limits, a 31 percent rate applied. The limits for the personal income tax brackets of 15, 25 and 30 percent were defined independently from the pension contribution cap so that the combined marginal tax rates varied strongly.

55. In order to rationalize the rate structure and reduce the high marginal tax rates, the government introduced, effective January 1, 2001, tax brackets for social contributions and for the PIT whose combined effect results in a linear tax rate of 28 percent. The government decided against merging the PIT and the social contributions because of its intention to replace the current pay-as-you-go system, under which there is scarcely any link between the contribution and benefit, by a modern pension system within the next 3 to 5 years. The government decided that eliminating the separate pension scheme and transferring it completely into the state budget at this time would have complicated the future reform efforts.



56. The tax base of the PIT has been broadened by including interest income. To keep the administration simple, a final withholding tax<sup>18</sup> of 5 percent applies on interest income effective July 2001; this will be replaced by a 10 percent rate by July 2002. The withholding scheme for wages has also been adjusted to allocate the individual allowance proportionately over the year, as is best practice. Previously, withholding only began in the month when the annual income accumulated to date exceeded the individual allowance, which meant that the actual withholding rate increased in the course of the year.

57. The progressive CPT rates of 15 and 25 percent have been replaced by a unified rate of 20 percent, close to the average rate under the old regime and in line with the rate in neighboring Georgia.

58. To offer businesses a simple tax scheme that does not force them into a high tax burden in case they cannot document all expenses, the government introduced the Simplified Tax in July 2000. It offers an alternative to the regular taxation under the PIT, CPT and VAT for businesses below a revenue threshold of dram 30 million. Before the introduction of the Simplified Tax, presumptive taxes applied mainly for small retail businesses. These schemes are to be largely phased out, and indeed, some have already been eliminated.<sup>19</sup> Turnover serves as the tax base of the Simplified Tax on which a rate of 4.5 percent applies for shops, and a rate of 7.5 percent for other businesses. A deduction for properly documented business expenses is allowed. However, even if the documented expenses are higher than the turnover, a minimum rate on the turnover applies (2.5 percent for shops, 4 percent for other businesses). Although this rule reduces the administrative advantages of the Simplified Tax, the government included it because encouraging taxpayers to demand written documentation for all their purchases is seen as a major step out of the shadow economy. Further administrative complications occur from the separate treatment of sales and purchases of fixed assets, which are also treated separately for VAT purposes.

59. The new excise tax law, effective August 1, 2000, eliminates numerous "nuisance" excises (e.g., leather and china), which generated little revenue, leaving excises applicable only to the major revenue producers (petroleum products, alcohol and tobacco). It also adopted specific rates for all of these goods in order to facilitate administration. In addition, the administrative procedures for the credit mechanism for alcohol used as an input in the production of alcoholic beverages were tightened to ensure that the excise taxes on the inputs are actually paid before granting VAT credits. There are no differences between excise taxes

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<sup>18</sup> In contrast to normal withholding taxes, where the amount withheld at the source is only seen as a prepayment of the annually assessed tax, final withholding taxes are not revised in the annual tax assessment.

<sup>19</sup> The presumptive tax for restaurants and retailers has been eliminated. Only small kiosks are still subject to presumptive taxation.

on domestic production and on imports (other than the tariff element of the cigarette tax), and all excises are to be collected at the factory, as is best practice.

60. With the reform of the VAT, the government abolished numerous exemptions, such as those for medicines/pharmaceuticals, food for children, urban transportation, goods transferred via leases and for normal ongoing sales of companies undergoing reorganization and bankruptcy. In parallel, the VAT threshold has been increased from dram 3 million to dram 10 million in order to reduce the number of taxpayers that are liable for the VAT and to concentrate scarce administrative resources on larger taxpayers. Taxpayers below the threshold are obliged to register for the Simplified Tax if they meet the preconditions (e.g., no tax arrears).

61. On customs, effective January 1, 2001 the government issued a new customs law in line with WTO rules. These changes do not affect the rates of customs duties, which were already in line with international standards.

### **C. Tax Administration Reform**

62. In 1999, the government decided to create a separate Ministry of Revenues (MSR), which combined the Tax Inspectorate and Customs Department. Therefore, administrative efforts focused on merging the two administrations.

63. Reform efforts have focused on the VAT, which generates around 40 percent of tax revenues. In 2000, the MSR, with support of the Barents Group, started to work on an audit system, in particular, on a system of VAT cross checks which is expected to begin in operation by end-June 2001. As a first step, the cross checks will include receipts from audits. In the second phase, planned for the third quarter of 2001, records from the importation of goods and transactions above a certain limit (to be determined by the government) will be included. In addition, effective January 1, 2001, the obligation to pay VAT at the border was extended from only goods that are subject to customs duty (mainly consumption goods) to all goods except those on a list defined by the government. The government expected that the share of goods on which VAT is already collected at the border would increase in 2001 from 30 to 50 percent (based on 1999 trade data).

64. The customs administration reform is closely linked to VAT administration (since around 50 percent of VAT is collected at the border). Based on the results of a diagnostic workshop conducted by the government in March 2000, with Barents Group and DFID assistance, the government has started to reform administrative procedures, including by streamlining customs procedures and by improving risk assessment and valuation practices. In addition, they have developed a data base to ensure that the valuation is in line with the new customs code.

### III. SELECTED ISSUES IN THE QUASI-FISCAL SECTORS

#### A. Introduction

65. As in other CIS countries, quasi-fiscal activities and barter payments in Armenia are symptoms of deep-rooted structural problems. Quasi-fiscal operations include implicit subsidies, provision of credit at below-market rates, charging less than commercial prices, and the bailing out of ailing industries and enterprises in distress. In Armenia, these activities have been especially noticeable in the energy sector.

66. The financial imbalance in the energy sector has a tremendous impact on the overall economy, especially since the energy sector has gained in relative importance over the last decade. The sector's share in industrial production increased from 3.4 percent in 1990 to 30.4 percent in 2000, and the share of the energy sector in GDP almost doubled, to about 10 percent, between 1995 and 2000. The increase in the relative size of the sector can be partly explained by the 60 percent decline in GDP in the early 1990s, which not only was triggered by the collapse of the Soviet Union, but also by the trade and transport blockade imposed in 1991 as a result of the Nagorno-Karabakh conflict and the repeated disruption of Armenia's second major trade route by a civil war in Georgia in 1991-1993<sup>20</sup>. In addition, the tremendous increase in the relative price of energy<sup>21</sup> following the collapse of the FSU contributed to the growth in the sector's relative importance (Tables 13 and 49).

67. The energy sector also gained in relative importance in Armenia's foreign trade due to the escalation of energy prices toward world market levels after 1991. Despite a 68 percent decline in the volume of total energy imports between 1992 and 1993,<sup>22</sup> the share of energy in total imports increased from 15 percent to 26 percent. In 1994, the share of energy in total imports increased further to 40 percent. As residential gas supply and district heating were discontinued for the lack of reliable fossil fuel imports, electricity became (and remains) the dominant source of energy for the residential sector.<sup>23</sup> During these early years of transition, the government's immediate priority was to increase the supply of electricity to a minimum level necessary to cover essential human and economic needs, and to arrest the fall in output.

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<sup>20</sup> During this period the gas pipeline was blown up 28 times.

<sup>21</sup> For example, at the retail level, electricity prices increased by 125 times between end-1993 and end-2000, compared to an increase in the CPI during this same period of 18.3 times.

<sup>22</sup> The volume of imports declined from 3,174 to 1,019 thousand tons of oil equivalent between 1992 and 1993.

<sup>23</sup> According to the World Bank, except for a small part (10 to 15 percent) of the urban population which still receives district heating, the main sources of heating are electricity, which is too expensive for space heating, and wood, which has resulted in massive deforestation, indoor pollution as well as health and safety hazards.

68. As the energy sector has been permitted to incur sizable financial losses and arrears, thereby accounting for a major quasi-fiscal deficit which in turn tends to induce arrears also in other sectors, the government has determined that financial rehabilitation of the energy sector is of utmost importance. In addition, the persistence of barter trade in the energy sector reflects the failure to complete economy-wide enterprise restructuring. Since nonpayment and barter trade occur economy-wide and are not confined to the energy sector, energy-sector reform by itself will not rectify these problems. In fact, financial rehabilitation of the energy sector is very much dependent on financial rehabilitation of other budget-related organizations (such as publicly-owned utility providers) which, due to low tariffs, technical and managerial inefficiencies, and theft, are unable to pay fully for their electricity. Hence, the government has expanded its focus beyond the energy sector in its attempt to seriously reduce quasi-fiscal activities as well as the nonpayment and noncash payment problems.

69. Section B outlines the present structure of the energy and other major quasi-fiscal sectors. Section C defines and quantifies these sectors' two major problems: (i) the flow problem as reflected in financial deficits; and (ii) the stock problem as shown by accumulated debt as the consequence of past operational losses and investment. The causes of the financial imbalances and the progress thus far achieved in solving them are presented in Sections D and E. The last section summarizes further steps that have been announced by the government. The appendix provides a brief characterization of the publicly-owned utility providers that contribute in a major way to the financial problems of the energy sector.

## **B. The Structure of the Quasi-Fiscal Sectors**

### **The quasi-fiscal sectors**

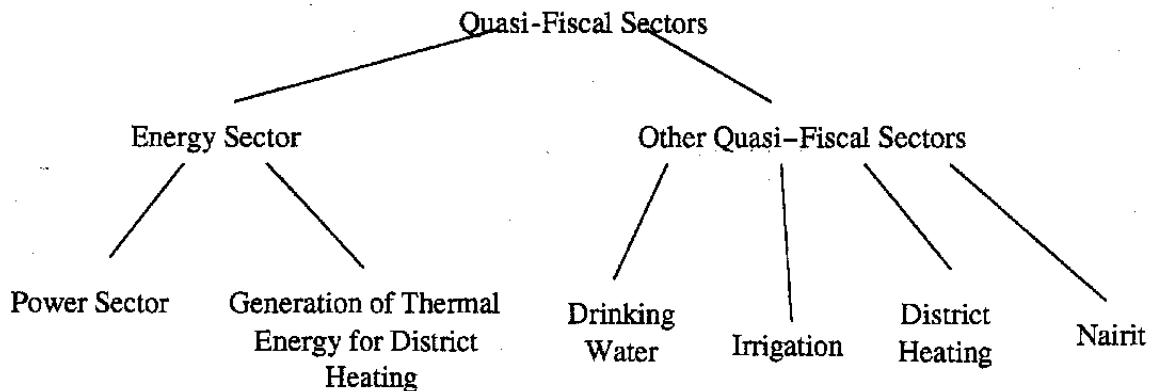
70. The Armenian authorities, assisted by World Bank and IMF staff, have defined the "quasi-fiscal sectors" as the energy sector, the state-owned irrigation and drinking water companies, centralized district heating<sup>24</sup> and the state-owned rubber plant "Nairit" (Figure 3). On the basis of this comprehensive definition, a system to monitor cash flows of the quasi-fiscal sectors was introduced in 1999.<sup>25</sup>

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<sup>24</sup> District heating refers to the provision of heat to end-consumers, of which private households account for 90 percent. The generation of thermal energy for district heating is a by-product of electricity generation.

<sup>25</sup> In the energy sector, monitoring of cash flows began in 1998.

Figure 3: Armenia: The Quasi-Fiscal Sectors



71. The extension of formal monitoring beyond the energy sector to the “other” quasi-fiscal sectors (see Appendix II) was based on the following considerations:

- First, collection rates for billed electricity and thermal energy from these other quasi-fiscal sectors were significantly lower than for other consumer groups, such as households, other industrial or service companies. Due to the accumulation of non-paid electricity bills, the major debtors to the energy sector are the two drinking water companies (Yerevan Water and Sewer Company and Armenia Water and Sewer Company), the irrigation company, district heating, and Nairit. Of a total stock of roughly dram 81 billion in energy sector receivables at end-2000, these entities accounted for some 55 percent.
- Second, these low electricity collection rates in the other quasi-fiscal sectors represent a constant drain on the fiscal budget, since the latter provides sizable explicit and implicit subsidies<sup>26</sup> to cover their electricity bills. Moreover, the Armenian authorities have been repeatedly under pressure to increase these subsidies by amending the central government budget if electricity consumption exceeded the amount assumed when the value of the subsidy was initially determined.<sup>27</sup> Even though the energy

<sup>26</sup> Examples of implicit subsidies are the government’s acceptance of tax arrears and barter payment, as well as the acceptance of operational deficits in these state-owned enterprises.

<sup>27</sup> In order to alleviate arrears from public entities (e.g., schools and hospitals) or state-owned enterprises to electricity companies, the 1999 budget contained maximum ceilings for electricity and heat consumption and provided funds to cover the cost of such “authorized” consumption. Electricity companies were instructed to cut off supplies if consumption exceeded ceilings. However, the ceilings proved to be set too low, and hence, the government

(continued)

companies are allowed to disconnect non-paying customers if their bills are overdue for 15 days, and managers are held responsible for compliance with this rule, enforcement has proven to be difficult, especially for large-scale enterprises and for budgetary organizations.

- Third, although disconnection is officially authorized, there are explicit exceptions to this rule. In mid-1995, the government issued a list of preferred customers to which power supply cannot be cut, including Nairit and the drinking water companies.<sup>28</sup>

### **The energy sector**

72. At end-2000, the publicly-owned energy sector consisted of thirteen enterprises,<sup>29</sup> which can broadly be categorized into electricity generation, transmission and dispatch,<sup>30</sup> and distribution companies (Figure 4). Since the second half of 1998, natural gas operations have been privatized (see paragraphs 105-06), and these operations as well as gas debts to Russia accumulated after this date are not included in the monitoring carried out by the government.

73. There are three types of electricity generation companies: (i) two thermal power plants using gas imported from Russia as an input to produce electricity, (ii) one nuclear power plant using nuclear fuel imported from Russia for electricity production; and (iii) two hydro power plants<sup>31</sup> using water from domestic resources<sup>32</sup> as an input. About 80 percent of

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had to amend the budget to provide for full payment of the electricity bills of public organizations.

<sup>28</sup> Nairit is included on the list of preferred customers because an interruption of energy supply might cause an explosion of the chemical plant.

<sup>29</sup> These enterprises are: Hrazdan thermal power plant; Yerevan thermal power plant; Metsamor nuclear power plant; Sevan-Hrazdan Cascade hydro-power plant; the Vorotan hydro-power plants system; the High Voltage Electricity Network; Armenergo; Yerevan Electricity Network; Northern Electricity Network; Southern Electricity Network; Central Electricity Network; Armgazprom (as a shareholder in Armrusgazprom); and Armtourtrade (a barter trader involved in payments previously supplied by Turkmenistan).

<sup>30</sup> A dispatch center controls and manages the loads of the generation companies and supplies the high voltage electricity to the distribution companies.

<sup>31</sup> There are also 13 privatized hydro power plants outside the public structure of the energy sector.

<sup>32</sup> The predominant water source for Armenia is Lake Sevan with its main outlet the river Hrazdan. The other water source is the river Vorotan, which empties into Lake Sevan. During the snow thaw, these rivers become very rapid and abound in water.

Armenia's primary energy consumption<sup>33</sup> is dependent on imports. The bulk of imports is channeled through Georgia because of the trade embargo. Gas is imported through Itera, the exclusive gas supplier, and passed on to Armrusgasprom, which is in charge of the Armenian gas distribution network. With the gas, thermal power plants produce electricity and by-products in the form of steam and hot water. Steam is used in industrial companies such as Nairit, while hot water (and also gas) is used in local boiler houses to provide district heating (the provision of hot water to end-consumers for heating purposes).

74. The five power generation companies transmit the high voltage electricity through the High Voltage Electricity Network to Armenergo, the dispatch center. Armenergo is the sole buyer of electricity from the generators following a single buyer model.<sup>34</sup> It sells the high voltage electricity at different tariffs to the electricity distribution companies. The tariffs are set by the Energy Regulatory Commission, the regulatory body of the energy sector, and are scaled according to the generation cost. For example, hydro power is less costly than nuclear power or thermal power, which both use imported inputs. Armenergo also exports electricity to, and imports it from, Georgia and Iran.<sup>35</sup> While Armenergo is involved in the contracting, for technical reasons the High Voltage Electricity Network receives the electricity first.

75. The electricity distribution companies transform the high voltage to low voltage and deliver it to the end users of electricity. The tariffs for end users are also set by the Energy Regulatory Commission. A law for the privatization of the electricity distribution companies was enacted by parliament in July 2000, and with the assistance of the World Bank and legal advisors, the government prepared the four electricity distribution companies grouped into two packages for privatization in 2001. Upon privatization, a distribution company would no longer be included in the structure of the public energy sector. The end users of electricity are private households, budgetary organizations (e.g., schools, universities, and public buildings), manufacturing industries (e.g., Nairit, and the copper-molybdenum plant),

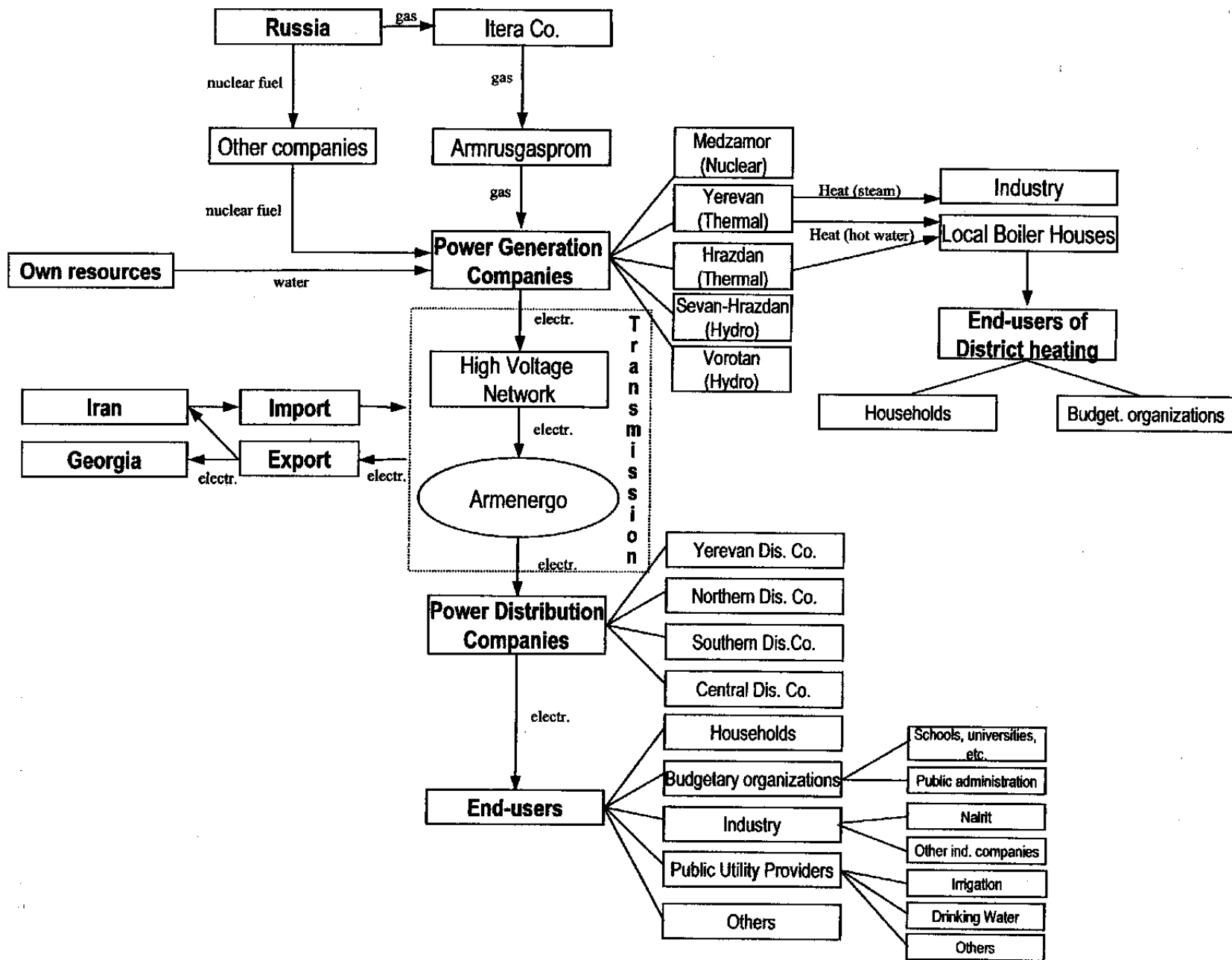
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<sup>33</sup> Primary energy consumption is consumption of energy in the form of natural resources: gas, coal, biomass, natural heat, etc. Secondary energy consumption is final consumption of energy for heating, cooling, hot water, lighting, etc.

<sup>34</sup> The single buyer model can be seen as a transitional arrangement before the conditions for a competitive wholesale electricity market are satisfied. It is characterized by legally and managerially separated generation and distribution companies, which are linked by one transmission and dispatch company (the "single buyer"), which has the exclusive right to purchase electricity from generators and to sell it to distributors. To facilitate the technically demanding balancing of electricity supply and demand, this model first appeared in developing and transition countries in the 1990s. Evidence suggests that the single buyer model has major disadvantages because it invites corruption and weakens payment discipline.

<sup>35</sup> Since 1997, Armenia has had an integrated power grid with Iran.

**Figure 4. Armenia: The Structure of the Energy Sector**





publicly-owned utility providers (irrigation, drinking water and sewage services) and other consumers (e.g., the army,<sup>36</sup> the transport sector and private service companies).

### C. The Size of the Quasi-Fiscal Deficits and Debts

#### Overall balance

76. The overall balance measures the difference between total revenues and total expenditures (including investment) for each sector. Grants are not included above the line, as they reflect discretionary financing by donors and are as such included in the cash flow below the line as a source of financing. In 1998, the overall energy sector alone had a deficit of 4 percent of GDP (Text Table 3). Improved collections (especially in thermal energy and in electricity exports) and higher electricity output led to a decrease of the energy sector deficit to less than ½ percent of GDP by 2000. In 1999, the first year for which data were available for the water companies and the irrigation sector, the combined deficit of the quasi-fiscal sectors was estimated to be at least 4½ percent of GDP.<sup>37</sup> This deficit was reduced—on the basis of preliminary data and the same subset of quasi-fiscal sectors—to around 2¼ percent in 2000 due to improved collections in the energy sector (as noted above) as well as higher energy output (for detailed cash flows, see Tables 51-55).

77. While the overall balance is an important indicator for assessing the current and capital operations of the quasi-fiscal sector, it needs to be interpreted with care. For example, if current losses are persistent, expenditures will rise because of increasing interest payments on growing debts. Furthermore, grants from foreign donors to finance infrastructure spending by the sector might significantly increase capital expenditures, and may vary significantly from year to year.

#### Primary balance

78. The primary balance for each sector is defined as the difference between total revenues and total expenditures, but excluding interest payments and externally financed capital expenditure.<sup>38</sup> A positive primary balance suggests that the sector can at least finance current expenditures (excluding interest) as well as domestically financed capital projects

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<sup>36</sup> Sometimes the army is included in budgetary organizations.

<sup>37</sup> Data for Nairit and district heating are not available.

<sup>38</sup> The government has indicated its intention to use the primary balance as a monitoring device. The rationale for this adjustment is that: (i) interest expenses depend on the rescheduling terms, and to include them would provide a given quasi-fiscal sector the possible incentive—in order to stay within its deficit ceiling—to negotiate even more reschedulings and even “softer” rescheduling terms in the course of the year; and (ii) capital expenditures that are externally financed are not fully under control of the sector, as they are guided by the project implementation units involved with disbursing the external funds.

from its own revenues. It provides an indicator of the adjustment effort in the given quasi-fiscal sector, because interest payments (predetermined by (i) the size of previous deficits and (ii) the terms of rescheduling agreements) and external capital expenditures (financed by foreign donors) are excluded. In 1998 the primary deficit for the quasi-fiscal sectors was at least 3.2 percent (but excluding water and irrigation), but had declined to 2.3 percent in 1999 and 1.3 percent of GDP in 2000.

Table 3. Overall Balances and Primary Balances in the Quasi-fiscal Sectors, 1998-2000

<i>As percentage of GDP</i>	1998	1999	2000
<b>Overall Balance</b>			
Energy	-4.1	-2.4	-0.3
Irrigation	...	-1.2	-1.1
Yerevan Water and Sewer Company	...	-0.5	-0.6
Armenia Water and Sewer Company	...	-0.3	-0.2
<b>Primary Balance</b>			
Energy	-3.2	-0.8	0.0
Irrigation	...	-0.7	-0.6
Yerevan Water and Sewer Company	...	-0.5	-0.5
Armenia Water and Sewer Company	...	-0.3	-0.2
Sum of all overall balances	...	-4.3	-2.2
Sum of all primary deficits	...	-2.3	-1.3
<i>Memo Item</i>			
Nominal GDP (mill. Dram)	958,791	988,074	1,032,455

Source: Armenian authorities. Data for 1998 are estimates and for 2000 are preliminary.

### Financing gap

79. As the overall balance as well as the primary balance both concentrate on items above the line, sole concentration on these items would disregard the macroeconomic impact of financing operations of these sectors. One approach for measuring the financing gap of the quasi-fiscal sectors is to focus on the **ex ante adjusted financing gap**, which not only takes into account the "above the line" operations of the sectors (i.e. revenues less current and capital expenditures), but also the principal due in any given year on their debt (which can involve budgetary loans, bank loans, payment arrears, and external credits) *before* (i) subsidies, (ii) rescheduling of debt service or (iii) accumulation of arrears. A positive ex ante adjusted financing gap indicates that such extraordinary financing is necessary. Ex post,

of course, the financing gap by definition will be zero, as the combination of a negative overall balance and nonserviceable debts will, as a practical matter, be covered by such financing.

80. Finally, it is necessary—in order to avoid double counting—to calculate a net financing gap for the entire quasi-fiscal sector. For example, the irrigation sector normally accumulates arrears on payments for electricity. If there were no ex ante financing gap for the irrigation sector because this gap would be financed from the budget, irrigation would be able to pay its electricity bills in full, and the ex ante financing gap of the energy sector would be reduced accordingly.

81. In November 2000,<sup>39</sup> the joint Bank/Fund assessment of these different ex ante financing gaps, which were agreed with the government were: (i) a gross adjusted financing gap of around 5½ percent of GDP (of which energy, almost 4 percent), and (ii) a net adjusted financing gap of 5 percent of GDP (Text Table 4). It is noteworthy, and an indication of the importance of the “stock” problem, that the preliminary estimated ex ante net unadjusted financing gap (at 5 percent) was almost four times larger than the preliminary estimated combined primary deficit (at around 1¼ percent).<sup>40</sup>

#### **Financing of current losses and investments**

82. Current losses and investment in the energy sector have been financed through fiscal support in the form of subsidies and budgetary lending, and through quasi-fiscal support such as the accumulation of arrears, bank loans<sup>41</sup> and supplier credits.<sup>42</sup> In many cases though, these types of financing exhibited a lack of transparency.

83. Despite the fact that the government did not give any *explicit subsidies* to the energy sector in 1998-2000, the government provided large amounts of fiscal support to the other quasi-fiscal sectors to enable them to pay for electricity. In fact in 2000, 90 percent of all government subsidies were given to state-owned enterprises (in particular, the drinking water and the irrigation sectors). However, as the amount of the subsidy did not cover the full electricity bills during these years, these companies still ran up arrears to the energy sector.

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<sup>39</sup> As the financing gap is ex post zero, it is in principle not meaningful to present preliminary actual data for the year 2000 here. Besides, due to data problems, no preliminary actual figures on the available financing for 2000 were available as late as March 2001.

<sup>40</sup> Excluding, of course, district heating and Nairit.

<sup>41</sup> To the extent that bank loans may be directed by the government, they can be considered as quasi-fiscal support.

<sup>42</sup> Given the importance of the gas-for-equity swap in the energy sector, this source of financing is discussed in more depth in the context of reforms or other solutions (Section E).

Table 4. Ex Ante Financing Gaps in the Quasi-fiscal Sectors, 2000

	2000
<i>as percentage of GDP</i>	
<b>Energy Sector</b>	
Unadjusted financing gap 1/	0.4
Adjustment for subsidies, restructured debt service, and arrears accumulation	3.5
Adjusted financing gap 2/	3.9
<b>Drinking Water</b>	
<i>Yerevan Water and Sewer Company</i>	
Unadjusted financing gap 1/	0.0
Adjustment for subsidies, restructured debt service, and arrears accumulation	0.4
Adjusted financing gap 2/	0.4
<i>Armenia Water and Sewer Company</i>	
Unadjusted financing gap 1/	0.1
Adjustment for subsidies, restructured debt service, and arrears accumulation	0.3
Adjusted financing gap 2/	0.4
<b>Irrigation</b>	
Unadjusted financing gap 1/	0.1
Adjustment for subsidies, restructured debt service, and arrears accumulation	0.6
Adjusted financing gap 2/	0.7
<b>Sum of the unadjusted financing gaps</b>	<b>0.6</b>
<b>Sum of the adjusted financing gaps</b>	<b>5.4</b>
Extra payments from the other quasi-fiscal sectors to the energy sector 3/	0.4
<b>Net unadjusted financing gap (after subtracting the extra payments)</b>	<b>0.2</b>
<b>Net adjusted financing gap (after subtracting the extra payments)</b>	<b>5.0</b>

Source: IMF/World Bank staff estimates.

1/The unadjusted financing gap shows the gap after the rescheduling of debt service, the accumulation of arrears and budgetary subsidies to the key quasi-fiscal sectors. The unadjusted financing gaps were agreed during the IMF mission to Yerevan in November 2000.

2/The adjusted financing gap shows the ex ante financing gap without subsidies, restructured debt services, and arrears accumulation.

3/The extra payments line summarizes the difference between the billed amount of electricity and the collected amount in the irrigation and water sectors. If there were no gaps in the irrigation and drinking water sectors, they would pay for 100 percent of their energy consumption. In this case the energy sector gap would be correspondingly reduced. The shortfall in energy payments by the irrigation and drinking water sectors needs to be subtracted from the energy financing gap in order to avoid double counting.

84. Prior to 2000, the budget also provided extensive amounts of *budgetary loans*, at low interest rates of 1 to 1.5 percent, to the quasi-fiscal sectors. The stock of budgetary loans to all quasi-fiscal sectors accounted for 3.7 percent of GDP at end-2000.<sup>43</sup> Since it is questionable whether these loans will ever be repaid, this net lending could well be considered to also have quasi-fiscal implications. Moreover, budgetary lending represents an implicit subsidy as not all enterprises have access to this financing source and it is given at below-market interest rates.

85. As in other CIS countries, the government has tolerated an increase in *arrears* of tax revenues, wages, social contributions and utility bills to keep the enterprises afloat. The stock of all arrears of the quasi-fiscal sectors amounted to at least dram 9.9 billion (about 1 percent of GDP) in 2000 (Table 51).<sup>44</sup> The stock of arrears from other quasi-fiscal sectors to the energy sector accounted for 55 percent of the stock of receivables of the energy sector in 2000. As the energy sector and Nairit are major tax debtors to the budget, growing tax arrears have eroded fiscal revenues. Moreover, given that the more profitable small and medium sized private enterprises are generally not allowed to run up tax arrears, this implicitly has led to a cross-subsidy to the less productive segments of the economy (such as Nairit or the energy sector).

86. *Bank loans* have played an important role in financing the deficit of the energy sector, while in the remaining quasi-fiscal sectors they do not appear to have been of particular significance. In the energy sector, bank loans still accounted for 22 percent of all payables at end-2000, although their share has decreased from 31 percent in 1998. In earlier years, these loans were primarily given as directed credits. To the extent these loans are still made at below-market interest rates, they could be considered quasi-fiscal operations.

87. Delays in payment to suppliers of goods and services to the energy sector are considered *supplier credits* if the terms of the late payments have been agreed between the two parties. Given their strong negotiating position, however, energy companies can easily enforce mutual agreements, thus converting such arrears to suppliers into supplier credits. Such agreements have been formalized, but often they do not reflect market terms, and therefore represent another implicit cross-subsidy from more productive to less productive segments of the economy.

#### **Stock of Debt**

88. As noted above, the persistence of current (or operational) losses, together with investment needs, has led to significant accumulation of debt. In the energy sector, the stock of payables at end-2000 was preliminarily estimated at \$223.7 million (about 12 percent of

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<sup>43</sup> In view of the lack of data for Nairit and district heating, the overall stock of budgetary loans is likely to have been even higher.

<sup>44</sup> Again, this has to be considered the minimum level since data for Nairit and district heating are not available

GDP), of which some 60 percent was domestic and 40 percent was external debt (Text Table 5). While in many other CIS countries energy debt and, in particular, gas debt, accounts for a high share in external debt,<sup>45</sup> in Armenia only 10 percent of total external debt can be attributed to the energy sector. This is partly due to the 1998 gas for equity swap under which Armenia received gas from Russia during 1998-2000 in exchange for equity in the Armenian gas company Armgas.<sup>46</sup> This swap also largely explains the reduction in the size of the total payable debt in the energy sector after 1998. Nevertheless, the large stock of energy sector debt means that energy sector debt service obligations in 2000 were considerable, in the range of 20 to 25 percent of energy sector revenues, according to World Bank estimates.

89. The stock of receivables held by the energy sector amounted to the equivalent of \$146 million at end-2000, and included electricity arrears and arrears for thermal energy and natural gas. From end-1998 to end-2000, the receivables of the energy sector increased from 8½ to 13 percent of GDP. The receivables for delivery of gas mainly stem from previous years, when the gas distribution network was still a part of the state-owned energy sector. Most of the energy sector's receivable debt is generally considered as "bad debt", i.e. it will likely never be collected.

#### **D. Causes of the Financial Imbalances**

##### **Technical and Excess Losses**

90. Technical losses are defined as losses due to inefficient and wasteful infrastructure and lack of metering, and are typically only subject to reduction through better management, improved maintenance, and new investment. Technical losses have been calculated separately—from excess losses (see below)—thus far only for the energy sector, and there has been only negligible progress in this area since 1998 (Text Table 6). Excess losses essentially refer to theft, and after a reduction in the excess loss rate in energy in 1999, the rate rose again in 2000. While the overall loss rate held roughly constant in irrigation between 1999 and 2000, it deteriorated substantially in the two water companies in 2000. Overall loss rates in water and irrigation are very high, in the range of 30 to 70 percent.

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<sup>45</sup> For example, the external debt of the state-owned energy companies is estimated at some 15 to 20 percent of total external debt in Moldova.

<sup>46</sup> This arrangement extends through 2001. In section E, the gas for equity swap is described in more detail.

Table 5. Stock of Payables and Receivables in the Energy Sector, 1996-2000

<b>Stock of Debt in the Energy Sector 1/</b>					
In million of US dollars at the end of the period					
	1996	1997	1998	1999	2000
<b>Payables</b>					<b>Preliminary</b>
Total Stock of Debt of the Energy Sector	241.1	258.6	269.7	234.7	223.7
Domestic debt	169.5	150.4	140.2	126.4	129.7
External debt	71.6	108.2	129.5	108.3	94.1
Percentage of external debt of the energy sector in the total stock of external debt	11.7	13.4	15.6	11.9	10.3
Total energy sector payable debt as percent of GDP	15.9	15.9	14.7	12.4	12.0
<b>Receivables 2/</b>					
Total stock of receivable debt	...	...	96.9	122.20	145.8
o/w Nairit	...	...	25.3	29.8	25.8
o/w Irrigation	...	...	4.8	11.6	21.4
o/w District heating	...	...	14.4	15.0	13.1
Percentage of receivables from the other quasi-fiscal sectors in the total	...	...	55.1	55.0	54.0
Total energy sector receivables as percent of GDP	...	...	8.4	11.2	12.9
<b>Memo Items</b>					
Exchange Rate (Dram/US dollar, eop)	435.10	494.98	522.00	523.77	552.18
GDP (billion dram)	661	804	959	988	1,032

Source: IMF staff estimates; Armenian authorities; World Bank.

1/ Due to lack of data, only the energy sector debt can be considered here.

2/ Also includes the receivables from natural gas (as accumulated before the creation of Armrusgasprom) and thermal energy. Irrigation and drinking water only have electricity debt to the energy sector, because they only use electricity but not thermal energy or gas as an input.

Table 6. Key Parameters in the Quasi-fiscal Sectors, 1995-2000

	1995	1996	1997	1998	1999	2000 Prel.
Loss rate as percent of supply						
Energy Sector						
Technical losses	...	...	...	15.2	14.8	14.9
Excess losses	...	...	...	15.5	10.0	11.6
Yerevan Water and Sewer Company	...	...	...	...	59.2	72.6
Armenia Water and Sewer Company	...	...	...	...	37.0	44.0
Irrigation	...	...	...	...	31.4	30.0
Tariff (on retail level)						
Energy sector, dram per kWh 1/	10.5	18	17.3	20.3	21.9	21.4
Yerevan Water and Sewer Company, dram per cubic meter	...	...	...	...	46.0	46.0
Armenia Water and Sewer Company, dram per cubic meter	...	...	...	...	38.4	42.8
Irrigation, dram per cubic meter	...	...	...	...	2.3	3.3
Collection rate as percent of billings						
Energy sector	58.0	59.0	40.0	77.1	88.0	88.5
Yerevan Water and Sewer Company 2/	...	...	...	...	24.2	18.7
Armenia Water and Sewer Company 2/	...	...	...	...	30.0	31.0
Irrigation 2/	...	...	...	...	50.1	38.4

Source: Armenian authorities

1/ Before 1998, only the household tariff is available. From 1998, cash flow data referring to the average tariff are cited.

2/ Some of the overdue bills will be collected during the first three months of 2001. These data was not available in March 2001.

91. Theft is often dependent on seasonal factors; for example, winter months electricity theft is higher than in summer months since electricity is the major heating source. Also, press reports have suggested that some managers in distribution companies as well as in pumping stations have been accused of being actively involved in theft. Moreover, the quasi-fiscal sectors still have inadequate metering, accounting and auditing systems, and the government has sought aid from USAID and the World Bank to deal with these problems. However, progress has proven to be slow.

### Low tariffs

92. As noted earlier, during the 1991-94 the energy sector operated in a crisis mode geared to human survival, with little attention being given to commercial principles. Faced



with the rapidly increasing price of energy imports, the authorities adjusted tariffs for electricity, gas, and heating (where available) to cover at least most of the fuel costs, but the extent of cost recovery for operations, maintenance, and depreciation was insufficient to maintain plants and equipment. In addition, the government's ability to raise tariffs in real terms was circumscribed by the high rate of inflation in 1992-1993.

### **Low collection rates**

93. The task of ensuring a secure supply of energy was complicated by the inability of the electricity supply rate in the energy sector was preliminarily estimated by the authorities at 88½ percent in 2000, but it is only in the 20 to 40 percent range in the water and irrigation sectors. Since 88 percent of all households pay their electricity bill, nonpayment in the state-owned energy sector is mainly caused by some large scale industrial enterprises such as Nairit, and budget-related organizations such as the drinking water companies and the irrigation company. Among the reasons for nonpayment are the following: (i) the inability of end users to pay; (ii) the reluctance to suspend service to nonpaying customers;<sup>47</sup> and (iii) the inability of the government to enforce collection of overdue receivables. The enforcement of financial discipline is also difficult because of the scarcity of metering equipment and of the lack of distribution companies to enforce payment discipline by end users, including both households and enterprises. Revenues collected have consistently fallen short of energy billed. The collection of technical means to disconnect nonpaying customers. The latter especially holds true for the "other" quasi-fiscal sectors.

### **Lack of transparency**<sup>48</sup>

94. As noted in the introduction, quasi-fiscal deficits as well as non-cash payments ultimately reflect a failure of economic policy to promote the restructuring of ailing sectors and to impose hard budget constraints on nonviable enterprises. Barter payment is still widespread in the energy sector. While in some cases the energy sector has had to accept barter payment in order to keep an enterprise or factory afloat, in other instances, creditors of the Armenian energy sector (such as Itera) might insist on payment in goods instead of cash. However, the lack of transparency associated with in-kind payments creates opportunities for corruption and fraud. Furthermore, mispricing of goods obscures the financial accounts of the involved enterprises.

95. During 1997-1998, barter made up for 60 percent of all energy payments, but the extent of barter has been significantly reduced since then. In Armenia, recent barter payments

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<sup>47</sup> Currently this argument is not as relevant for the energy sector as for the other publicly-owned utility providers, as in 1988-2000 nonpaying households were consistently cut off from electricity.

<sup>48</sup> While technically not directly causing financial imbalances, indirectly the lack of transparency contributes to higher losses through theft, and helps to conceal the financial condition of the quasi-fiscal sectors, thereby delaying their financial rehabilitation.

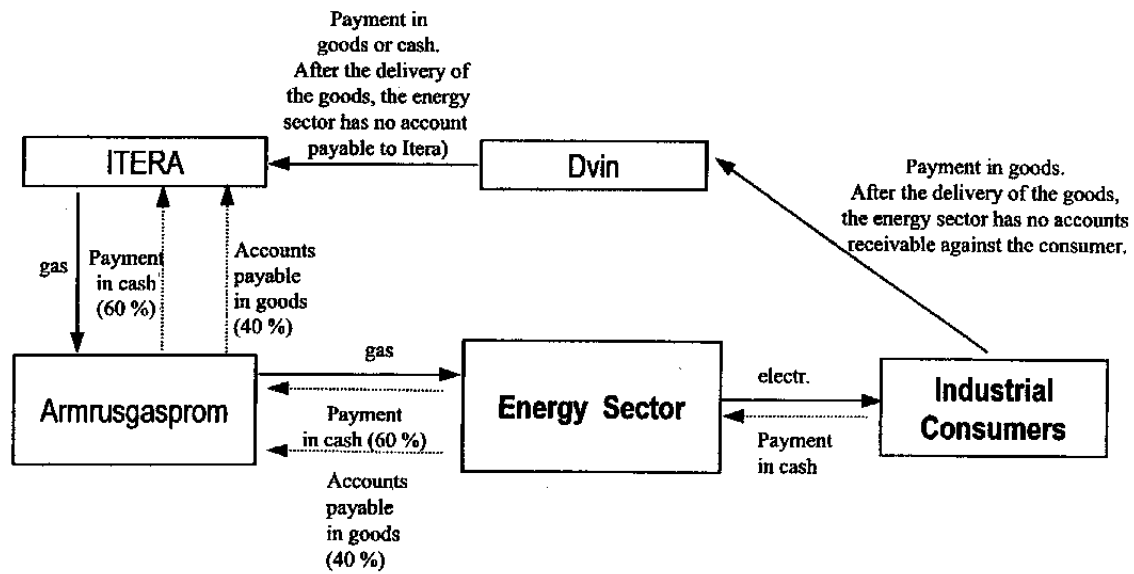
to the energy sector have been organized through mediators or trading companies, such as Dvin (see Figure 5, which illustrates a barter payment scheme for Itera). If a consumer is not able to pay its electricity bill in cash, it may offer in-kind payment to the energy sector. If the energy sector agrees to in-kind payment, a contract is set up between the energy sector, the barter trader (here, Dvin), Armrusgasprom, and the consumer concerning the goods to be supplied in exchange for electricity, and the terms of the payment (i.e. deadlines and penalties). Armrusgasprom (and herewith implicitly Itera) only accepts "high-quality goods" in barter trade like rubber, cement/concrete, copper and molybdenum. Upon delivery of the goods to the barter trader, the energy sector's receivables from the consumer are cancelled. When Dvin delivers the goods to Itera, the energy sector balances the barter share (recently, up to 40 percent) of the accounts payable to Armrusgasprom and Itera.

96. The involvement of Dvin in the payment chain is especially "advantageous" if the payment schedules for the electricity bill and the delivery of the goods do not coincide. In some instances, the consumer proposes to the energy sector to pay in goods which are not yet produced. In case of such late payment for electricity, the consumer may have an account payable to Dvin but not to the energy sector, since if Dvin pays Itera from goods it has in stock, it can cover the debt of the energy sector to Itera in a timely manner. This advantage also holds true in a case of early payment if an electricity consumer has already produced goods and delivered them to Dvin, but, has not yet consumed the electricity. In this case, the consumer has an account receivable from Dvin.

97. Dvin is also involved in offsetting operations to cover electricity bills for its customers. Since Dvin is specialized in trade with the Russian Federation it may not only arrange the trade on behalf of the energy sector but, if necessary, for much of the industrial sector. For example, Nairit used Dvin as a mediator for its trade with Russia in 1998-2000, and as a result had accounts receivable from Dvin from these transactions. On the other hand, Nairit was not able to cover its electricity bill, and thus Nairit had accounts payable to the energy sector. As a consequence, the Ministry of Industry and Trade (supervising Dvin) and the Ministry of Energy agreed in 2000 on an offsetting operation, which allowed Nairit to cover its debts to the energy sector by drawing on its account receivable to Dvin.

98. As long as the government continues to tolerate quasi-fiscal deficits and barter, enterprise restructuring tends to be delayed not only in the quasi-fiscal sector but also— due to ripple effects—in the entire industrial sector. Given the importance of large-scale enterprises for the economy, implicit subsidies channeled through the acceptance of operational deficits and barter are often a substitute for an effective social safety net. Establishment of a better targeted social safety net, improved incentives to private entrepreneurs, as well as the fight against corruption would all help to overcome quasi-fiscal deficits and barter, and the government has committed itself to reforms in these areas.

**Figure 5. Armenia: Barter Trade in the Energy Sector**



## E. Reforms

99. Armenia's isolation from international markets was eased somewhat by the signing of a cease-fire agreement with Azerbaijan in 1994 and by political stabilization and economic recovery in Georgia. This allowed the government to move away from the management of an economy in conditions similar to being under siege and towards the implementation of a comprehensive stabilization and structural reform program. The following steps have been taken to reform the energy sector in Armenia.

### **Tariff adjustments**

100. In an early attempt to reduce operational losses in the energy sector, the tariffs in the electricity sector were gradually increased, from 0.2 Dram/kwh (US cents 0.3 per kwh) at end-1993 to 25 Dram/kwh (US cents 4.4 per kWh) on January. 1, 1999 (Table 13).<sup>49</sup> However, the current electricity tariff still does not cover total expenditures, nor do tariffs in the other quasi-fiscal sectors. It is frequently argued that the present tariff in the energy sector would cover current expenditures (excluding interest payments) if all consumers were to pay their bills. Even though this argument is arithmetically correct, from an economic point of view it lacks substance as the collection rate in 2000 was still well below 100 percent. As noted earlier, the low tariff is partly motivated by social considerations, given the absence of a social safety net. Since a non-cost recovery tariff does not signal relative scarcity, however, it is inferior to an increase in tariffs accompanied by direct transfers to needy households to balance the social impact of higher utility costs.

### **Collection enforcement**

101. In an effort to enforce payment discipline, the government implemented a decree in mid-1995 under which the Ministry of Energy was authorized to suspend service to customers in default with the exception of budgetary enterprises and so called strategic enterprises such as Nairit and the drinking water and irrigation companies. This measure helped to improve payment discipline, and the collection rate rose from below 40 percent in 1995 to around 88-89 percent in 1999-2000. At present, households pay 88 percent of their electricity bill in cash. The collection rate for industries is 100 percent due to the acceptance of barter payment. Other consumers (especially service companies), however, pay the full amount for their electricity bill in cash. Major nonpayers to the electricity sector include the irrigation, drinking water and the transportation sectors.

### **Improvement of monitoring**

102. The measure to cut off non-paying private households was accompanied by (i) the introduction of accounting systems making the extent of nonpayment transparent, and (ii) enhanced metering systems provided mainly by international donors. In September 1998, the government published the first official cash flow projections for the energy sector for the

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<sup>49</sup> Data refer to tariffs at the household level, while the data in the cash flow table (Table 6) represent the average tariff.

years 1998 to 2001. For 1999, cash flows were compiled for the two water companies and the irrigation sector. Since then, actual cash flows have been reported to the government and to parliament.

103. In 1998, the U.S. Government approved a grant of \$15 million mainly to improve the metering system in the energy sector. Today, the majority of end-consumers are metered, but the manipulation of meters is frequently reported. Furthermore, lack of metering is still a matter of concern at the transmission and generation level. In the other quasi-fiscal sectors, metering lags far behind the standards of the energy sector.

#### **Improved regulatory framework**

104. In 1997 a new energy law was adopted. The energy law: (i) provided the legal basis for the separation of Armenergo, which was then a vertically integrated power company, into generation, transmission, dispatch and distribution companies and, hence, triggered the substantial restructuring of the energy sector; (ii) established an independent Energy Regulatory Commission responsible for issuing licenses, establishing market rules and setting regulated tariffs; and (iii) separated the policy-making (e.g., providing for more competition) from the ownership role of the government. Since 1997, private ownership has in principle been allowed in all parts of the energy sector except in nuclear facilities.

#### **Other Measures: The gas for equity swap**

105. In 1998, a joint venture, Armrusgasprom, was formed with Russia's Gazprom and Itera to finance the continuing operational losses of the energy sector caused by the high loss rates and inadequate collection of energy bills.<sup>50</sup> Some 55 percent of the equity in Armrusgasprom, valued at \$270 million, was transferred to Russia's Gazprom (45 percent) and to Itera (10 percent), a U.S. registered private natural gas trading company, mainly in exchange for gas that was to be supplied to Armenia during 1998-2001. The remaining Armrusgasprom shares are owned by the government of Armenia, namely the Ministry of Energy. The joint venture between the government of Armenia and Gazprom and Itera, named Armrusgasprom, was intended to secure gas deliveries to Armenia, as Itera is its exclusive gas supplier. Given a secured gas supply from abroad, Armenia is even able to produce electricity in excess of its domestic demand, making it a net exporter of electricity. However, one of the major Armenian objectives for the joint venture—to export Russian gas via Armenia to Turkey—has not yet been achieved. If Armenia were to become part of a gas transit network, the deal would allow the government to collect transit fees for exported gas. Finally, the Armenian government expected that Itera would have financial resources to invest into the gas network.

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<sup>50</sup> Since the energy sector was unable to collect fully the amount of electricity delivered to customers, a negative current balance arose, which in turn led to non-payment of gas deliveries.

106. As the Armenian government considers Armrusgasprom to be an independent company, the official cash flow projections for the energy sector have excluded operations of Armrusgasprom since the second half of 1998. If domestic gas consumers failed to pay Armrusgasprom, this would not trigger budgetary support from the government for the joint venture. Nevertheless, since the state holds 45 percent of Armrusgasprom, it would need to assume an equal part of that company's liabilities if it went bankrupt. In treating Armrusgasprom as a private company, it remains unclear what the government's current obligations to the company are. This is complicated by the fact that the government still has not clearly indicated, whether the gas provided to the energy sector on the basis of the gas-for-equity swap would be given as a budgetary loan or as a grant to the energy sector.<sup>51</sup> Furthermore, the accounting treatment and the schedule of payments through the chain of energy companies (from electricity generation through the electricity distribution companies) remains to be clarified.

#### F. Further Steps

107. With the assistance of the World Bank and other international donors, the government has been preparing several steps for the further financial rehabilitation of the quasi-fiscal sectors.

- Privatization of energy distribution companies: In preparation for strategic investor privatization, the electricity distribution companies were gradually consolidated (from 62 companies in 1996, to 11 in 1997, and to 4 in 1998). Furthermore, a privatization law was enacted in July 2000 and soon after, a tender committee was established to supervise the privatization process. In March 2001, the tender documents were initially sent to potential investors. Privatization of the electricity distribution companies could improve revenue collections at the distribution stage if the government no longer can prevent the supplier from cutting off delinquent customers, or if it agrees to subsidize the distribution companies for the unpaid bills. Privatization of the transmission and generation stages of the energy sector (except for the nuclear power plant) are also being considered for the medium and long term.
- Targets for the primary balance: The government has set targets for the primary balance of the energy sector in 2001. Furthermore, the government has indicated its intention to publish quarterly data on cash flows in the energy sector and to improve data provision in the other quasi-fiscal sectors. These targets will give the authorities the incentive to push ahead with the restructuring of the quasi-fiscal sectors, and are intended in the meantime to serve also as an incentive for lower losses and increased collections in these sectors.

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<sup>51</sup> Decree 658 (October 23, 2000) only requires that the amount of gas received by the energy sector should be paid to the budget starting from 2003 "in accordance with financial flows." If by then the energy sector is still running a deficit, it would not need to pay for the gas.

- **Support for the restructuring of energy sector debt:** After the privatization of the electricity distribution companies, the accumulation of new receivables and payables by the energy sector should cease. However, the problem of old payable debt could complicate further privatization. Therefore, the government has been exploring possibilities for restructuring the energy sector's accumulated external and domestic debt, at concessional terms.

108. As the sector does not earn sufficient revenues to finance necessary investment to replace obsolete plant and machinery, further tariff adjustments to reflect current and capital expenditures may also have to be considered. Over the next decade, the World Bank estimates that about \$1.7 billion is needed in the energy sector alone to compensate for the asset depletion since the collapse of the Soviet Union, and to rehabilitate and replace assets that are well beyond their economic life. One of the reasons for the privatization plan noted above was the interest in attracting additional needed investment.

**Armenia: Summary of Tax System (as of January 1, 2001)**

(All values in drams)

	Tax	Nature of Tax	Deductions and Exemptions	Rates
<b>1. Taxes on consumption and production</b>				
1.1	<b>VALUE-ADDED TAX</b>	<p>VAT shall be charged on any supply of goods and services or import of goods and services as well as on own-consumption of a taxable person. Exports are zero-rated (destination principle). The tax base is price plus excise taxes on domestic goods and customs value plus excise taxes plus customs duty for imported goods.</p> <p>Input tax credit: Credit is allowed for VAT accrued on raw materials, fuel and services involved in production and sales as well as on capital assets. This credit is allowed on an immediate basis for fixed assets or if the value of the asset is no more than dram 10 million. Refunds are limited to exports.</p> <p>The annual threshold for VAT is equal to dram 10 million.</p>	<p>Exemptions: sales of stamps; housing rental by individuals; rent of leased enterprises organized on the basis of state enterprises; circulation of currency and securities; services for which state duties are charged; goods and services imported as humanitarian aid and for charitable purposes; agricultural products supplied by the producer; scientific services.</p>	<p>20 percent standard rate.</p> <p>Zero-rated: exports, nonresident diplomatic purchases.</p>
1.2	<p><b>EXCISES</b></p> <p>The new law is effective from August 1, 2000</p>	<p>All excise rates are specific. The tax is payable by producers or importers of excisable goods.</p>	<p>Exemptions: Sale of goods for export; goods imported by individuals, if less than the taxed quantity, as defined by customs legislation (currently \$500 twice a year); goods on transit through Armenia; goods imported to Armenia within the framework of humanitarian assistance, and relief programs; goods imported to Armenia temporarily, to be kept under the Custom House control, as in accordance with the legislation; goods imported to Armenia, which were previously temporarily exported.</p>	<p>Rates in dram (per liter unless otherwise specified):</p> <p>Beer .....70</p> <p>Wine .....100</p> <p>Ethyl alcohol .....600</p> <p>Spirits ..... 300-1,500</p> <p>Diesel fuel .....11,500</p> <p>Crude oil (per ton).....27,000</p> <p>Liquid gases (per ton) .....1,000</p> <p>Tobacco substitutes (per kg) ..1,500</p>
1.3	<p><b>SPECIFIC (PRE-SUMPTIVE) TAXES ON CIGARETTES AND PETROLEUM</b></p>	<p>A specific tax for cigarettes (including VAT, excise and customs duties for imports, and VAT and excise for domestic production) and for gasoline (including excise and VAT) is effective.</p>		<p>The rate (per box) for filtered cigarettes is:</p> <p>- \$100 for imports;</p> <p>- \$80 and \$22 for domestic filtered and filter-less, respectively;</p> <p>The rate for gasoline is \$222 per tone.</p>



	Tax	Nature of Tax	Deductions and Exemptions	Rates
1.4	ENVIRONMENTAL TAXES	Specific taxes and ad valorem taxes are imposed on economic activities and materials, which exploit or pollute natural resources.		Rates vary greatly depending on activity and substance. A hazardous material tax is imposed on many oil based and other products.
<b>2. Taxes on income and wealth</b>				
2.1	ENTERPRISE PROFIT TAX  The new Law was effective on January 1, 1998	Resident legal entities are taxable on their taxable profits from all sources worldwide. Foreign legal entities operating through representations in Armenia are taxable on the taxable profits derived by the representatives in Armenia as well as on income independently received from Armenian sources.  The taxable profit is the positive difference between gross income of taxpayer and deductions, envisaged by the law.	Deductions: income related expenses—particularly the following shall be considered as expenses: material expenses; labor reimbursement; pension, unemployment, social security payments; depreciation of fixed assets; insurance payments; taxes, duties, other obligatory payments which are not subject to compensation (or netting); interest on loans, or other borrowings; fee for guarantees, letters of guarantee, LCs, and other banking services; advertisement expenses; representative expenses; business trip expenses; court expenses; fines and penalties, unless envisaged otherwise in this law; expenses on staff recruitment; auditing, legal, other information and administrative expenses; factoring, trust expenses; the amount of any losses that are the result of selling or exchanging property.  Loss carry forward of 5 years.  If the share of a foreign investor in the equity capital of a resident (except banks) is at least dram 500 million after January 1, 1998, then the amount of the tax of the resident is reduced by 100 or 50 percent for up to ten years depending on the time the investments is made.	20 percent

	Tax	Nature of Tax	Deductions and Exemptions	Rates
2.2	<p><b>PERSONAL INCOME TAX</b></p> <p>The new law and went into effect on January 1, 1998</p>	<p>Residents are liable for income tax on their worldwide income. Nonresidents are taxable on the income derived of Armenian sources.</p> <p>The following monetary and in-kind income received by individuals shall be subject to taxation: income derived from implementation of labor and civil and legal agreements; authors' royalties; income derived from business activities; income derived from leasing of property; income derived from share capital participation, securities and deposit payments, as well as other income. In-kind (nonmonetary) income shall be taxed in compliance with the market prices.</p> <p>On interest from deposits, a final withholding tax is applied.</p> <p>Tax on Armenian-source income is normally withheld at the source. Income from an overseas source is assessed on an annual basis.</p>	<p>Nontaxable income: state benefits paid according to legislation of RA except allowances for temporary work disability and for care of a sick family member; pensions; one-time compensation to families of disabled or killed serviceman and alimony.</p> <p>Deductions: dividends; income of military service; monetary and in-kind assistance from NGOs; property and cash inherited from or gifted by physical persons; social assistance provided by the state or local governments; sale of property with the exception of selling the property not for entrepreneurial purposes; scholarships; insurance compensation; severance pay; one-time assistance in case of the death of an employee or a family member; and prizes above dram 10,000.</p>	<p>The rates as of January 1, 2001 are as follows:</p> <p>Annual taxable income less than dram 240,000—0 percent;</p> <p>Annual taxable income from 240,000 to 1,200,000—10 percent of the amount above dram 240,000;</p> <p>Annual taxable income above 1,200,000—20 percent of the amount above dram 1,200,000;</p> <p>Final withholding tax on interest:</p> <p>From July 1, 2001 to July 1, 2002—5 percent;</p> <p>A 10 percent rate thereafter.</p>
2.3	<p><b>Simplified Tax</b></p> <p>The new law and went into effect on July 1, 2000</p>	<p>A tax on turnover that is a substitute for the VAT and the income tax for legal persons and individual entrepreneurs with a turnover below dram 30 million, excluding taxpayers with imports above dram 1 million, taxpayers with outstanding tax obligation above dram 100,000, financial institutions, casinos and lotteries. There is no threshold for restaurants and retail shops.</p>	<p>Deductions:</p> <ul style="list-style-type: none"> <li>- Sales and purchases of fixed assets are treated separately for VAT and profit tax purposes.</li> <li>- Deductions for documented business expenses (excluding fixed assets) are allowed up to 50 percent of the tax obligation. The remaining part of documented expenses can be carried forward. In any case, minimum tax payment after deductions is 2 percent of the turnover.</li> </ul>	<p>For retail businesses: 4.5 percent</p> <p>For all other businesses:</p> <p>Annual taxable turnover from dram 0—dram 16 million: 7.5 percent;</p> <p>Annual taxable above dram 16 million: 12.5 percent</p>

	Tax	Nature of Tax	Deductions and Exemptions	Rates
2.4	MANDATORY SOCIAL SECURITY CONTRIBUTIONS	Withholding is required for monthly contributions to pensions, unemployment, social security and medical funds summarized in the State Fund for Social Insurance.	Nonprofit organizations and organizations working in the area of education, health and culture have to pay the minimum contribution only for one employee.	<p>The rates for the pension contributions to be paid by the employer as of January 1, 2001 are as follows:</p> <p>Annual taxable income less than dram 240,000—dram 60,000;</p> <p>Annual taxable income from 240,000 to 1,200,000—15 percent of the amount above dram 240,000;</p> <p>Annual taxable income above 1,200,000—15 percent of the amount above dram 1,200,000;</p> <p>The employee pays independently from the amount of salaries 3 percent.</p>
2.5	LAND TAX Effective April 1, 1994	For agricultural land, the tax is based on net income, determined by the land cadastral valuation. For other land, the tax is based on the land cadastral value.	<p>Exemptions: Budget institutions and organizations; state reserves, national parks, botanical gardens, and land of historical-cultural importance, farmers and collective farms formed during land reform; state land of general use; educational-industrial and experimental plots attached to colleges and schools.</p> <p>A 50 percent exemption applies to certain lands used for scientific, educational, and agricultural and forest cultivation programs; and citizens exempt from income tax (currently, there is no such exemption).</p>	<p>Land of agricultural use: 15 percent</p> <p>Nonagricultural land:</p> <p>Land of industrial importance, transportation, communication, broadcasting, television, defense, gas lines, and water funds: within settled area—1 percent, and outside of settled area—0.5 percent.</p> <p>Land for forest stocks 1percent</p> <p>Other land—1 percent</p>
2.6	PROPERTY TAX The new law was effective on February 1, 1998	<p>The tax is paid for buildings and means of transportation.</p> <p>The tax base for the buildings is the value as assessed according to the law, and the tax base for means of transportation is the engine power (horse power, HP, or kilowatt).</p>	<p>Exemptions:</p> <p>a) the property of budget organizations and institutions;</p> <p>b) communication roads (including motor ways), communication and power transmission lines, as well as property used for the purpose of their direct operation; and</p> <p>c) water reservoirs;</p> <p>Deductions: for vehicles manufactured more than 3 years before, the tax amount is reduced by 10 percent for each year above 3, but not more than 50 percent of the total tax amount.</p>	<p>Residential buildings: 0–0.8 percent of according the scale; other buildings: 0.6 percent</p> <p>Water transport: dram 150 per HP;</p> <p>Trucks and buses: dram 100 to dram 200 per HP; and</p> <p>Passenger vehicles: dram 200 to dram 500 per HP.</p>

	Tax	Nature of Tax	Deductions and Exemptions	Rates
<b>3. TAXES ON INTERNATIONAL TRADE</b>				
3.	<b>CUSTOMS DUTIES</b>  The new law is effective from January 1, 2001	Customs duties are levied on all physical and legal entities importing into, and exporting from, Armenia.	Exemptions from customs duties are as follows: transit of goods through the territory of Armenia, temporary imports of goods on the territory of Armenia.  A deduction for individuals applies for the goods worth no more than \$500 and weighting not more than 50 kg.  The individuals that arrive in Armenia with the intention of permanent residence may import their belongings into Armenia without payment of customs duties.  The citizens of Armenia may import their inheritance property (received abroad) into the customs territory of Armenia without payment of customs duties.	Exports are zero-rated.  Imports of almost all finished products (consumption goods) are taxed by 10 percent, and all other goods (including raw materials, machinery, equipment, pharmaceuticals) are generally 0 rated.
<b>4. PRESUMPTIVE (SPECIFIC) TAXES FOR SOME BUSINESSES</b>				
4.	<b>PRESUMPTIVE PAYMENTS</b>  The new law was effective on August 1, 1998	The law has established presumptive taxes replacing VAT and/or profit (income) tax for the following activities: a) the activity on arranging trading place; b) transportation activities; c) haircutting services; d) the activities of photo laboratories; e) the activities of gas stations; f) retail sale of petrol and diesel; g) parking places; h) commercial fishing; i) exchange offices; j) foreign exchange dealers; k) casinos; l) lotteries; m) computer games; and n) video-recorders, and films.		Rates vary according to the activities and basic parameters.

## **Recent Economic Developments in the Other Quasi-fiscal Sectors**

### **Yerevan Water and Sewer Company**

1. The Yerevan Water and Sewer Company provides drinking water and sewage services for the population of Yerevan and its vicinity. The overall deficit of the company increased from 0.5 percent of GDP in 1999 to 0.6 percent of GDP in 2000 (Text Table 3). These deficits were caused by high loss rates, low collection rates, and a less than full cost-recovery tariff. In 1999, the overall loss rate was 59.2 percent of all water that was supplied to the network because the technical standard of the company and the grid is very low. Furthermore, the low technical standard contributes to high electricity consumption in order to pump the water. The collection rate in 1999 was 24 percent, mainly the result of inadequate management. In 2000, according to preliminary estimates, the situation deteriorated further. The collection rate declined to 19 percent and the overall loss rate increased to 73 percent of water supply. In 1999, the tariff rate was dram 46 per cubic meter water for drinking water and dram 10 per cubic meter for sewage. It remained unchanged in 2000 as the government attempted to maintain access to water for the poor.

2. To overcome low collection rates and high losses, the government began to compile cash flows to increase the transparency of the company, and reported them to parliament for the first time in 1999. Furthermore, the sales department was fully restructured with a view to increasing collection rates and improving customer service. In this connection, additional discounts to privileged customers, which were mainly intended to subsidize the industrial sector, were also eliminated in 1999. However, in the course of these reforms it became apparent that the government lacked the capacities to restructure the company in a more substantial manner. In February 2000, the government, with assistance from the World Bank, recruited an international water operator to manage Yerevan Water and Sewer Company under a four year performance-based contract. Under the contract, the operator must decrease energy consumption by 25 percent, increase the collection rate to 85 percent and improve the technical standard of the grid. The management contract includes an incentive fee, which is to be disbursed by the World Bank annually if the performance standards are met. Since the international water operator only started its work in June 2000, it is too early to assess the effectiveness of this approach. Even though electricity consumption decreased by 10 percent from 1999 to 2000, as mentioned above, collection rates and loss rates deteriorated.

### **Armenia Water and Sewer Company**

3. The Armenia Water and Sewer Company serves approximately 1.4 million people outside of Yerevan. The overall deficit of the company declined from 0.3 percent of GDP in 1999 to 0.2 percent of GDP in 2000.<sup>52</sup> The factors underlying the deficit are similar to the

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<sup>52</sup> Since Armenia Water and Sewer company neither undertakes foreign financed investment projects nor pays interest on domestic debt, its primary deficit is equal to its overall deficit.

Yerevan Water and Sewer Company: high loss rates, low collection rates, and a less than full cost-recovery tariff. In addition to the problems that the two drinking water companies have in common, Armenia Water and Sewer Company has a larger need for investment because some areas of Armenia are still without access to drinking water (especially in the earthquake zone). These investments have been financed through budget loans and subsidies. Collection rates increased from an estimated 20 percent<sup>53</sup> in 1998 to 31 percent in 2000, which is mainly due to a change in the management system that presently awards managers for high collections. However, loss rates increased, from 37 percent in 1999 to 44 percent in 2000. As in the case of the Yerevan Water and Sewer Company, the Armenia Water and Sewer Company started to compile cash flows in 1999 to be reported to parliament. Furthermore, it gradually introduced gravity flow systems to reduce the amount of pumping of water uphill, which led to a 5 percent decline in electricity consumption from 1999 to 2000. In addition, water supply was improved in a number of regions.

### **Irrigation**

4. The Irrigation Company supplies water to communities and irrigation distribution stations, which in turn provide the water to consumers and collect fees. While irrigation was supplied free of charge in Soviet times, a system to collect tariffs has been introduced over the last eight years. In 2000, the company's overall deficit declined slightly from 1.2 percent of GDP in 1999 to 1.1 percent of GDP. Correspondingly, the primary deficit fell from 0.7 percent of GDP in 1999 to 0.6 percent of GDP in 2000. The reasons for the high deficit resemble those for the two drinking water companies: high loss rates, low collection rates, and a less than full cost-recovery tariff (i.e., at actual loss and collection rates). Furthermore, the company uses a great deal of electricity since the gravity system from Soviet times is defective and is therefore no longer used. In addition, there is still a substantial share of arid land close to the border with Azerbaijan, where the wells were destroyed during the Nagorno-Karabakh conflict and which presently have to be served with water pumped over long distances. The collection rate of the Irrigation Company declined from 50 percent of the billed amount in 1999 to 38 percent in 2000. The collection problem is aggravated because individual metering of customers is not at present technically feasible. Loss rates remain at around 30 percent, and the authorities consider that they can only be improved by additional investments. Starting in 1995, the World Bank began providing funding for urgent repairs in the irrigation sector, while operational costs have been covered by fee collections and substantial subsidies from the state budget (1999: dram 6.7 billion, 2000: dram 5.4 billion).<sup>54</sup>

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<sup>53</sup> This figure is from a report to parliament.

<sup>54</sup> The recent reduction in the subsidy was in part a consequence of the tariff increase, which amounted to 43 percent from 1999 to 2000.

### **District Heating**

5. In the Soviet period, district heating was the primary source of heating. However, in the aftermath of the 1992-95 energy crisis, the system broke down and presently only relatively modern houses are still supplied with this type of heating. Even though district heating now only covers roughly 15 percent of the population in Armenia, it continues to incur sizable financial deficits. Given the lack of data, it is difficult to form a view regarding the present financial viability of district heating. The Ministry of Finance and Economy estimated the financing deficit (overall deficit plus negative available financing) at dram 7.4 billion (roughly 0.7 percent of GDP) for the heating season of 1999-2000. This deficit was predominantly caused by a low collection rate (for 1999-2000: 19.5 percent) and a low tariff in comparison to alternative sources of heat (e.g., electricity). However, technical losses do not appear to have been an underlying factor for the deficit, as they were estimated at only 9 percent of total thermal energy supply. Since the majority of the population in Armenia has to rely on relatively expensive electricity for heating, the low tariff in district heating is a significant income transfer to households benefiting from this system. Moreover, since mainly modern apartment buildings are served, which are usually rented by tenants with above-average income, the system appears to be highly regressive. For the heating season 2000-2001, the government introduced a system whereby customers would have to pay 60 percent of their heating bills in advance. Since it is technically infeasible to cut-off single households, it remains to be seen whether this measure can be implemented effectively so as to increase the collection rate. The state budgets for 2000 and 2001 made no provision for the subsidization of district heating.

### **Nairit**

6. Nairit is an enormous chemical factory just outside of Yerevan, which produces mainly chloroprene rubber and latexes. Most of the customers of Nairit are located in Russia, Ukraine and other CIS countries, and the demand for Nairit's chloroprene rubber declined to 25,000 tons in 2000—a quarter of the amount demanded during Soviet times. As Nairit was only able to pay around 25 percent of its electricity bill in the first nine months of 2000, the energy sector (as noted earlier) effectively accepted barter payments by Nairit. The government announced in 2000 its intention henceforth to treat Nairit as a private company, which would be liquidated if it cannot be operated profitably.

Table 7. Armenia: Real Gross Domestic Product Growth, 1995-2000

	1995	1996	1997	1998	1999	2000
(At 1996 prices; in millions of dram)						
Gross domestic product	624,575	661,209	683,168	733,315	757,514	802,965
Industry	153,217	154,903	156,916	153,423	161,400	171,730
Agriculture	225,569	230,069	219,716	247,970	251,194	245,360
Construction	38,873	48,677	50,577	55,943	60,250	77,361
Transport and communication 1/	34,373	40,260	43,964	44,582	44,939	44,669
Wholesale and retail trade	56,419	62,955	66,103	70,516	77,426	83,852
Other services 2/	90,379	87,881	90,665	93,007	97,213	106,028
Net taxes 3/	25,746	36,465	55,228	67,875	65,092	73,964
(In percent change over same period previous year)						
Gross domestic product	6.9	5.9	3.3	7.3	3.3	6.0
Industry	2.6	1.1	1.3	-2.2	5.2	6.4
Agriculture	4.0	2.0	-4.5	12.9	1.3	-2.3
Construction	-5.8	25.2	3.9	10.6	7.7	28.4
Transport and communication 1/	9.6	17.1	9.2	1.4	0.8	-0.6
Wholesale and retail trade	73.0	12.5	5.0	6.7	9.8	8.3
Other services 2/	-2.2	14.6	3.2	2.6	4.5	9.1
Net taxes 3/	-72.2	14.6	51.5	22.9	-4.1	13.6

Source: National Statistical Service.

1/ Includes passenger transport only during 1994-95.

2/ Includes the government sector.

3/ Calculated as taxes less subsidies



Table 8. Armenia Quarterly Real GDP, 1997-2000

	1997					1998					1999					2000				
	Q1	Q2	Q3	Q4	Year	Q1	Q2	Q3	Q4	Year	Q1	Q2	Q3	Q4	Year	Q1	Q2	Q3	Q4	Year
(In 1996 average price, in millions of drams)																				
GDP	87,089	137,019	226,533	232,528	683,168	92,796	146,725	243,364	250,430	733,315	97,094	154,323	261,524	244,574	757,514	97,385	160,495	269,893	275,192	802,965
Industry	26,773	41,835	42,558	45,750	156,916	27,958	42,932	41,386	41,147	153,423	26,846	46,229	47,820	40,505	161,400	26,926	48,356	50,355	46,094	171,730
Agriculture	18,121	45,126	93,539	62,931	219,716	17,428	45,052	115,216	70,274	247,970	18,113	43,860	117,416	72,005	251,194	17,968	46,185	108,023	73,185	245,360
Construction	4,592	7,442	14,340	24,202	50,577	3,601	9,966	14,081	28,295	55,943	5,879	13,737	18,070	22,565	60,250	5,191	16,044	22,913	33,213	77,361
Transport/communication 1/	5,684	4,387	13,818	19,876	43,964	5,893	4,812	13,418	20,458	44,582	6,021	4,641	13,691	20,587	44,939	6,232	4,344	14,074	20,020	44,669
Trade/services	13,273	7,457	16,554	28,818	66,103	13,628	8,917	16,840	31,130	70,516	15,358	10,567	18,779	32,723	77,426	16,495	11,063	20,243	36,051	83,852
Other sectors 2/	11,881	18,310	31,509	28,966	90,665	13,340	20,853	24,822	34,104	93,097	13,438	21,244	25,458	36,626	97,213	13,569	20,641	32,818	39,001	106,028
Net taxes 3/	6,766	12,262	14,216	21,965	55,228	10,949	14,193	17,601	25,021	67,875	11,439	14,046	20,291	19,564	65,092	11,005	13,863	21,468	27,629	73,964
(In percent change over same period previous year)																				
GDP	3.0	2.1	3.4	4.1	3.3	6.6	7.1	7.4	7.7	7.3	4.6	5.2	7.5	-2.3	3.3	0.4	4.1	3.3	12.6	6.0
Industry	-2.5	-2.6	6.3	3.0	1.3	4.4	2.6	-2.8	-10.1	-2.2	-4.0	7.7	15.5	-1.6	5.2	0.2	4.5	5.2	13.7	6.4
Agriculture	0.7	-2.5	-6.9	-3.6	-4.5	-3.8	-0.2	23.2	11.7	12.9	3.9	-2.6	1.9	2.5	1.3	0.3	5.3	-8.0	1.7	-2.3
Construction	29.4	-11.7	19.6	-2.1	3.9	-21.6	33.9	-1.8	16.9	10.6	63.3	37.8	28.3	-20.3	7.7	-11.7	16.7	26.7	47.1	28.4
Transport/communication 1/	3.1	4.8	-1.3	21.4	9.2	3.7	4.9	-2.9	2.9	1.4	2.2	-3.6	2.0	0.6	0.8	3.5	-6.4	2.8	-2.8	-0.6
Trade/services	3.2	4.0	6.8	5.0	5.0	2.7	19.6	1.7	8.0	6.7	12.7	18.5	11.5	5.1	9.8	7.4	4.7	7.8	10.2	8.3
Other sectors 2/	7.5	6.9	5.9	-3.3	3.2	12.3	13.9	-21.2	17.7	2.6	0.7	1.9	2.6	7.4	4.5	2.5	-2.1	28.9	4.3	9.1
Net taxes 3/	9.8	55.1	95.0	45.5	51.5	61.8	15.7	23.8	13.8	22.9	4.5	-1.0	15.3	-21.8	-4.1	-6.5	-1.5	6.7	48.3	13.6

Source: National Statistical Service

1/ Includes passenger transport only during 1994-95.

2/ Includes the government sector.

3/ Calculated as taxes less subsidies

Table 9. Armenia: Gross Domestic Product, 1995-2000

	1995	1996	1997	1998	1999	2000
(In current prices; in millions of dram)						
Gross domestic product	522,285	660,311	804,336	958,791	988,074	1,032,455
Industry	126,731	156,980	192,056	207,452	212,883	226,898
Agriculture	202,135	217,594	244,287	295,628	251,147	231,908
Construction	44,512	63,124	64,242	80,936	93,360	112,743
Transport and communication 2/	22,646	31,023	43,330	48,528	73,978	71,698
Trade	49,781	63,262	72,992	82,401	87,809	94,878
Other services 1/	76,480	128,328	187,429	243,847	268,897	294,331
(Share in total; in percent)						
Gross domestic product	100.0	100.0	100.0	100.0	100.0	100.0
Industry	24.3	23.8	23.9	21.6	21.5	22.0
Agriculture	38.7	33.0	30.4	30.8	25.4	22.5
Construction	8.5	9.6	8.0	8.4	9.4	10.9
Transport and communication 2/	4.3	4.7	5.4	5.1	7.5	6.9
Trade	9.5	9.6	9.1	8.6	8.9	9.2
Other services 1/	14.6	19.4	23.3	25.4	27.2	28.5

Source: National Statistical Service.

1/ Includes government.

Table 10. Production of Selected Agricultural Products, 1995-2000  
(In thousand tons; unless otherwise indicated)

	1995	1996		1997		1998		1999		2000 (Prel.)	
		Hectares	Output	Hectares	Output	Hectares	Output	Hectares	Output	Hectares	Output
Grains	262.7	183,869.0	328.4	198,932.0	258.2	198,744.0	325.7	175,655.0	301.0	181,099.0	224.7
<i>Of which: wheat</i>	153.8	92,840.0	201.4	113,554.0	178.7	124,307.0	239.1	112,402.0	214.4	114,487.0	179.2
Potatoes	427.7	32,645.0	423.2	32,875.0	359.8	32,736.0	440.0	31,963.0	414.1	34,202.0	286.6
Vegetables	450.9	21,037.0	444.5	19,721.0	369.0	19,290.0	395.2	20,878.0	449.0	20,017.0	376.2
Fruit	146.1	34,139.0	158.2	24,941.0	108.8	21,604.0	126.7	22,474.0	88.1	22,796.0	128.4
Grapes	154.9	21,850.0	158.5	17,758.0	107.7	15,785.0	106.0	15,768.0	114.8	15,027.0	115.8
Beef and poultry for slaughter, with live weight	82.4	...	82.6	...	83.7	...	86.0	...	85.8	...	102.4
Milk	428.3	...	431.3	...	435.3	...	457.5	...	466.2	...	462.0
Eggs (millions)	197.6	...	192.2	...	190.8	...	219.4	...	325.9	...	385.4
Wool (thous. tons)	1.5	...	1.4	...	1.3	...	1.3	...	1.3	...	1.3
Tobacco	0.2	19.0	0.0	35.0	0.0	117.0	0.2	820.0	1.9	2,538.0	4.6

Source: National Statistical Service.

Table 11. Armenia: Production of Selected Industrial Commodities, 1995-2000

	1995	1996	1997	1998	1999	2000
Electric energy (in millions of kWh)	5,576	6,229	6,030	6,191	5,717	5,958
Cable (in kilometers)	992	481	705	1,189	234	1,492
Metal cutting equipment (number)	449	459	539	372	165	203
Car tires (in thousands)	93	73	0	17	5	...
Cement (in thousands)	228	282	293	314	287	219
Regular cut tuff stone (in thousands of cubic meters)	76	70	84	86	67	49
Carpets (in thousands of square meters)	29	23	14	19	18	19
Wine (in thousands of litres)	9,390	4,800	3,220	1,430	4,880	2,561
Cognac (in thousands of litres)	3,250	2,310	3,920	2,530	1,210	2,845
(Percent change over same period previous year)						
Electric energy	-2	12	-3	-3	-8	4
Cable	55	-52	47	69	-80	538
Metal cutting equipment	-39	2	17	-31	-56	23
Car tires	-23	-22	-100	...	-71	...
Cement	87	24	4	7	-9	-24
Construction materials	36	-8	20	2	-22	-27
Carpets	-22	-21	-39	36	-5	6
Wine	-59	-49	-33	-56	241	-48
Cognac	-37	-29	70	-35	-52	135

Sources: National Statistical Service, and Ministry of Energy.

Table 12. Armenia: Consumer Prices, 1995-2001

		CPI Jan. 94 =100	Percent change over previous month	Percent change over 12-months	Cumulative during the year	Average inflation during the year ending	Quarterly inflation	
							Percent change over previous quarter	Percent change over same quarter previous year
1995	January	1,129.8	3.9	1,029.8	3.9			
	February	1,138.3	0.8	860.4	4.7			
	March	1,152.0	1.2	572.7	5.9	777.5	45.3	777.5
	April	1,233.8	7.1	326.3	13.5			
	May	1,330.0	7.8	196.5	22.3			
	June	1,338.0	0.6	173.4	23.0	352.8	14.1	217.9
	July	1,276.4	-4.6	165.6	17.4			
	August	1,249.6	-2.1	150.8	14.9			
	September	1,248.4	-0.1	135.7	14.8	255.0	-3.3	150.2
	October	1,298.3	4.0	120.2	19.4			
	November	1,333.4	2.7	97.2	22.6			
	December	1,434.7	7.6	31.9	31.9	176.7	7.7	72.8
1996	January	1,486.3	3.6	31.6	3.6			
	February	1,536.9	3.4	35.0	7.1			
	March	1,539.9	0.2	33.7	7.3	33.4	12.2	33.4
	April	1,533.8	-0.4	24.3	6.9			
	May	1,534.4	0.0	15.4	7.0			
	June	1,514.5	-1.3	13.2	5.6	24.9	0.4	17.5
	July	1,464.5	-3.3	14.7	2.1			
	August	1,468.9	0.3	17.5	2.4			
	September	1,452.7	-1.1	16.4	1.3	22.0	-4.3	16.2
	October	1,453.0	0.0	11.9	1.3			
	November	1,487.9	2.4	11.6	3.7			
	December	1,517.6	2.0	5.8	5.8	18.7	1.7	9.6
1997	January	1,564.7	3.1	5.3	3.1			
	February	1,589.7	1.6	3.4	4.7			
	March	1,602.4	0.8	4.1	5.6	4.2	6.7	4.2
	April	1,628.1	1.6	6.1	7.3			
	May	1,681.8	3.3	9.6	10.8			
	June	1,747.4	3.9	15.4	15.1	7.3	6.3	10.4
	July	1,740.4	-0.4	18.8	14.7			
	August	1,723.0	-1.0	17.3	13.5			
	September	1,781.6	3.4	22.6	17.4	11.3	3.7	19.6
	October	1,783.4	0.1	22.7	17.5			
	November	1,813.7	1.7	21.9	19.5			
	December	1,848.1	1.9	21.8	21.8	14.0	3.8	22.1
1998	January	1,923.9	4.1	23.0	4.1			
	February	1,991.2	3.5	25.3	7.7			
	March	1,997.2	0.3	24.6	8.1	24.3	8.6	24.3
	April	1,961.3	-1.8	20.5	6.1			
	May	1,924.0	-1.9	14.4	4.1			
	June	1,864.4	-3.1	6.7	0.9	18.8	-2.8	13.7
	July	1,784.2	-4.3	2.5	-3.5			
	August	1,746.7	-2.1	1.3	-5.5			
	September	1,745.0	-0.1	-2.1	-5.7	12.5	-8.3	0.5
	October	1,745.0	0.0	-2.2	-5.7			
	November	1,776.4	1.8	-2.1	-4.0			
	December	1,826.1	2.8	-1.2	-1.3	8.7	1.3	-1.9
1999	January	1,899.2	4.0	-1.3	4.0			
	February	1,899.2	0.0	-4.7	4.0			
	March	1,887.8	-0.6	-5.5	3.4	-3.8	6.3	-3.9
	April	1,895.3	0.4	-3.4	3.8			
	May	1,904.8	0.5	-1.1	4.3			
	June	1,904.8	0.0	2.1	4.3	-2.3	0.3	-0.9
	July	1,843.9	-3.1	3.3	1.0			
	August	1,827.3	-0.9	4.7	0.1			
	September	1,832.7	0.3	5.0	0.4	-0.3	-3.5	4.3
	October	1,841.9	0.5	5.6	0.9			
	November	1,845.6	0.2	3.9	1.1			
	December	1,863.9	1.0	2.1	2.1	0.7	0.9	3.8
2000	January	1,899.3	1.9	0.0	1.9			
	February	1,901.2	0.1	0.1	2.0			
	March	1,893.6	-0.4	0.3	1.6	0.1	2.6	0.1
	April	1,878.4	-0.8	-0.9	0.8			
	May	1,872.8	-0.3	-1.7	0.5			
	June	1,867.2	-0.3	-2.0	0.2	-0.7	-1.3	-1.5
	July	1,829.8	-2.0	-0.8	-1.8			
	August	1,806.0	-1.3	-1.2	-3.1			
	September	1,811.5	0.3	-1.2	-2.8	-0.8	-3.0	-1.0
	October	1,811.5	0.0	-1.7	-2.8			
	November	1,827.8	0.9	-1.0	-1.9			
	December	1,871.6	2.4	0.4	0.4	-0.8	1.2	-0.7
2001	January	1,957.7	4.6	3.1	4.6			
	February	1,940.1	-0.9	2.0	3.7			
	March	1,940.5	0.0	2.5	3.7	2.5	5.9	2.5

Source: National Statistical Service.

Table 13. Armenia: Selected Energy Prices, 1995-2000 1/  
(In drams per unit)

Unit	1995				1996				1997				1998				1999				2000				
	Jan. 1	Apr. 1	Jul. 1	Oct. 1	Jan. 1	Apr. 1	Jul. 1	Oct. 1	Jan. 1	Apr. 1	Jul. 1	Oct. 1	Jan. 1	Apr. 1	Jul. 1	Oct. 1	Jan. 1	Apr. 1	Jul. 1	Oct. 1	Jan. 1	Apr. 1	Jul. 1	Oct. 1	
<b>Electricity</b>																									
Retail	kilowatt hours	10.0	10.0	10.0	12.0	12.0	14.0	14.0	14.0	16.3	17.1	16.9	19.0	20.1	20.1	20.1	20.1	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
<b>Natural gas</b>																									
Retail	cubic meter	...	...	...	...	28.0	30.0	...	30.0	32.0	34.0	37.2	32.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0	51.0
<b>Petroleum products</b>																									
Gasoline (A-76), retail	liter	195.6	141.8	159.3	147.3	139.3	128.0	147.7	148.7	147.7	145.7	161.7	174.3	166.3	160.0	172.0	174.0	180.0	180.0	181.0	225.0	231.0	275.0	317.0	285.0
Diesel fuel	liter	126.7	106.7	106.9	110.7	112.3	105.0	117.7	125.3	130.7	137.7	142.0	154.0	157.7	153.0	148.0	127.0	127.0	125.0	125.0	174.0	162.0	172.0	199.0	209.0
<b>Liquid Gas</b>																									
Retail	kg	587.0	405.0	408.0	371.0	375.0	328.0	326.0	320.0	498.0	393.5	350.2	358.7	346.7	337.0	339.6	339.0	343.0	344.0	342.0	310.0	340.0	339.0	318.0	345.0

Sources: Ministry of Energy; and National Statistical Service.

1/ Prices include VAT and excise taxes, if applicable.

Table 14. Armenia: Regulated Prices for Main Commodities and Services, 1995-2000 1/  
(In drams; end-of-period)

Item	Unit	1995	1996	1997	1998	1999	2000
Transport (bus)	1 trip	25.0	47.5	47.5	51.0	49.8	50.0
Electricity 2/	1 kWh	12.0	14.0	20.4	20.4	25.0	25.0
Telephone	monthly	101.0	101.0	600.0	600.0	906.5	900.0
Rent	monthly/sq. meter	8.0	10.4	21.0	21.8	21.8	21.8
Water	1 cubic meter	14.7	14.7	28.8	46.0	46.0	46.0
Sewage	monthly	4.2	4.2	8.5	10.0	10.0	10.0
Garbage	monthly	60.0	60.0	60.0	100.0	100.0	100.0

Source: National Statistical Service.

1/ Data for Yerevan only.

2/ Tariff for households.

Table 15. Armenia: Labor Market Indicators, 1995-2000 1/

	1995	1996	1997	1998	1999	2000 Prel.
Population (in millions)	3.8	3.8	3.8	3.8	...	...
Employment (in thousands)	1,476.4	1,435.6	1,372.2	1,337.3	1,298.2	1,283.0
<i>Of which:</i>						
Industry	302.9	255.0	228.9	209.4	195.2	183.5
Agriculture and forestry	551.9	586.0	566.6	567.8	562.4	555.5
Transport and communication	53.4	48.0	49.1	50.7	48.0	47.5
Construction	76.0	68.0	59.7	56.7	53.6	52.6
Trade and public catering	100.0	110.2	115.6	113.2	109.2	107.8
Other services	392.2	368.4	350.7	339.5	329.8	336.1
Official number of unemployed persons (in thousands) 2/	131.7	159.3	174.4	133.8	175.0	153.9
Official unemployment rate (in percent) 3/	6.7	9.3	10.8	9.4	11.2	11.7
Official number of persons on forced leave (in thousands)	...	...	...	...	...	...
Official number of vacancies (in thousands) 2/	1.1	0.5	0.1	0.7	0.8	0.6
Minimum monthly wage in drams	487.9	756.7	1,000.0	1,000.0	5,000.0	5,000.0
Real minimum monthly wage in drams 4/	115.9	152.2	176.8	162.7	806.0	816.0
Average monthly wage in drams	5,910.0	8,613.0	11,870.0	15,547.3	18,529.8	21,001.0
Real average monthly wage 4/	130.0	162.0	175.1	217.0	255.2	291.5
Average monthly dollar wage	14.6	20.8	24.2	30.6	35.2	38.9
Employment in agricultural households (in thousands)	534.7	572.0	555.3	556.4	550.7	548.4

Source: National Statistical Service.

1/ Data cover only the public sector, including budgetary organizations and state-owned enterprises. Wage data are annual average.

2/ At the end of period.

3/ Using the average annual officially registered number of unemployed.

4/ Annual average, Jan 1995 = 100. Figures were calculated by the staff through deflating nominal wage with CPI.



Table 16. Armenia: Average Monthly Wages in the State Sector, 1995-1999 1/  
(In drams)

	1995	1996	1997	1998	1999
State Sector Average	5,910	8,613	11,870	15,466	18,835
Material sphere	7,913	11,843	17,113	22,840	26,271
Non-material sphere	3,786	5,792	8,273	10,757	14,267
<i>Of which:</i>					
Budgetary sphere	3,077	5,122	7,427	9,934	12,292
By branch					
Industry	7,503	12,337	16,625	21,634	23,434
Agriculture	5,681	8,106	8,385	10,662	13,407
Forestry	3,803	5,172	7,269	8,268	9,147
Transport	9,422	15,277	6,251	30,409	33,197
Communications	10,467	15,692	16,139	70,775	38,654
Construction	12,306	13,524	21,752	29,517	35,328
Trade	4,529	5,853	8,934	9,989	11,022
Information and computer services	4,698	8,400	10,346	15,705	18,415
Other material branches	3,476	6,820	11,953	14,713	20,451
Communal services	5,480	8,852	10,789	16,518	19,659
Health	3,515	5,071	7,036	8,952	11,147
General admin. and management	2,928	10,516	15,572	20,616	29,127
Education, culture and art	2,684	3,961	6,604	7,670	9,756
Science	5,140	8,089	10,077	12,975	15,490
Finance and insurance	22,415	22,810	26,007	41,918	70,374

Sources: National Statistical Service; and Fund staff estimates.

1/ Budgetary and non-budgetary state sectors only. Average wages of all sectors are simple average of monthly series provided by the authorities. Sectoral wages are adjusted based on the ratio between average wages from the monthly series and annual wages provided by the authorities.

Table 17. Armenia: Labor Force, Employment, and Unemployment, 1995-2000

	1995	1996	1997	1998	1999	2000 Prel.
	(In thousands)					
Potential labor force 1/	2,084	2,108	...	...	...	...
Total employed	1,476	1,436	1,372	1,337	1,298	1,283
Registered unemployed	106	148	166	139	164	170
Actual labor force 2/	1,582	1,584	1,538	1,476	1,462	1,453
Employment by sector	1,476	1,436	1,372	1,337	1,298	1,283
State sector <sup>3/</sup>	736	558	509	406	355	345
Private sector <sup>4/</sup>	741	878	863	931	943	938
Material sphere	1,071	1,056	1,009	987	956	946
Industry	303	255	229	209	195	193
Construction	76	68	60	57	54	53
Agriculture	550	584	564	566	560	554
Forestry	2	3	2	2	2	2
Transport and communications	27	24	27	28	26	26
Wholesale and retail trade, and catering	100	110	116	113	109	108
Other material sphere	14	13	11	12	10	10
Nonmaterial sphere	405	380	362	349	340	335
Education, culture, art	180	174	161	155	153	152
Science	23	15	16	17	16	16
Health, physical culture, and social welfare	86	82	81	78	77	76
Housing and personal services	52	51	47	43	38	38
General administration	29	29	30	29	28	28
Other nonmaterial sphere	35	30	27	27	28	25
	(In percent)					
Memorandum items:						
Employed in state sector <sup>5/</sup>	49.8	38.9	37.1	30.4	27.3	26.9
Employed in private sector <sup>6/</sup>	50.2	61.1	62.9	69.6	72.7	73.1
Unemployment rate <sup>7/</sup>	6.7	9.3	10.8	9.4	11.2	11.7
Unemployment rate <sup>8/</sup>	5.1	7.0	...	...	...	...

Source: National Statistical Service.

1/ Working-age population (16 years to 60 years of age) excluding students. The NSS is planning to undertake surveys similar to BLS in the U.S.A. to calculate the actual labor force as those actively seeking work.

2/ Defined as total employed plus those registered as unemployed.

3/ State and state-owned enterprises.

4/ Non-state sector; includes farms and cooperative sector.

5/ Total employed in state sector as percent of total employment.

6/ Total employed in private sector as percent of total employment.

7/ Registered unemployed as percent of actual labor force.

8/ Registered unemployed as percent of potential labor force.

Table 18. Armenia: Employment by Sectors, 1995-2000  
(Thousands of persons)

	1995	1996	1997	1998	1999	2000 Prel.
Total	1,476.4	1,435.6	1,372.2	1,337.3	1,298.2	1,283.0
<i>Of which:</i>						
Industry	302.9	255.0	228.9	209.4	195.2	192.9
Agriculture	549.6	583.5	566.6	567.8	562.4	555.8
Transportation and communications	53.4	48.0	49.1	50.7	48.0	47.4
Construction	76.0	68.0	59.7	56.7	53.6	53.0
Trade and public catering	100.0	110.2	115.6	113.2	109.2	107.9
Information and computer services	1.4	1.3	1.0	0.9	1.0	1.0
Housing and communal services	52.2	50.6	47.4	42.6	38.2	37.8
Health care, physical training, social security	85.5	81.7	80.7	77.7	76.6	75.7
Public education	147.5	142.1	134.3	132.4	128.4	126.9
Culture and art	32.7	31.7	27.0	22.4	25.0	24.7
Science and scientific support	22.8	14.7	16.0	17.3	15.8	15.6
Financing and insurance	8.5	6.4	4.7	4.5	6.3	6.2
Administrative agencies	29.3	28.6	29.5	29.1	28.2	27.9
Other sectors	14.6	13.8	10.1	11.0	8.7	8.6

Source: National Statistical Service.

Table 19. Armenia: Budgetary Sector Employment, 1995-2000  
(End-of-period; in thousands of employees)

	1995	1996	1997	1998	1999				2000			
					Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4 Prel.
Total	304.6	290.4	204.2	186.5	182.1	184.5	182.2	180.7	181.1	180.8	180.8	180.8
Education, culture, art	174.7	166.4	152.9	138.8	132.6	133.9	131.8	130.6	131.7	130.9	131.1	131.1
Science	19.8	16.7	8.1	7.8	9.0	8.3	8.0	8.0	8.0	8.1	8.4	8.4
Health, physical culture, and social welfare	80.8	79.6	7.7	7.2	9.6	10.8	10.6	10.4	10.7	11.3	11.5	11.5
General administration	29.3	27.7	27.7	25.9	24.0	23.9	24.7	24.5	24.5	23.9	24.3	24.3
Other (excluding military)	104.0	109.0	7.8	6.8	6.3	6.3	7.1	7.2	6.2	6.6	5.5	5.5

Source: National Statistical Service.

Table 20. Armenia: General Government Budget, 1995-2000  
(in millions of dram)

	1995	1996	1997	1998	1999	2000
					Prel. Act.	
Total revenue and grants	103,834	116,606	158,426	197,673	224,383	202,005
Total revenue	84,803	106,935	146,808	188,617	209,283	195,423
Tax revenue	66,457	85,051	130,714	162,337	190,469	182,526
Value-added tax	17,019	21,520	39,323	59,844	68,270	67,491
Excises	2,388	11,323	18,679	19,397	21,677	23,403
Enterprise profits tax	23,868	16,761	16,070	12,294	21,499	20,320
Personal income tax	6,826	8,795	14,712	15,246	18,835	14,777
Land tax	1,721	1,940	2,676	1,393	1,471	1,473
Customs duties	2,707	5,875	10,597	10,625	8,051	8,672
Payroll taxes	10,680	14,717	22,050	25,699	25,085	23,480
Other taxes	900	3,022	4,955	12,114	17,952	14,154
Presumptive income tax	139	490	623	3,915	5,000	4,034
Property tax	210	608	1,029	1,811	2,630	2,721
Nontax revenues	18,346	21,884	16,094	26,280	18,053	12,883
Capital revenue	...	...	...	...	760	14
Grants	19,031	9,671	11,618	9,056	15,100	6,582
Total expenditure	150,684	172,496	205,382	244,738	297,120	267,411
Current expenditure	112,725	129,740	172,086	188,639	224,149	211,491
Wages	13,528	18,983	24,774	29,645	34,394	36,603
Subsidies	4,916	815	4,451	1,059	14,183	8,306
Interest	16,112	17,273	21,702	17,808	19,845	17,320
domestic interest	11,774	12,129	15,828	10,677	12,907	9,354
external interest	4,339	5,144	5,874	7,131	6,938	7,966
Transfers	31,084	32,009	43,214	53,764	72,978	66,273
Family allowances	...	...	...	...	21,391	19,717
Pensions	27,289	28,840	34,898	48,648	32,434	32,035
Reserve Fund and Contingent Liabilities	2,452	500	0	0	8,540	1,987
Other transfers	1,344	2,670	8,316	5,116	6,410	6,535
Transfer to State Fund for Social Insurance	...	...	...	...	4,203	5,998
Goods and services	47,085	60,660	77,945	86,364	82,749	82,988
Health	12,866	9,725	11,954	23,394	14,257	14,576
Education	...	...	...	...	7,654	8,717
Other	34,219	50,935	65,991	62,970	60,838	59,695
Capital exp. and net lending	37,958	42,757	33,296	56,099	72,971	55,920
Capital expenditure	35,383	26,794	27,940	47,259	46,285	40,313
Foreign financed	27,735	19,183	23,261	21,036	24,031	17,018
Domestic financed	7,648	7,612	4,679	26,223	22,254	23,295
Net lending	2,575	15,962	5,356	8,840	26,686	15,607
Overall deficit (accrual)(-)	-46,850	-55,891	-46,956	-47,065	-72,738	-65,406
Accumulation of new arrears	...	...	...	6,376	19,926	31,791
Clearance of 1999 arrears	0	0	0	0	0	-11,092
Overall deficit (cash) before measures	-46,850	-55,891	-46,956	-40,689	-52,812	-44,707
Measures/gap	0	0	0	0	0	0
Statistical discrepancy	-11,252	-5,752	870	-4,333	-1,501	4,778
Overall deficit excl. grants	-65,881	-65,562	-58,574	-56,122	-87,838	-71,988
Overall deficit (cash) after measures(-)	-58,102	-61,643	-46,087	-45,022	-54,313	-39,929
Financing	58,102	61,643	46,087	45,022	54,313	39,929
Domestic financing	3,024	18,540	-4,729	20,451	8,004	24,477
Banking system	2,776	14,535	-9,052	5,700	-4,288	-6,959
Central Bank of Armenia	2,316	9,037	-10,912	-150	75	-13
Rest of banking system	460	5,498	1,860	5,850	-4,363	-6,946
Nonbank	248	4,005	4,323	14,751	12,292	31,436
Privatization receipts	48	212	45	21,277	10,971	21,509
Treasury bills	201	1,773	4,278	-6,009	2,041	10,020
Promissory notes / Other	0	2,020	0	-517	-720	-93
External Financing	55,078	43,103	50,816	24,571	46,309	15,452
Gross inflow 1/	...	...	...	...	56,789	26,602
Amortization	...	...	...	...	10,480	11,150

Sources: Ministry of Finance, Central Bank of Armenia; and Fund staff estimates.

Table 21. Armenia: General Government Budget, 1995-2000  
(In percent of GDP; unless otherwise indicated)

	1995	1996	1997	1998	1999 Prel. Act.	2000
Total revenue and grants	19.9	17.6	19.7	20.6	22.7	19.6
Total revenue	16.2	16.2	18.3	19.7	21.2	18.9
Tax revenue	12.7	12.9	16.3	16.9	19.3	17.7
Value-added tax	3.3	3.3	4.9	6.2	6.9	6.5
Excises	0.5	1.7	2.3	2.0	2.2	2.5
Enterprise profits tax	4.6	2.5	2.0	1.3	2.2	2.0
Personal income tax	1.3	1.3	1.8	1.6	1.9	1.4
Land tax	0.3	0.3	0.3	0.1	0.1	0.1
Customs duties	0.5	0.9	1.3	1.1	0.8	0.8
Payroll taxes	2.0	2.2	2.7	2.7	2.5	2.3
Other taxes	0.2	0.5	0.6	1.3	1.8	1.4
Presumptive income tax	0.0	0.1	0.1	0.4	0.5	0.4
Property tax	0.0	0.1	0.1	0.2	0.3	0.3
Nontax revenues	3.5	3.3	2.0	2.7	1.8	1.2
Capital revenue	...	...	...	...	0.1	0.0
Grants	3.6	1.5	1.4	0.9	1.5	0.6
Total expenditure	28.9	26.1	25.5	25.5	30.1	25.9
Current expenditure	21.6	19.6	21.4	19.7	22.7	20.5
Wages	2.6	2.9	3.1	3.1	3.5	3.5
Subsidies	0.9	0.1	0.6	0.1	1.4	0.8
Interest	3.1	2.6	2.7	1.9	2.0	1.7
domestic interest	2.3	1.8	2.0	1.1	1.3	0.9
external interest	0.8	0.8	0.7	0.7	0.7	0.8
Transfers	6.0	4.8	5.4	5.6	7.4	6.4
Family allowances	...	...	...	...	2.2	1.9
Pensions 1/	5.2	4.4	4.3	5.1	3.3	3.1
Reserve Fund and Contingent Liabilities	0.5	0.1	0.0	0.0	0.9	0.2
Other Transfers	0.3	0.4	1.0	0.5	0.6	0.6
Transfer to State Fund for Social Insurance	...	...	...	...	0.4	0.6
Goods and Services	9.0	9.2	9.7	9.0	8.4	8.0
Health	2.5	1.5	1.5	2.4	1.4	1.4
Education	...	...	...	...	0.8	0.8
Other	6.6	7.7	8.2	6.6	6.2	5.8
Capital exp. and net lending	7.3	6.5	4.1	5.9	7.4	5.4
Capital expenditure	6.8	4.1	3.5	4.9	4.7	3.9
Foreign financed	5.3	2.9	2.9	2.2	2.4	1.6
Domestic financed	1.5	1.2	0.6	2.7	2.3	2.3
Net lending	0.5	2.4	0.7	0.9	2.7	1.5
Foreign financed	0.0	0.0	0.0	0.0	0.8	0.6
Domestic financed	0.0	0.0	0.0	0.0	1.9	0.9
Overall deficit (accrual)(-)	-9.0	-8.5	-5.8	-4.9	-7.4	-6.3
Accumulation of new arrears	...	...	...	0.7	2.0	3.1
Clearance of 1999 arrears	0.0	0.0	0.0	0.0	0.0	-1.1
Overall deficit (cash) before measures	-9.0	-8.5	-5.8	-4.2	-5.3	-4.3
Measures/gap	0.0	0.0	0.0	0.0	0.0	0.0
Statistical discrepancy	-2.2	-0.9	0.1	-0.5	-0.2	0.5
Overall deficit excl. grants	-12.6	-9.9	-7.3	-5.9	-8.9	-7.0
Overall deficit (cash) after measures(-)	-11.1	-9.3	-5.7	-4.7	-5.5	-3.9
Financing	11.1	9.3	5.7	4.7	5.5	3.9
Domestic financing	0.6	2.8	-0.6	2.1	0.8	2.4
Banking system	0.5	2.2	-1.1	0.6	-0.4	-0.7
Central Bank of Armenia	0.4	1.4	-1.4	0.0	0.0	0.0
Rest of banking system	0.1	0.8	0.2	0.6	-0.4	-0.7
Nonbank	0.0	0.6	0.5	1.5	1.2	3.0
Privatization receipts	0.0	0.0	0.0	2.2	1.1	2.1
Treasury bills	0.0	0.3	0.5	-0.6	0.2	1.0
Promissory notes / Other	0.0	0.3	0.0	-0.1	-0.1	0.0
External financing	10.5	6.5	6.3	2.6	4.7	1.5
Gross inflow 1/	...	...	...	...	5.7	2.6
Amortization	...	...	...	...	1.1	1.1
Memorandum items: (in millions of dram)						
Stock of arrears at end-period w/o measures	...	...	...	6,376.0	26,302	47,001

Sources: Ministry of Finance, Central Bank of Armenia; and Fund staff estimates.

1/ Dram 10396 million of WB disbursements for SAC III are reported in 1999 as they were used to finance 1999 expenditures. In the BOP, this amount is reported in 2000.

Table 22. Armenia: State Budget, 1997-2000  
(In millions of dram)

	1997	1998	1999		2000
			Prel. Act.		
Total revenue and grants	126,688	163,812	190,917	170,015	
Total revenue	115,070	154,755	175,817	163,434	
Tax revenue	103,618	130,394	158,803	152,357	
Value-added tax	39,323	59,844	68,270	67,491	
Excises	18,679	19,397	21,677	25,403	
Enterprise profits tax	16,070	12,294	21,499	20,320	
Personal income tax	14,712	13,492	17,548	13,367	
Land tax	0	66	71	19	
Customs duties	10,597	10,625	8,051	8,672	
Other taxes	3,319	10,519	16,418	12,930	
<i>Of which: stamp duties</i>	1,443	9,910	9,743	8,822	
Presumptive Income Tax	623	3,915	5,000	4,034	
Property tax	294	243	269	120	
Nontax revenue	11,453	24,361	16,254	11,063	
Capital revenue	0	0	760	14	
Grants	11,618	9,056	15,100	6,582	
Total expenditure	170,695	210,133	262,005	235,770	
Current expenditure	138,113	156,544	189,658	180,444	
Wages	21,527	26,364	30,486	32,863	
Subsidies	4,347	812	13,958	8,218	
Interest	21,702	17,808	19,845	17,320	
domestic interest	15,828	10,677	12,907	9,354	
external interest	5,874	7,131	6,938	7,966	
Transfers	18,455	30,422	48,031	45,765	
Family allowances	8,138	14,754	21,391	19,710	
Pension contributions	3,152	3,557	5,225	6,468	
Reserve Fund and Contingent Liabilities	0	0	8,540	1,987	
Other transfers	6,716	8,632	8,672	11,667	
Transfer to SFSI	450	3,479	4,203	5,932	
Goods and Services	72,082	81,138	77,338	76,277	
Health	9,018	17,112	14,257	14,575	
Education	2,842	5,262	6,723	7,565	
Other	60,223	58,764	56,358	54,137	
Capital exp. and net lending	32,581	53,589	72,347	55,326	
Capital expenditure	27,225	44,749	45,661	39,719	
Foreign financed	23,261	21,036	24,031	17,018	
Domestic financed	3,964	23,713	21,630	22,701	
Net lending	5,356	8,840	26,686	15,607	
Overall deficit (accrual)(-)	-44,006	-46,321	-71,088	-65,754	
Accumulation of new arrears	0	5,070	19,420	30,955	
Clearance of 1999 arrears	0	0	0	-11,092	
Overall deficit (cash) before measures	-44,006	-41,251	-51,668	-45,891	
Measures/gap	0	0	0	0	
Statistical discrepancy	-2,542	-3,783	-2,445	5,071	
Overall deficit excl. grants	-55,624	-55,378	-86,188	-72,336	
Overall deficit (cash) after measures(-)	-46,548	-45,034	-54,113	-40,820	
Financing	46,548	45,034	54,113	40,820	
Domestic financing	...	20,463	7,804	25,368	
Banking system	...	5,712	-4,488	-6,068	
Central Bank of Armenia	...	-65	75	-13	
Rest of banking system	...	5,777	-4,563	-6,055	
Nonbank	...	14,751	12,292	31,436	
Privatization receipts	...	21,277	10,971	21,509	
Treasury bills	...	-6,009	2,041	10,020	
Promissory notes / Other	...	-517	-720	-93	
External financing	...	24,571	46,309	15,452	
Gross inflow	...	60,903	56,789	26,602	
Amortization	...	36,332	10,480	11,150	

Sources: Ministry of Finance, Central Bank of Armenia; and Fund staff estimates.

Table 23. Armenia: State Budget, 1997-2000  
(In percent of GDP, unless otherwise indicated)

	1997	1998	1999	2000
			Prel. Act.	
Total revenue and grants	15.8	17.1	19.3	16.5
Total revenue	14.3	16.1	17.8	15.8
Tax revenue	12.9	13.6	16.1	14.8
Value-added tax	4.9	6.2	6.9	6.5
Excises	2.3	2.0	2.2	2.5
Enterprise profits tax	2.0	1.3	2.2	2.0
Personal income tax	1.8	1.4	1.8	1.3
Land tax	0.0	0.0	0.0	0.0
Customs duties	1.3	1.1	0.8	0.8
Other taxes	0.4	1.1	1.7	1.3
<i>Of which: stamp duties</i>	0.2	1.0	1.0	0.9
Presumptive income tax	0.1	0.4	0.5	0.4
Property tax	0.0	0.0	0.0	0.0
Nontax revenue	1.4	2.5	1.6	1.1
Capital revenue	0.0	0.0	0.1	0.0
Grants	1.4	0.9	1.5	0.6
Total expenditure	21.2	21.9	26.5	22.8
Current expenditure	17.2	16.3	19.2	17.5
Wages	2.7	2.7	3.1	3.2
Subsidies	0.5	0.1	1.4	0.8
Interest	2.7	1.9	2.0	1.7
domestic interest	2.0	1.1	1.3	0.9
external interest	0.7	0.7	0.7	0.8
Transfers	2.3	3.2	4.9	4.4
Family allowances	1.0	1.5	2.2	1.9
Pension contributions	0.4	0.4	0.5	0.6
Reserve Fund and Contingent Liabilities	0.0	0.0	0.9	0.2
Other transfers	0.8	0.9	0.9	1.1
Transfer to SFSI	0.1	0.4	0.4	0.6
Goods and services	9.0	8.5	7.8	7.4
Health	1.1	1.8	1.4	1.4
Education	0.4	0.5	0.7	0.7
Other	7.5	6.1	5.7	5.2
Capital exp. and net lending	4.1	5.6	7.3	5.4
Capital expenditure	3.4	4.7	4.6	3.8
Foreign financed	2.9	2.2	2.4	1.6
Domestic financed	0.5	2.5	2.2	2.2
Net lending	0.7	0.9	2.7	1.5
Foreign financed	0.0	0.2	0.8	0.6
Domestic financed	0.0	0.8	1.9	0.9
Overall deficit (accrual)(-)	-5.5	-4.8	-7.2	-6.4
Accumulation of new arrears	0.0	0.5	2.0	3.0
Clearance of 1999 arrears	0.0	0.0	0.0	-1.1
Overall deficit (cash) before measures	-5.5	-4.3	-5.2	-4.4
Measures/gap	0.0	0.0	0.0	0.0
Statistical discrepancy	-0.3	-0.4	-0.2	0.5
Overall deficit excl. grants	-6.9	-5.8	-8.7	-7.0
Overall deficit (cash) after measures(-)	-5.8	-4.7	-5.5	-4.0
Financing	5.8	4.7	5.5	4.0
Domestic financing	...	2.1	0.8	2.5
Banking system	...	0.6	-0.5	-0.6
Central Bank of Armenia	...	0.0	0.0	0.0
Rest of banking system	...	0.6	-0.5	-0.6
Nonbank	...	1.5	1.2	3.0
Privatization receipts	...	2.2	1.1	2.1
Treasury bills	...	-0.6	0.2	1.0
Promissory notes / Other	...	-0.1	-0.1	0.0
External financing	...	2.6	4.7	1.5
Gross inflow	...	6.4	5.7	2.6
Amortization	...	3.8	1.1	1.1
Memorandum items: (in millions of dram)				
GDP	804,336	958,791	988,074	1,032,455
Stock of arrears, end-of-period	...	5,070	24,490	44,353

Sources: Ministry of Finance, Central Bank of Armenia, and Fund staff estimates.



Table 24. Armenia: Local Budgets, 1995-2000  
(In millions of dram)

	1995	1996	1997	1998	1999	2000 Budget
Total revenue and grants	39,317	6,506	11,826	12,108	10,643	13,711
Total revenue	29,300	4,915	8,066	8,163	8,381	8,509
Tax revenue	28,017	3,209	5,047	6,244	6,581	6,689
Value-added tax	8,175	99	0	0	0	0
Enterprise profits tax	9,850	38	0	0	0	0
Personal income tax	6,808	41	0	1,754	1,287	1,410
Land tax	1,721	1,707	2,676	1,327	1,400	1,454
Other taxes	1,317	1,322	1,635	1,595	1,534	1,224
<i>Of which: stamp duties</i>	560	1,322	1,449	1,451	1,532	1,211
Property tax	147	2	735	1,568	2,361	2,601
Nontax revenue	1,283	1,706	3,020	1,919	1,799	1,820
Grants	10,016	1,592	3,760	3,945	2,262	5,202
Total expenditure	35,358	6,321	10,030	11,541	11,379	12,780
Current expenditure	32,822	4,945	8,974	9,029	10,755	12,186
Wages	6,179	1,338	3,247	3,281	3,908	3,740
Subsidies	1,762	0	104	240	225	88
Interest	0	0	0	0	0	0
Transfers	10,537	543	1,134	1,017	1,211	1,647
Family allowances	8,183	44	0	0	0	7
Pension contributions	2,263	499	1,134	1,017	1,211	1,504
Other transfers	91	0	0	0	0	70
Goods and services	14,344	3,064	4,489	4,491	5,411	6,711
Education	...	...	94	1,020	931	1,152
Other	...	...	4,395	3,471	4,480	5,558
Capital exp. and net lending	2,536	1,376	1,056	2,512	624	594
Capital expenditure	2,536	911	1,056	2,512	624	594
Foreign financed	0	0	...	0	0	0
Domestic financed	2,536	911	...	2,512	624	594
Net lending	0	465	...	0	0	0
Overall deficit (accrual)(-)	3,959	185	1,797	567	-737	931
Accumulation of new arrears	...	...	...	...	...	...
Clearance of old arrears	-3,490	-94	-98	-27	0	0
Overall deficit (cash) before measures	3,959	185	1,797	567	-737	931
Measures/gap	0	0	0	0	0	0
Statistical discrepancy	-2	-212	-1,307	276	944	0
Overall deficit excl. grants	0	0	0	0	0	0
Overall deficit (cash) after measures	467	-121	392	816	207	931
Deficit / Financing	-467	121	-392	-816	-207	-931
Domestic financing	-467	121	-392	-816	-207	-931
Banking system	-467	121	-392	-816	-207	-931
Central Bank of Armenia	0	213	15	15	0	0
Rest of banking system	-467	-92	-407	-831	-207	-931
Nonbank	0	0	0	0	0	0
External financing	0	0	0	0	0	0

Source: Ministry of Finance.

Table 25. Armenia: Local Budgets, 1995-2000  
(In percent of GDP; unless otherwise indicated)

	1995	1996	1997	1998	1999	2000 Budget
Total revenue and grants	7.5	1.0	1.5	1.3	1.1	1.3
Total revenue	5.6	0.7	1.0	0.9	0.8	0.8
Tax revenue	5.4	0.5	0.6	0.7	0.7	0.6
Value-added tax	1.6	0.0	0.0	0.0	0.0	0.0
Enterprise profits tax	1.9	0.0	0.0	0.0	0.0	0.0
Personal income tax	1.3	0.0	0.0	0.2	0.1	0.1
Land tax	0.3	0.3	0.3	0.1	0.1	0.1
Other taxes	0.3	0.2	0.2	0.2	0.2	0.1
<i>Of which: stamp duties</i>	0.1	0.2	0.2	0.2	0.2	0.1
Property tax	0.0	0.0	0.1	0.2	0.2	0.3
Nontax revenue	0.2	0.3	0.4	0.2	0.2	0.2
Grants	1.9	0.2	0.5	0.4	0.2	0.5
Total expenditure	6.8	1.0	1.2	1.2	1.2	1.2
Current expenditure	6.3	0.7	1.1	0.9	1.1	1.2
Wages	1.2	0.2	0.4	0.3	0.4	0.4
Subsidies	0.3	0.0	0.0	0.0	0.0	0.0
Interest	0.0	0.0	0.0	0.0	0.0	0.0
Transfers	2.0	0.1	0.1	0.1	0.1	0.2
Family allowances	1.6	0.0	0.0	0.0	0.0	0.0
Pension contributions	0.4	0.1	0.1	0.1	0.1	0.1
Other transfers	0.0	0.0	0.0	0.0	0.0	0.0
Goods and services	2.7	0.5	0.6	0.5	0.5	0.7
Education	...	...	0.0	0.1	0.1	0.1
Other	...	...	0.5	0.4	0.5	0.5
Capital exp. and net lending	0.5	0.2	0.1	0.3	0.1	0.1
Capital expenditure	0.5	0.1	0.1	0.3	0.1	0.1
Foreign financed	0.0	0.0	...	0.0	0.0	0.0
Domestic financed	0.5	0.1	...	0.3	0.1	0.1
Net lending	0.0	0.1	...	0.0	0.0	0.0
Overall deficit (accrual)(-)	0.8	0.0	0.2	0.1	-0.1	0.1
Accumulation of new arrears	...	...	...	...	...	...
Clearance of old arrears	-0.7	0.0	0.0	0.0	0.0	0.0
Overall deficit (cash) before measures	0.8	0.0	0.2	0.1	-0.1	0.1
Measures/gap	0.0	0.0	0.0	0.0	0.0	0.0
Statistical discrepancy	0.0	0.0	-0.2	0.0	0.1	0.0
Overall deficit excl. grants	0.0	0.0	0.0	0.0	0.0	0.0
Overall deficit (cash) after measures	-0.1	0.0	0.0	0.1	0.0	0.1
Deficit / Financing	-0.1	0.0	0.0	-0.1	0.0	-0.1
Domestic financing	-0.1	0.0	0.0	-0.1	0.0	-0.1
Banking system	-0.1	0.0	0.0	-0.1	0.0	-0.1
Central Bank of Armenia	0.0	0.0	0.0	0.0	0.0	0.0
Rest of banking system	-0.1	0.0	-0.1	-0.1	0.0	-0.1
Nonbank	0.0	0.0	0.0	0.0	0.0	0.0
External financing	0.0	0.0	0.0	0.0	0.0	0.0
Memorandum item:						
GDP (in millions of dram)	522,285	661,209	804,336	958,791	988,074	1,032,455

Source: Ministry of Finance.

Table 26. Armenia: State Fund for Social Insurance Budget, 1995-2000

	1995	1996	1997	1998	1999	2000
					Prel. Act.	
(In millions of dram)						
Total revenue and grants	15,125	20,632	28,141	33,751	35,195	37,385
Total revenue	15,125	20,632	27,691	30,272	31,521	31,453
Contributions from payroll	13,264	16,772	24,345	29,797	31,032	31,025
State payroll	0	0	4,195	4,785	5,225	6,468
Enterprise payroll	13,264	16,772	20,150	25,012	25,807	24,557
Self-employed and agriculture	210	3,860	1,725	475	462	403
Other revenue	1,651	0	1,621	0	27	24
Transfers	0	0	450	3,479	3,674	5,932
Total expenditure	15,587	21,887	28,135	34,387	37,670	38,407
Pensions	14,086	19,740	25,920	33,127	34,111	35,803
<i>Of which: Pension to soldiers and officers</i>	0	0	0	3,479	3,770	5,932
Social Safety Net Compensation	540	1,056	0	0	1,422	1,012
Unemployment compensations and programs	680	851	841	767	1,394	747
Interest on bank credit	0	0	895	0	0	0
Other expenditures, and statis. discrepancy	281	241	479	494	743	844
Overall deficit (accrual) (-)	-462	-1,255	7	-635	-2,475	-1,022
Change in arrears	...	...	...	1,306	2,068	982
Overall deficit (cash) (-)	-462	-1,255	7	671	-407	-40
Financing	462	1,255	-7	-671	407	40
Gap	0	0	0	0	0	0
Stock of arrears by end of the FY	...	...	...	1,306	3,374	4,356
(In percent of GDP)						
Total revenue and grants	2.9	3.1	3.5	3.5	3.6	3.6
Total revenue	2.9	3.1	3.4	3.2	3.2	3.0
Contributions from payroll	2.5	2.5	3.0	3.1	3.1	3.0
State payroll	0.0	0.0	0.5	0.5	0.5	0.6
Enterprise payroll	2.5	2.5	2.5	2.6	2.6	2.4
Self-employed and agriculture	0.0	0.6	0.2	0.0	0.0	0.0
Other revenue	0.3	0.0	0.2	0.0	0.0	0.0
Transfers	0.0	0.0	0.1	0.4	0.4	0.6
Total expenditure	3.0	3.3	3.5	3.6	3.8	3.7
Pensions	2.7	3.0	3.2	3.5	3.5	3.5
<i>Of which: Pension to soldiers and officers</i>	0.0	0.0	0.0	0.4	0.4	0.6
Social Safety Net Compensation	0.1	0.2	0.0	0.0	0.1	0.1
Unemployment compensations and programs	0.1	0.1	0.1	0.1	0.1	0.1
Interest on bank credit	0.0	0.0	0.1	0.0	0.0	0.0
Other expenditures, and statis. discrepancy	0.1	0.0	0.1	0.1	0.1	0.1
Overall deficit (accrual) (-)	-0.1	-0.2	0.0	-0.1	-0.3	-0.1
Change in arrears	...	...	...	0.1	0.2	0.1
Overall deficit (cash) (-)	-0.1	-0.2	0.0	0.1	0.0	0.0
Financing	0.1	0.2	0.0	-0.1	0.0	0.0
Gap	0.0	0.0	0.0	0.0	0.0	0.0
Stock of arrears by end of the FY	...	...	...	0.1	0.3	0.4

Sources: Ministry of Finance; and State Fund for Social Insurance.

Table 27. Armenia: Distribution of Current Expenditures in the General Government Budget, 1995-2000  
(In percent of total current expenditures; unless otherwise indicated)

	1995	1996	1997	1998	1999	2000
Wages	12.0	14.6	14.4	16.2	11.6	13.7
Subsidies	4.4	0.6	2.6	0.6	4.8	3.1
Interest	14.3	13.3	12.6	9.7	6.7	6.5
Domestic interest	10.4	9.3	9.2	5.8	4.3	3.5
External interest	3.8	4.0	3.4	3.9	2.3	2.7
Transfers	27.6	24.7	25.1	25.4	24.6	24.8
Pensions and social safety net	24.2	22.2	20.3	22.6	19.5	21.6
Payment of contingent liabilities	2.2	0.4	0.0	0.0	2.9	0.7
Other transfers	1.2	2.1	4.8	2.8	2.2	2.4
Goods and services	41.8	46.8	45.3	48.1	27.9	31.0
Health and education	11.4	7.5	6.9	10.6	7.4	8.7
Other	30.4	39.3	38.3	37.5	20.5	22.3
Memorandum item:						
Current expenditures (in percent of total expenditures)	74.8	74.8	83.8	76.8	75.4	79.1

Source: Ministry of Finance and Economy.

Table 28. Armenia: Composition of Tax Revenues in General Government Budget, 1995-2000  
(In percent of total taxes)

	1995	1996	1997	1998	1999	2000
Tax revenue ..						
Value-added tax	25.6	25.3	30.1	36.9	35.8	37.0
Excises	3.6	13.3	14.3	11.9	11.4	13.9
Enterprise profits tax	35.9	19.7	12.3	7.6	11.3	11.1
Personal income tax	10.3	10.3	11.3	9.4	9.9	8.1
Land tax	2.6	2.3	2.0	0.9	0.8	0.8
Customs duties	4.1	6.9	8.1	6.5	4.2	4.8
Payroll taxes	16.1	17.3	16.9	15.8	13.2	12.9
Other taxes	1.4	3.6	3.8	7.5	9.4	7.8
Presumptive income tax	0.2	0.6	0.5	2.4	2.6	2.2
Property tax	0.3	0.7	0.8	1.1	1.4	1.5
Memorandum item:						
Tax revenue in percent of total revenue (including grants)	64.0	72.9	82.5	82.1	84.9	90.4

Source: Ministry of Finance and Economy.

Table 29. Armenia: Largest Tax Debtors and Their Outstanding Tax Debts 1/  
(In millions of dram)

Name of taxpayer	Legal form	Tax arrears
Armgazard	State enterprise	5,535
Armgold	Closed jsc	1,781
Armenian Water	Closed jsc	1,479
Ararat gold factory	State enterprise	1,358
Yerevan Water	Closed jsc	1,210
Dogagorts (tire plant)	Open jsc	1,051
Sodk gold mine	Affiliated enterprise	648
Dvin Concern	Closed jsc	609
Fenisia Armenia	Joint Venture	333
Nairit	Open jsc	316
Total		14,318

Source: Ministry of State Revenue.

1/ As of February 1, 2001.

Table 30. General Government Tax Revenue in Selected BRO Countries, 1995-2000  
(In percent of GDP)

	1995	1996	1997	1998	1999	2000 Prel. Est.
Average (unweighted; twelve countries)	22.6	22.2	23.7	22.8	22.8	22.9
Armenia	12.7	12.9	16.3	16.9	19.3	17.7
Azerbaijan	10.4	14.2	17.0	15.0	14.0	14.6
Estonia	38.4	37.0	37.4	37.0	36.3	35.6
Georgia	4.6	7.2	8.8	8.7	13.7	13.8
Kazakhstan	20.0	19.7	19.0	16.6	16.0	20.1
Kyrgyz Republic 1/	15.0	12.0	12.5	13.8	12.3	12.3
Latvia	35.1	33.7	34.8	34.3	32.7	30.5
Lithuania	31.6	28.8	31.9	31.2	30.5	28.6
Moldova	28.8	27.4	29.9	30.6	22.1	22.0
Russia	27.5	27.6	28.4	25.5	32.1	36.1
Tajikistan	12.8	11.7	13.3	11.7	12.8	12.9
Ukraine	34.8	34.7	35.6	32.6	32.1	30.5

Source: IMF, European II Department Centralized Database.

1/ Central government only.

Table 31. Armenia: Accounts of the Central Bank, 1995-2000  
(End-of-period stocks, in millions of drams)

	1995 1/	1996 1/	1997 1/				1998 1/				1999 1/				1999 2/	2000 2/				2000 3/
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		Q1	Q2	Q3	Q4	
Net international reserves 4/	14,639	21,948	16,502	15,688	42,181	47,451	46,283	43,586	47,950	50,982	41,925	39,124	56,302	53,202	53,425	49,121	48,548	56,620	72,097	76,360
Net domestic assets	14,724	19,308	22,671	25,291	6,698	3,099	-1,115	3,345	2,530	2,857	3,636	4,565	-4,430	651	428	1,377	5,856	1,437	293	-3,970
General government	10,201	19,238	23,511	27,742	7,933	8,326	1,087	6,674	7,861	9,270	7,519	6,596	4,170	8,306	8,306	7,045	7,881	7,930	8,292	8,292
Republican government	10,316	19,382	23,603	27,800	8,154	8,376	1,186	6,808	7,938	9,349	7,873	6,923	4,378	8,407	8,407	7,087	7,978	8,070	8,294	8,295
Local government	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Pension and employment fund	-115	-144	-92	-58	-221	-50	-99	-134	-77	-79	-354	-327	-208	-101	-101	-42	-97	-140	-2	-1
Banks	3,781	3,346	3,471	2,287	1,369	2,375	1,111	155	-248	2,738	240	1,638	-2,506	1,352	1,352	2,385	5,080	3,340	3,332	3,332
Other items, net	742	-3,276	-4,311	-4,738	-2,604	-7,602	-3,313	-3,484	-5,083	-9,151	-4,123	-3,669	-6,094	-9,007	-9,230	-8,053	-7,105	-9,833	-11,331	-15,594
Reserve money	29,363	41,256	39,173	40,979	48,879	50,550	45,168	46,931	50,480	53,839	45,561	43,689	51,872	53,853	53,853	50,498	54,404	58,057	72,390	72,390
Currency outside Central Bank of Armenia	25,743	37,144	33,787	35,533	38,097	42,215	37,638	35,660	39,656	45,345	34,690	36,280	42,320	45,482	45,482	39,040	41,825	46,376	61,873	61,873
Required reserves	2,392	3,559	2,915	2,986	5,723	8,061	7,169	10,402	10,126	7,912	10,087	6,634	9,264	7,961	7,961	10,883	11,942	11,609	10,350	10,350
Correspondent accounts	693	359	2,291	2,170	4,663															
Other accounts	535	194	180	290	396	274	361	869	698	582	784	775	288	410	410	575	637	72	167	167
Flows (with respect to end of previous period)																				
Net international reserves 4/	11,306	16,818	-5,446	-814	26,493	7,620	-1,168	-2,697	4,364	3,032	-9,057	-2,801	17,178	-3,099	-2,877	-4,081	-573	8,072	15,477	19,740
Net domestic assets	3,221	-12,356	3,363	2,620	-18,593	-5,949	-4,214	4,460	-815	327	779	929	-8,995	5,080	4,858	726	4,479	-4,419	-1,144	-5,407
General government	2,316	-6,682	4,273	4,231	-19,809	393	-7,239	5,587	1,187	1,409	-1,751	-923	-2,426	4,136	4,136	-1,261	836	49	362	362
Republican government	2,316	-6,706	4,221	4,197	-19,646	222	-7,190	5,622	1,130	1,411	-1,476	-950	-2,545	4,029	4,029	-1,320	891	92	224	225
Local government	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Pension and employment fund	463	24	52	34	-163	171	-49	-35	57	-2	-275	27	119	107	107	59	-55	-43	138	139
Banks	152	-2,850	125	-1,184	-918	1,006	-1,264	-956	-403	2,986	-2,498	1,398	-4,144	3,858	3,858	-1,033	2,695	-1,740	-8	-8
Other items, net	753	-2,824	-1,035	-427	2,134	-7,348	4,289	-171	-1,599	-4,068	5,028	454	-2,425	-2,914	-3,136	954	948	-2,728	-1,498	-5,761
Reserve money	14,527	4,462	-2,083	1,806	7,900	1,671	-5,382	1,763	3,549	3,359	-8,278	-1,872	8,183	1,981	1,981	-3,355	3,906	3,653	14,333	14,333
Currency outside Central Bank of Armenia	14,689	4,384	-3,357	1,746	2,564	4,118	-4,577	-1,978	3,996	5,689	-10,655	1,590	6,040	3,162	3,162	-6,442	2,785	4,551	15,497	15,497
Required reserves	882	-237	-644	71	2,737	2,338	-892	3,233	-276	-2,214	2,175	-3,453	2,630	-1,303	-1,303	2,922	1,059	-333	-1,259	-1,259
Correspondent accounts	-1,579	268	1,932	-121	2,493	-4,663	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other accounts	161	47	-14	110	106	-122	87	508	-171	-116	202	-9	-487	122	122	165	62	-565	95	95

Sources: Central Bank of Armenia; and Fund staff estimates.

Notes:

- 1/ NIR is based on the exchange rate of dram 470 per US dollar for 1994-1999.
- 2/ NIR is based on the exchange rate of dram 525 per U.S. dollar.
- 3/ NIR is based on the exchange rate of dram 552.18 per U.S. dollar.
- 4/ NIR is adjusted to exclude KfW loans (which are long term loans) from the liabilities side.



Table 32. Armenia: Monetary Survey, 1995-2000  
(End-of-period, in millions of drams)

	1995 1/	1996 1/	1997 1/				1998 1/				1999 1/				1999 2/	2000 2/				2000 3/
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		Q1	Q2	Q3	Q4	
Net foreign assets (convertible currencies) 4/	14,823	7,769	1,842	-3,693	24,728	29,945	26,174	21,952	24,763	17,564	11,182	11,544	35,307	30,882	31,105	25,151	23,459	42,531	57,844	62,107
Net domestic assets	25,429	46,602	53,706	62,859	42,930	40,303	44,941	54,753	64,899	77,948	76,709	80,335	69,493	77,663	77,440	85,072	95,934	86,064	92,755	88,491
Consolidated government	8,819	23,354	26,831	31,521	13,836	14,302	6,758	12,686	16,138	20,006	15,989	16,747	12,482	15,368	15,864	15,864	13,656	10,374	9,301	9,301
Republican government	9,883	23,789	27,531	32,063	14,874	15,097	7,558	13,240	16,629	20,809	16,967	17,717	14,222	15,883	15,883	16,287	13,835	10,621	9,373	9,373
Local government	-857	-222	-494	-384	-680	-577	-701	-420	-414	-347	-382	-327	-468	-203	-203	-381	-82	-107	-70	-70
Pension and employment fund	-207	-213	-206	-158	-358	-218	-99	-134	-77	-456	-596	-643	-1,272	-312	-312	-42	-97	-140	-2	-2
Economy	37,947	37,181	40,760	47,032	44,286	48,486	52,547	54,448	64,806	78,992	76,261	80,332	81,978	85,105	85,105	90,645	98,950	98,652	104,039	104,039
Enterprises	33,856	32,040	34,808	39,724	36,730	37,560	36,113	36,661	37,989	45,831	40,551	42,213	48,561	49,216	49,216	49,353	51,539	55,547	61,472	61,472
Rest of economy	4,091	5,141	5,952	7,308	7,556	10,926	16,434	17,787	26,817	33,161	35,710	38,119	33,417	35,889	35,889	41,292	44,027	43,105	42,567	42,567
Other items, net	-21,337	-13,933	-13,885	-15,694	-15,192	-22,485	-14,364	-12,381	-16,045	-21,050	-15,541	-16,744	-24,967	-22,810	-23,033	-21,437	-16,672	-22,962	-20,585	-24,849
Broad money	40,252	54,371	55,548	59,166	67,658	70,248	71,115	76,705	89,662	95,312	87,891	91,879	104,800	108,545	108,545	110,223	119,393	128,595	150,599	150,599
Currency in circulation	24,601	34,784	31,136	32,548	34,637	37,596	34,672	32,275	36,457	41,370	31,603	33,571	39,220	42,610	42,610	36,639	39,286	44,158	59,486	59,486
Dram deposits	7,432	8,158	8,565	10,343	12,097	9,085	13,058	14,797	16,818	16,167	14,216	16,096	18,736	13,678	13,678	16,189	16,444	16,583	17,236	17,236
Foreign exchange deposits	8,219	11,429	15,847	16,275	20,924	23,567	23,385	29,633	36,387	37,975	42,072	42,212	46,844	52,257	52,257	57,395	63,663	67,854	73,877	73,877

Sources: Central Bank of Armenia; and Fund staff estimates.

Notes:

- 1/ NIR is based on the exchange rate of dram 470 per US dollar for 1994-1999.
- 2/ NIR is based on the exchange rate of dram 525 per U.S. dollar.
- 3/ NIR is based on the exchange rate of dram 552.18 per U.S. dollar.
- 4/ NIR is adjusted to exclude KfW loans (which are long term loans) from the liabilities side.

Table 33. Armenia: Monetary Developments 1997-2001  
(In millions of drams; unless otherwise indicated)

	1997 1/					1998 1/					1999 1/					2000 1/					2000 2/		
	Year	Q1	Q2	Q3	Q4	Year	Q1	Q2	Q3	Q4	Year	Q1	Q2	Q3	Q4	Year	Q1	Q2	Q3	Q4	Year	Year	
																							Pred.
<b>Central Bank of Armenia</b>																							
Net International Reserves 3/	49,801	46,283	43,586	47,950	50,982	50,982	41,925	39,124	36,302	53,425	53,425	49,121	48,548	56,620	72,097	72,097	76,360						
Net domestic assets	749	-1,115	3,345	2,530	2,857	2,857	3,636	4,565	-4,430	428	428	1,377	5,856	1,437	293	293	-3,970						
Reserve money	50,550	45,168	46,931	50,480	53,839	53,839	45,561	43,689	51,872	53,853	53,853	50,498	54,404	58,057	72,390	72,390	72,390						
Currency issue	42,215	37,638	35,660	39,656	45,345	45,345	34,690	36,280	42,320	45,482	45,482	39,040	41,825	46,376	61,873	61,873	61,873						
Deposits	8,335	7,530	11,271	10,824	8,494	8,494	10,871	7,409	9,552	8,371	8,371	11,458	12,579	11,681	10,517	10,517	10,517						
<b>Banking System</b>																							
Net foreign assets	29,945	26,174	21,952	24,763	17,564	17,564	11,182	11,544	35,307	31,105	31,105	25,151	23,459	42,531	57,844	57,844	62,107						
Net domestic assets	40,302	44,941	54,753	64,899	77,948	77,948	76,709	80,335	69,493	77,440	77,440	85,072	95,934	86,064	92,755	92,755	88,492						
Broad money (M2X) 4/	70,247	71,115	76,705	89,662	95,512	95,512	87,891	91,879	104,800	108,545	108,545	110,223	119,393	128,595	150,599	150,599	150,599						
Currency in circulation	37,596	34,672	32,275	36,457	41,370	41,370	31,603	33,571	39,220	42,610	42,610	36,639	39,286	44,158	59,486	59,486	59,486						
Deposits	32,651	36,443	44,430	53,205	54,142	54,142	56,288	58,308	65,580	65,935	65,935	73,584	80,107	84,437	91,113	91,113	91,113						
Dram	9,084	13,058	14,797	16,818	16,167	16,167	14,216	16,095	18,736	13,678	13,678	16,189	16,444	16,583	17,236	17,236	17,236						
Foreign currency	23,567	23,385	29,633	36,387	37,975	37,975	42,072	42,213	46,844	52,257	52,257	57,395	63,663	67,854	73,877	73,877	73,877						
Memorandum items:																							
Dram broad money (M2)	46,680	47,730	47,072	53,275	57,537	57,537	45,819	49,666	57,956	56,288	56,288	52,828	55,730	60,741	76,722	76,722	76,722						
as % of M2X	66.5	67.3	61.4	59.4	60.2	60.2	52.1	54.1	55.3	51.9	51.9	47.9	46.7	47.2	50.9	50.9	50.9						
Dollarization Index																							
FCD/M2X (in %)	33.5	32.9	38.6	40.6	39.8	39.8	47.9	45.9	44.7	48.1	48.1	52.1	53.3	52.8	49.1	49.1	49.1						
FCD/Dram deposits (in %)	259.4	179.1	200.3	216.4	234.9	234.9	295.9	262.3	250.0	382.1	382.1	354.5	387.2	409.2	428.6	428.6	428.6						
FCD/Total deposits (in %)	72.2	64.2	66.7	68.4	70.1	70.1	74.7	72.4	71.4	79.3	79.3	78.0	79.5	80.4	81.1	81.1	81.1						
Annual GDP	798,555					958,791						988,074											
Quarterly GDP	225,193	124,684	198,021	308,304	324,376		130,017	216,174	324,640	317,196		130,719	218,449	327,136	356,151					1,032,455	1,032,455		
Velocity M2X 5/																							
End-of-period	11.4	7.0	10.3	13.8	13.6	10.0	5.9	9.4	12.4	11.7	9.1	4.7	7.3	10.2	9.5	6.9	6.9						
Period average	12.8					11.5					10.0				8.1	8.1	8.1						
Velocity M2 5/																							
End-of-period	17.1	10.4	16.8	23.1	22.6	16.7	11.4	17.4	22.4	22.5	17.6	9.9	15.7	21.5	18.6	13.5	13.5						
Period average	18.2					18.7					18.9				16.8	16.8	16.8						
Percentage change in RM (nominal) 6/	22.5	-10.6	3.9	7.6	6.7	6.5	-15.4	-4.1	18.7	3.8	0.0	-6.2	7.7	6.7	24.7	34.4	...						
Percentage change in M2X (nominal) 6/	7.2	1.2	7.9	15.9	6.5	36.0	-8.0	4.5	14.1	3.6	13.6	1.5	8.3	7.7	17.1	38.7	...						
Percentage change in M2 (nominal) 6/	-0.1	2.2	-1.4	13.2	8.0	23.3	-20.4	8.4	16.7	-2.9	-2.2	-6.1	5.5	9.0	26.3	36.3	...						

Sources: Central Bank of Armenia and Fund staff estimates.

1/ NIR is based on the program exchange rate of dram 470 per US dollar for 1998 and of 525 per U.S. dollar for 1999-2000 as indicated.

2/ NIR is based on the new program exchange rate of dram 552.18 per U.S. dollar.

3/ NIR is adjusted to exclude KfW loans (which are long term loans) from the liabilities side.

4/ Broad money (M2X) is defined to comprise currency in circulation, dram deposits (including demand, time and savings deposits) and foreign currency deposits.

Dram broad money (M2) is defined as broad money (M2X) less foreign currency deposits.

5/ Quarterly velocity are derived from corresponding quarterly GDP and year velocity are derived from year GDP.

6/ Compared to the previous period.

Table 34. Armenia: Indicators of External Competitiveness, 1995-2000  
(Indices 1995=100; unless otherwise indicated)

	1995	1996	1997	1998	1999	2000
<b>Real effective exchange rate indices</b>						
Total -- Period average 1/	100	120	105	111	117	113
CIS	100	127	106	126	162	151
Non-CIS	100	107	102	103	94	94
Total -- December 1/ 2/	140	107	108	117	118	107
CIS	162	110	109	165	162	136
Non-CIS	109	100	107	94	96	91
<b>Bilateral US-Armenian real exchange rate indices</b>						
Armenia's GDP deflator relative to US GDP deflator	100	115	112	120	111	106
Dollar/dram exchange rate adjusted for relative CPI						
Period average	100	113	106	111	103	98
December	114	107	112	105	104	95
<b>Monthly wages (in U.S. dollars)</b>						
Armenia	16	22	24	31	34	39
Georgia	8	18	27	31	34	37
Azerbaijan	13	20	31	43	43	45
CIS 3/	61	94	107	95	60	72
<b>Wages in Armenia relative to wages in (in percent)</b>						
Georgia	207	122	87	99	100	105
Azerbaijan	119	110	78	71	79	85
CIS 3/	26	23	22	32	57	54
<b>Memorandum items:</b>						
Current account balance 4/	-15.7	-13.8	-17.6	-21.2	-16.6	-14.6
Trade balance (goods and services) 4/	-35.5	-32.6	-38.0	-33.7	-29.0	-27.2
Income and transfers (net) 4/	19.8	18.8	20.4	12.5	12.4	12.7
<b>Economic growth (in percent)</b>						
Armenia	6.9	5.9	3.3	7.3	3.3	6.0
Georgia	2.6	10.5	10.7	2.9	2.9	1.2
Azerbaijan	-11.8	1.3	5.8	10.0	7.4	10.3
CIS 3/	-5.1	-4.0	-3.1	-2.7	-0.9	3.4
<b>U.S. dollar/dram exchange rate</b>						
Period average	100	98	83	80	76	75
End-of-period	101	93	82	78	77	74

Sources: IMF Information Notice System (INS); and Fund staff estimates.

1/ For 1995-1997, INS weights. For 1998-2000, weights based on the 1997 DOT. An increase denotes an appreciation.

2/ Using INS weights, the values of the indices are 120 in 1998, 115 in 1999, and 102 in 2000.

3/ CIS countries (excluding Armenia) weighted together using 1994 (1997) trade weights for the 1995-1997 (1998-2000) period.

4/ In percent of GDP.

Table 35. Armenia: Commercial Banks' Interest Rates for Loans and Deposits, 1996-2000  
(Annualized interest rates)

	1996				1997				1998				1999				2000			
	Mar.	Jun.	Sept.	Dec.	Mar.	Jun.	Sept.	Dec.	Mar.	Jun.	Sept.	Dec.	Mar.	Jun.	Sept.	Dec.	Mar.	Jun.	Sept.	Dec.
<b>Dram</b>																				
<b>One-month</b>																				
Deposit	38.3	19.9	23.9	19.2	41.9	20.1	28.2	20.7	21.4	20.3	23.7	24.4	24.5	27.5	25.1	28.8	19.7	16.6	12.7	18.1
Loan	94.2	82.5	73.5	69.5	56.6	49.5	58.2	63.1	52.3	54.1	61.6	61.1	53.9	58.9	39.6	34.5	40.5	34.7	32.4	14.8
<b>Three-month</b>																				
Deposit	58.3	37.3	26.4	21.8	34.2	23.6	35.2	35.2	8.5	36.3	24.6	24.5	20.9	31.9	33.3	27.6	24.1	19.1	19.0	19.2
Loan	110.1	74.1	71.7	65.1	65.7	65.9	59.3	52.0	54.1	41.4	43.3	48.1	47.2	47.6	43.1	34.5	43.8	35.3	31.5	28.7
<b>Six-month</b>																				
Deposit	54.3	34.4	34.6	21.6	36.7	21.2	26.6	39.0	35.1	34.7	21.2	23.6	21.8	31.1	22.8	31.2	26.6	21.0	19.6	19.6
Loan	82.6	58.0	43.8	55.7	47.9	51.1	59.0	55.1	57.9	49.3	50.1	50.0	47.6	37.6	48.6	35.1	34.0	28.6	27.4	29.1
<b>U.S. Dollars</b>																				
<b>One-month</b>																				
Deposit	43.4	32.3	32.4	28.8	28.6	27.9	24.3	22.1	18.7	17.3	18.8	21.0	18.8	13.5	13.9	18.9	10.6	11.1	7.9	11.2
Loan	58.5	48.1	80.1	47.9	52.9	51.2	66.1	52.6	47.4	51.1	45.4	50.5	38.6	45.2	40.5	37.5	44.0	36.6	30.7	34.3
<b>Three-month</b>																				
Deposit	39.8	36.7	36.2	32.9	29.8	22.6	28.0	25.3	24.0	22.4	23.2	21.6	24.0	24.3	24.8	20.0	14.0	8.4	18.4	15.0
Loan	83.6	81.6	73.3	57.3	54.4	60.5	60.2	52.1	53.5	53.3	16.8	43.5	44.1	46.3	41.2	43.3	41.5	40.6	34.1	35.2
<b>Six-month</b>																				
Deposit	29.2	40.8	30.3	27.4	16.4	29.8	21.1	27.4	19.3	26.8	24.1	23.6	23.3	23.5	22.8	22.0	19.2	15.7	16.1	18.0
Loan	55.6	56.6	55.4	60.8	45.7	53.3	45.5	51.7	48.8	39.1	39.8	39.4	36.5	33.7	37.9	30.4	37.0	34.9	31.5	32.7

Source: Central Bank of Armenia.

Table 36. Armenia: Treasury Bills, 1995-2000

Government securities	1995		1996				1997				1998				1999				2000			
	Sep.	Dec.	Mar.	Jun.	Sep.	Dec.	Mar.	Jun.	Sep.	Dec.	Mar.	Jun.	Sep.	Dec.	Mar.	Jun.	Sep.	Dec.	Mar.	Jun.	Sep.	Dec.
	(In millions of drams)																					
Treasury bills outstanding																						
1-10 weeks	100	160	348.4	690	700	284	152	222	...	125.45	...	...	...	636.7	...	243	...	519	...	...	...	100
11-20 weeks	150	...	150	874	1,192	2,360	1,300	1,200	300	678	...	...	...	3,352	5,501	4,746	5,050	4,104	3,250	4,050	1,300	821
21-30 weeks	...	...	...	357	884	1,805	940	524	1,500	760	...	...	...	5608.1	6,198	6,958	7,823	9,649	11,350	8,465	5,919	4,468
31-40 weeks	...	...	...	...	...	...	750	364	1,200	1,050	...	...	...	5709.4	4,517	5,086	5,274	5,314	4,319	3,843	5,000	5,234
41-52 weeks	...	...	...	...	...	...	...	500	1,100	600	...	...	...	4925.3	4,488	3,288	2,995	3,593	3,007	4,507	5,700	5,900
Outstanding at face value (TBills)	...	...	...	...	...	...	...	...	...	...	20,237	22,417	...	20,231	20,703	20,320	21,142	23,179	21,926	20,865	17,919	16,522
Outstanding at face value (Notes)	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1,000	4,000	6,572	6,272
	(In percent)																					
Treasury bill average interest rate																						
1-10 weeks	38.5	37.1	37.6	36.7	29.4	43.0	50.1	42.9	...	28.6	...	...	...	47.5	...	41.2	...	48.3	...	...	...	...
11-20 weeks	37.0	...	38.1	38.2	39.3	57.4	71.9	54.8	44.7	45.9	...	...	...	56.2	61.4	58.1	45.5	48.4	35.2	19.2	19.2	25.9
21-30 weeks	...	...	...	39.8	39.3	56.5	75.5	48.3	46.5	48.9	...	...	...	46.2	56.6	60.7	54.1	49.0	39.7	26.1	20.7	24.8
31-40 weeks	...	...	...	...	...	...	81.2	57.4	46.2	49.3	...	...	...	42.4	49.4	58.5	61.3	56.4	43.9	32.5	23.2	23.0
41-52 weeks	...	...	...	...	...	...	...	60.9	43.7	48.5	...	...	...	45.4	44.2	52.2	63.9	61.4	61.2	37.3	25.0	23.0
Weighted average interest rate	37.6	37.1	37.8	38.0	36.8	56.1	74.1	54.1	45.5	47.5	...	...	...	46.6	53.6	57.9	55.2	52.5	42.8	28.4	22.7	23.5

Sources: Debt Management Department, and MOFE.

Table 37. Armenia: Quarterly Balance of Payments, 1999-2000  
(In millions of U.S. dollars; unless otherwise indicated)

	1999					2000				
	Q1	Q2	Q3	Q4	Year	Q1	Q2	Q3	Q4	Year
Current account	-56	-66	-70	-114	-307	-89	-69	-46	-75	-279
Trade balance	-93	-107	-116	-157	-474	-113	-121	-99	-134	-467
Exports	64	61	62	60	247	61	84	74	87	307
Imports	-157	-168	-179	-217	-721	-174	-206	-173	-221	-774
Services (net)	-13	-15	-14	-21	-62	-13	-14	-9	-18	-54
Credits	30	31	35	40	136	30	33	34	39	136
Debits	-43	-45	-49	-61	-198	-43	-47	-43	-57	-191
Income (net)	12	10	12	21	55	1	15	20	18	54
Private transfers (net)	18	20	21	22	80	17	20	24	24	86
Official transfers (net)	20	26	27	21	94	19	32	17	35	103
Capital and financial account	37	60	109	106	311	76	62	55	98	290
Capital transfers (net)	3	3	2	5	13	7	5	5	11	28
Foreign direct investments (net)	15	45	31	31	122	45	36	20	3	104
Portfolio investments (net)	1	0	1	-1	2	0	-1	-1	-17	-19
Public sector (net)	8	11	43	23	84	22	3	10	11	46
Disbursements	9	15	45	34	102	27	10	15	18	70
Amortization	-2	-4	-2	-11	-18	-5	-7	-5	-7	-24
Other capital (net) 1/	11	1	32	47	90	2	19	20	90	130
Overall balance	-20	-6	38	-8	4	-14	-7	8	23	11
Change in gross reserves (- increase)	22	11	-36	-17	-20	14	5	-10	-26	-18
IMF (net)	-2	-4	-2	24	15	-4	-4	-4	-4	-16
Arrears, net to Russia (+ increase)	...	...	...	1	1	4	5	5	5	18
Debt relief from Turkmenistan	...	...	...	...	...	...	2	2	2	5
Memorandum items:										
Current account (in percent of GDP)										
Including official transfers	-23.4	-16.5	-11.7	-18.9	-16.6	-36.0	-16.9	-7.7	-11.4	-14.6
Excluding official transfers	-31.5	-23.0	-16.1	-22.5	-21.7	-43.7	-24.6	-10.5	-16.7	-19.9
Gross reserves (end-of-period)	276.1	265.4	301.3	304.6	304.6	286.6	280.1	285.9	313.5	313.5
In months of imports 2/	3.4	3.3	3.7	3.8	3.8	3.3	3.2	3.2	3.6	3.6
In months of amortization 3/	143.0	137.5	156.1	157.8	157.8	93.0	90.9	92.8	101.8	101.8
External debt service (in percent of exports) 4/	8.9	14.5	8.3	25.8	14.3	22.2	8.0	7.7	7.3	10.6

Sources: Data provided by the Armenian authorities; and Fund staff estimates.

1/ Includes errors and omissions.

2/ In months of the following year's import of goods and services.

3/ Excludes amortization of short term debt, deposits held by nonresidents and debt acquired domestically by nonresidents.

4/ Government and government-guaranteed medium and long-term debt service.

Table 38. Armenia: Annual Balance of Payments, 1995-2000

	1995	1996	1997	1998	1999	2000 Prel.
(In millions of U.S. dollars)						
Current account	-202	-220	-289	-403	-307	-279
Net exports of goods and services	-457	-520	-622	-640	-536	-521
Exports	300	368	330	360	383	443
Imports	-757	-888	-952	-1,000	-919	-965
Income excl. workers' remittances (net)	-13	-7	-14	-22	-24	-24
Workers' remittances and private transfers (net)	71	123	192	147	159	164
Official transfers (net)	197	184	156	113	94	103
Capital and financial account	231	231	337	406	311	290
Capital transfers (net)	0	0	0	10	13	28
FDI and portfolio investments (net)	25	25	68	205	124	85
Public sector (net)	118	122	96	34	84	46
Disbursements	118	150	114	105	102	70
Amortizations	0	-28	-18	-71	-18	-24
Other capital inflows (net) 1/	88	84	174	158	90	130
Overall balance	29	11	49	4	4	11
Net international reserves (- increase)	-29	-11	-49	-4	-5	-34
Arrears and debt relief	...	...	...	...	1	23
(In percent of GDP)						
Current account	-15.7	-13.8	-17.6	-21.2	-16.6	-14.6
Net exports of goods and services	-35.5	-32.6	-38.0	-33.7	-29.0	-27.2
Exports	23.3	23.1	20.2	18.9	20.7	23.2
Imports	-58.8	-55.6	-58.1	-52.7	-49.8	-50.4
Income excl. workers' remittances (net)	-1.0	-0.5	-0.9	-1.2	-1.3	-1.3
Workers' remittances and private transfers (net)	5.5	7.7	11.7	7.7	8.6	8.6
Official transfers (net)	15.3	11.5	9.5	5.9	5.1	5.4
Capital and financial account	18.0	14.5	20.6	21.4	16.8	15.1
Capital transfers (net)	0.0	0.0	0.0	0.5	0.7	1.5
FDI and portfolio investments (net)	2.0	1.6	4.1	10.8	6.7	4.5
Public sector (net)	9.2	7.7	5.8	1.8	4.6	2.4
Disbursements	9.2	9.4	6.9	5.5	5.5	3.7
Amortizations	0.0	-1.8	-1.1	-3.7	-1.0	-1.3
Other capital inflows (net) 1/	6.8	5.3	10.6	8.3	4.9	6.8
Overall balance	2.3	0.7	3.0	0.2	0.2	0.6
Net international reserves (- increase)	-2.3	-0.7	-3.0	-0.2	-0.3	-1.8
Arrears and debt relief	...	...	...	...	0.1	1.2
(In units indicated)						
Memorandum items:						
Current account excluding official transfers						
In millions of U.S. dollars	-399	-404	-445	-515	-401	-382
In percent of GDP	-31.0	-25.3	-27.1	-27.1	-21.7	-19.9
External debt service (in percent of exports of goods and services)	20.9	20.3	14.2	19.0	14.3	10.6
Gross reserves (end-of-period) 2/	1.5	2.1	2.9	3.9	3.8	3.6
Real GDP (percent change)	6.9	5.9	3.3	7.2	3.3	6.0
Percent change in nominal dollar values of:						
Exports of goods and services	30.7	22.9	-10.3	8.9	6.5	15.7
Imports of goods and services	74.2	17.4	7.2	5.0	-8.1	5.0
GDP	98.1	24.1	2.6	15.9	-2.8	3.6
Of which: Domestic demand	104.0	21.4	6.8	12.3	-6.2	2.2

Sources: Data provided by the Armenian authorities; and Fund staff estimates.

1/ Includes errors and omissions.

2/ In months of next year's imports of goods and services.

Table 39. Armenia: Commodity Composition of Exports, 1995-2000

	1995	1996	1997	1998	1999	2000
(In millions of U.S. dollars)						
Total, f.o.b.	271	290	234	229	247	307
Agricultural products	14	13	28	18	18	30
Minerals and chemicals	43	25	22	33	40	38
Textiles, leather, and footwear	25	13	14	16	16	16
Precious stones and metals	90	140	55	53	100	121
Base metals and articles thereof	31	47	58	40	25	44
Other products 1/	69	52	57	69	49	58
(Percent change)						
Total, f.o.b.	26	7	-20	-2	8	24
Agricultural products	1	-6	117	-35	-2	66
Minerals and chemicals	97	-42	-10	48	21	-5
Textiles, leather, and footwear	-23	-46	2	15	-1	0
Precious stones and metals	24	57	-61	-4	88	22
Base metals and articles thereof	227	54	22	-30	-38	77
Other products 1/	5	-25	9	21	-28	19
(Shares in percent of total)						
Agricultural products	5	4	12	8	7	10
Minerals and chemicals	16	8	10	14	16	12
Textiles, leather, and footwear	9	5	6	7	6	5
Precious stones and metals	33	48	24	23	40	40
Base metals and articles thereof	11	16	25	18	10	14
Other products 1/	26	18	24	30	20	19
(In percent of GDP)						
Total, f.o.b.	21	18	14	12	13	16
Precious stones and metals	7	9	3	3	5	6
Other exports	14	9	11	9	8	10

Sources: National Statistical Service; and Fund staff estimates.

1/ Including miscellaneous non-specified exports.



Table 40. Armenia: Commodity Composition of Imports, 1995-2000

	1995	1996	1997	1998	1999	2000
(In millions of U.S. dollars)						
Total, c.i.f.	674	858	906	914	835	899
Agricultural products	174	206	188	184	135	149
Minerals and chemicals	280	243	295	280	247	264
Textiles, leather, and footwear	9	27	45	39	37	39
Precious stones and metals	62	130	47	46	87	113
Base metals and articles thereof	16	10	25	20	24	24
Other products	132	242	305	346	305	309
(Percent change)						
Total, c.i.f.	71	27	6	1	-9	8
Agricultural products	42	19	-9	-2	-27	10
Minerals and chemicals	65	-13	22	-5	-12	7
Textiles, leather, and footwear	-1	200	67	-15	-5	5
Precious stones and metals	97	108	-63	-4	90	31
Base metals and articles thereof	339	-36	140	-18	19	2
Other products	133	83	26	13	-12	1
(Shares in percent of total)						
Agricultural products	26	24	21	20	16	17
Minerals and chemicals	42	28	33	31	30	29
Textiles, leather, and footwear	1	3	5	4	4	4
Precious stones and metals	9	15	5	5	10	13
Base metals and articles thereof	2	1	3	2	3	3
Other products	20	28	34	38	37	34
(In percent of GDP)						
Total, c.i.f.	52	54	55	48	45	47
(In units indicated)						
Memorandum items:						
Humanitarian imports						
In millions of U.S. dollars	152	62	84	72	66	76
Percent change	113	-59	35	-14	-8	15
Underlying imports, c.i.f. 1/						
In millions of U.S. dollars	460	666	775	797	683	710
Percent change	58	45	16	3	-14	4
In percent of GDP	36	42	47	42	37	37
In percent of domestic demand	26	31	34	31	29	29

Source: National Statistical Service.

1/ Defined as total imports less humanitarian imports and imports of precious stones and metals.

Table 41. Armenia: Direction of Exports, 1995-2000

	1995	1996	1997	1998	1999	2000
(In millions of U.S. dollars)						
Total, f.o.b.	271	290	234	229	247	307
EU member and accession countries	52	69	75	82	110	112
Belgium	31	45	47	50	84	75
Other EU countries	18	17	19	26	22	32
Accession countries 1/	3	7	9	5	3	5
CIS	170	128	95	81	56	73
Russia	91	96	63	40	34	45
Georgia	3	7	11	10	11	15
Other CIS countries	76	25	21	31	11	13
Rest of the world	50	94	64	67	81	122
Iran	35	44	43	31	34	28
U.S.	1	4	7	12	16	38
Other countries 2/	14	45	14	24	31	56
(Percent change)						
Total, f.o.b.	26	7	-20	-2	8	24
EU member and accession countries	31	33	9	9	35	2
Belgium	18	45	5	6	69	-11
Other EU countries	88	-2	13	36	-16	43
Accession countries 1/	-20	111	27	-39	-39	67
CIS	7	-24	-26	-15	-30	29
Russia	8	6	-35	-36	-15	31
Georgia	-5	152	56	-11	16	39
Other CIS countries	7	-67	-16	47	-63	12
Rest of the world	175	88	-32	4	22	50
Iran	140	25	-3	-26	9	-19
U.S.	70	604	63	63	38	137
Other countries 2/	343	222	-69	67	30	81
(Shares in percent of total)						
EU member and accession countries	19	24	32	36	44	37
Belgium	11	15	20	22	34	24
Other EU countries	6	6	8	12	9	10
Accession countries 1/	1	2	4	2	1	2
CIS	63	44	41	35	23	24
Russia	34	33	27	17	14	15
Georgia	1	2	5	4	4	5
Other CIS countries	28	9	9	14	5	4
Rest of the world	18	32	27	29	33	40
Iran	13	15	18	14	14	9
U.S.	0	2	3	5	6	12
Other countries 2/	5	16	6	10	13	18

Source: National Statistical Service.

1/ Bulgaria, Cyprus, The Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Romania, the Slovak Republic, Slovenia, and Turkey.

2/ Including miscellaneous non-specified exports.

Table 42. Armenia: Origin of Imports, 1995-2000

	1995	1996	1997	1998	1999	2000
(In millions of U.S. dollars)						
Total, c.i.f.	674	858	906	914	835	899
EU member and accession countries	107	166	254	354	321	371
Belgium	16	50	50	55	85	84
Other EU countries	73	83	127	204	168	218
Accession countries 1/	18	33	77	95	68	68
CIS	334	278	299	230	187	168
Russia	135	125	216	191	150	132
Georgia	62	51	38	27	27	20
Other CIS countries	137	101	45	12	10	17
Rest of the world	233	415	353	330	327	360
Iran	90	150	89	64	78	83
U.S.	114	104	116	96	86	103
Other countries 2/	29	161	148	169	163	174
(Percent change)						
Total, c.i.f.	71	27	6	1	-9	8
EU member and accession countries	164	55	53	39	-9	15
Belgium	1,056	217	0	10	56	-1
Other EU countries	105	14	53	61	-18	30
Accession countries 1/	428	85	135	23	-28	0
CIS	62	-17	8	-23	-19	-10
Russia	20	-7	72	-11	-22	-12
Georgia	247	-17	-25	-30	0	-27
Other CIS countries	81	-26	-55	-73	-13	59
Rest of the world	58	78	-15	-7	-1	10
Iran	516	67	-41	-28	23	6
U.S.	31,286	-9	12	-17	-11	20
Other countries 2/	-78	454	-8	15	-4	7
(Shares in percent of total)						
EU member and accession countries	16	19	28	39	38	41
Belgium	2	6	5	6	10	9
Other EU countries	11	10	14	22	20	24
Accession countries 1/	3	4	9	10	8	8
CIS	50	32	33	25	22	19
Russia	20	15	24	21	18	15
Georgia	9	6	4	3	3	2
Other CIS countries	20	12	5	1	1	2
Rest of the world	35	48	39	36	39	40
Iran	13	17	10	7	9	9
U.S.	17	12	13	11	10	11
Other countries 2/	4	19	16	19	19	19

Source: National Statistical Service.

1/ Bulgaria, Cyprus, The Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Romania, the Slovak Republic, Slovenia, and Turkey.

2/ Including miscellaneous non-specified exports.

Table 43. Armenia: Public Sector Medium and Long-Term External Nominal Debt, 1995-2000

	1995	1996	1997	1998	1999	2000 Prel.
	(In million of U.S. dollars)					
Total nominal debt	382	568	700	787	855	862
Multilaterals	291	426	500	578	642	647
<i>Of which:</i>						
World Bank	99	191	267	309	363	397
IMF	70	117	134	189	201	175
IFAD	0	1	2	8	18	18
EBRD 1/	45	43	43	39	37	34
EU	76	73	54	33	23	21
Bilaterals	87	121	153	169	178	193
<i>Of which:</i>						
Russia	87	74	92	98	109	115
U.S. 2/	0	14	29	44	50	57
Commercial credits 3/	4	21	47	39	34	22
	(In units indicated)					
Memorandum items:						
Shares in percent of total						
Multilaterals	76	75	71	73	75	75
Bilaterals	23	21	22	22	21	22
Commercial credits 3/	1	4	7	5	4	3
Total nominal debt (percent change)	89	49	23	12	9	1
Total nominal debt (in percent of GDP)	30	36	43	41	46	45
Total debt in present value terms (in millions of U.S. dollars)	...	...	...	507	549	535
Grant element 4/	...	...	...	36	36	38
Total PV debt in percent of						
Exports of goods and services 5/	...	...	...	144	154	136
Central government revenue excluding grants	...	...	...	165	167	179

Sources: External Debt Management, Ministry of Finance and Economy; and Fund staff estimates.

1/ Excluding the government-guaranteed loan to the cargo terminal.

2/ In 1999 and 2000, including loans from the Lincy and Huntsman foundations.

3/ Government-guaranteed loans and suppliers' credits.

4/ Difference between nominal and present value debt in percent of nominal debt.

5/ Three year moving average centered on the preceding year.

Table 44. Armenia: Public Sector Medium and Long-Term External Debt as of end-2000

Creditor	Nominal debt		Present value debt		Grant element 2/
	In millions of U.S. dollars 1/	Percent of total debt	In millions of U.S. dollars 1/	Percent of total debt	
Total	862	100	535	100	38
Multilaterals	647	75	357	67	45
World Bank	397	46	168	31	58
IMF	175	20	140	26	20
EBRD 3/	34	4	34	6	0
EU 4/	21	2	7	1	66
IFAD	18	2	7	1	60
Bilaterals	193	22	155	29	19
Russia	115	13	108	20	5
USA 5/	57	7	31	6	46
Turkmenistan	13	1	13	2	-3
Germany	6	1	2	0	63
France	2	0	1	0	61
Commercial credits 6/	22	3	22	4	0
Memorandum items:					
Concessional loans 7/	635	74	315	59	50
Nonconcessional loans 8/	227	26	220	41	3
Fixed interest rate loans	698	81	385	72	45
Variable interest rate loans 8/	164	19	150	28	9
SDR-denominated loans	582	67	305	57	47
Dollar-denominated loans 5/ 8/	251	29	220	41	13
Euro-denominated loans 4/ 9/	30	3	10	2	65
Total debt in percent of exports 10/	218	...	135	...	...
Total debt in percent of fiscal revenue 11/	288	...	179	...	...
Total debt in percent of GDP	45	...	28	...	...

Sources: External Debt Management, Ministry of Finance and Economy; and Fund staff estimates.

1/ Unless otherwise indicated.

2/ Difference between nominal and present value debt in percent of nominal debt.

3/ Excluding the government-guaranteed loan to the cargo terminal.

4/ Present value calculated net of expected capital transfer of euro 5.5 million annually from the EU.

5/ Including loans from the Lincy and Huntsman foundations.

6/ Government-guaranteed loans and suppliers' credits.

7/ Loans with a grant element of at least 35 percent at the time of loan commitment.

8/ Including all commercial credits.

9/ Including loans in currencies where irrevocably fixed conversion rates to the euro have been established by the EU.

10/ Three year moving average of exports of goods and services centered on the preceding year.

11/ Central government total revenue excluding external grants.

Table 45. Armenia: Incorporated and Partially Privatized Enterprises, 1995-2000

	1995	1996	1997	1998	1999	2000
Number of state-owned enterprises existing prior to 1992						
<i>Of which:</i> Small	10,197					
Medium and large	2,000					
Total	12,197					
Number of corporatized and partially privatized enterprises (in each year)						
<i>Of which:</i> Small	1,568	2,129	2,052	601	196	44
Medium and large	240	613	396	210	...	...
Total	1,808	2,742	2,448	811	196	44
Number of corporatized and partially privatized enterprises (cumulative)						
<i>Of which:</i> Small	1,827	3,956	6,008	6,609	6,805	6,849
Medium and large	240	853	1,249	1,459	1,459	1,459
Total	2,067	4,809	7,257	8,068	8,264	8,308
Share of corporatized and partially privatized enterprises in total (in percent)						
<i>Of which:</i> Small	18	39	59	65	67	67
Medium and large	12	43	62	73	73	73
Total	17	39	59	66	68	68

Source: Armenian authorities.

Table 46. Armenia: Banking System Indicators, 1997-2000

	1997				1998				1999				2000			
	Mar.	Jun.	Sep.	Dec.	Mar.	Jun.	Sep.	Dec.	Mar.	Jun.	Sep.	Dec.	Mar.	Jun.	Sep.	Dec.
Total capital to risk weighted assets ratio 1/	29.4	28.5	28.7	27.0	33.6	31.9	29.5	29.8	29.6	27.1	28.6	27.8	29.0	26.4	24.5	25.0
Core capital to risk weighted assets ratio	21.2	21.0	27.4	25.2	30.5	29.1	27.3	27.2	27.0	25.5	26.7	25.9	27.2	24.7	23.0	23.3
Highly liquid assets to total capital ratio 1/	33.4	41.8	52.7	45.8	38.7	39.9	40.7	37.8	34.2	34.7	39.0	39.7	38.9	34.5	31.3	30.5
Highly liquid assets to demand liabilities ratio	86.7	96.2	110.0	94.8	88.7	88.2	90.7	83.4	87.6	84.4	89.9	100.1	102.7	100.0	96.1	86.1
Total non-performing loan to total loan ratio	24.7	24.4	20.1	11.3	12.1	9.8	9.7	10.6	14.2	11.8	7.3	4.3	5.6	5.6	5.3	6.2

Source: Central Bank of Armenia.

1/ Revised indicators based on a new classification recently provided by the CBA.

Table 47. Armenia: Banking Sector Loans to Enterprises, 1998-2000

	1998				1999				2000			
	Mar	Jun.	Sept.	Dec.	Mar.	Jun.	Sept.	Dec.	Mar.	Jun.	Sept.	Dec.
(In millions of dram)												
Credit in drams	7,433	7,416	7,318	6,552	5,358	6,143	7,231	9,049	8,436	8,811	9,127	11,205
Industry	4,022	4,312	4,300	3,351	2,786	2,672	3,319	5,117	4,198	4,778	4,725	5,814
<i>Of which</i> : Energy	2,863	2,745	2,723	1,588	1,686	1,587	1,575	1,433	54	38	139	303
Agriculture	1,383	1,334	919	803	835	920	1,211	1,322	1,247	1,293	1,905	2,606
Construction	715	529	521	901	649	1,262	1,575	1,436	1,741	1,339	1,205	1,030
Transportation and communication	74	198	219	133	64	74	66	41	43	58	52	207
Trade	1,238	1,043	1,359	1,364	1,024	1,215	1,060	1,133	1,207	1,343	1,240	1,548
Credit in foreign exchange	24,685	26,332	27,272	37,870	26,724	30,607	35,553	35,338	38,093	45,683	45,851	53,055
Total credit to enterprises	32,118	33,748	34,590	44,422	32,082	36,750	42,784	44,387	46,529	54,494	54,978	64,260
(In percent)												
Credit to enterprises in drams	23.1	22.0	21.2	14.7	16.7	16.7	16.9	20.4	18.1	16.2	16.6	17.4
Industry	12.5	12.8	12.4	7.5	8.7	7.3	7.8	11.5	9.0	8.8	8.6	9.0
<i>Of which</i> : Energy	8.9	8.1	7.9	3.6	5.3	4.3	3.7	3.2	0.1	0.1	0.3	0.5
Agriculture	4.3	4.0	2.7	1.8	2.6	2.5	2.8	3.0	2.7	2.4	3.5	4.1
Construction	2.2	1.6	1.5	2.0	2.0	3.4	3.7	3.2	3.7	2.5	2.2	1.6
Transportation and communication	0.2	0.6	0.6	0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.3
Trade	3.9	3.1	3.9	3.1	3.2	3.3	2.5	2.6	2.6	2.5	2.3	2.4
Credit in foreign exchange	76.9	78.0	78.8	85.3	83.3	83.3	83.1	79.6	81.9	83.8	83.4	82.6
Total credit to enterprises	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Sources: Central Bank of Armenia; and Fund staff estimates.



Table 48. Armenia: Total Electricity Generation, Distribution, and Collection, 1995-1999

	1995	1996	1997	1998	1999
Production of electricity (in millions of kilowatts)	5,576	6,229	6,030	5,684	5,716
<i>Of which:</i>					
Thermal	3,353	2,332	3,040	1,416	2,439
Hydro	1,919	1,573	1,390	2,801	1,199
Nuclear 1/	304	2,324	1,600	1,466	2,078
Production of electricity (in percent of total)					
<i>Of which:</i>					
Thermal	60	37	50	25	43
Hydro	34	25	23	49	21
Nuclear	5	37	27	26	36
Distribution of sales (in percent of total net generation) 2/					
Households	44	48	50	40	33
Industry (includes Nairit)	...	18	17	18	17
<i>Of which:</i>					
Nairit	...	...	...	...	5
Budgetary organizations	...	7	8	7	6
Irrigation	...	7	6	10	12
Drinking water	...	11	7	9	8
Transport	...	...	3	4	3
Others	...	10	10	13	13
Collection rate (in percent of total sales)					
Households	26	40	58	86	79
Industry (includes Nairit)	...	103	71	96	114
Budgetary organizations	...	63	96	63	85
Irrigation 3/	...	18	12	25	62
Drinking water 4/	...	54	52	42	86
Transport 4/	...	...	95	84	115
Others	...	76	57	93	105
Total	58	59	62	77	88

Sources: Armenian authorities; and World Bank.

1/ The nuclear power plant was recommissioned in November 1995.

2/ Excludes excess and technical losses and self-use of electric power.

3/ The figure for 1996 includes other agriculture use of electricity.

4/ In 1996 transport was included in drinking water.

Table 49. Armenia: Structure of Industrial Production, 1990-2000  
(As a percent of total industrial production)

	1990	1993	1995	1996	1997	1998	1999	2000
Energy	3.4	9.3	16.9	22.9	27.1	34.0	32.0	30.4
Food processing	15.4	17.1	20.5	38.1	40.5	44.9	43.6	40.9
Other industry	81.2	73.6	62.6	39.0	32.4	21.1	24.4	28.7
<i>Of which:</i>	81.2	73.6	62.6	39.0	32.4	21.1	24.4	28.7
Electromechanics	14.0	9.0	5.4	3.3	1.4	1.0	1.9	2.4
Machine tools	10.0	3.6	2.1	1.5	1.2	0.9	1.8	1.5
Electronics	10.0	7.0	3.6	3.0	2.2	1.2	0.2	0.9
Synthetic precious stones	10.7	28.4	19.8	8.4	6.0	3.3	6.2	5.6
Light industry	24.0	8.4	4.2	1.8	1.5	1.8	1.3	1.3
Construction materials	5.0	2.2	2.6	2.4	2.8	3.1	3.2	2.2
Chemical and biotechnology	3.9	3.4	4.3	3.7	3.2	2.2	2.9	3.3
Metallurgy	0.0	5.1	9.0	4.7	3.9	5.9	6.1	10.3
Other	3.6	6.5	11.6	10.2	10.2	1.6	0.8	1.2
Memorandum item:								
Energy share (in percent of GDP)	...	...	4.7	6.1	7.1	8.0	9.1	8.8

Source: National Statistical Service.

Table 50. Armenia: Energy Supply and Consumption, 1985-2000  
(In millions of kWh)

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000 1/
Total electricity supply	11,579	11,705	11,866	11,957	10,512	11,282	11,089	9,334	6,409	5,673	5,515	6,102	6,089	6,207	5,316	5,568
Thermal generation	8,077	10,150	8,999	8,947	9,693	8,807	7,970	5,960	2,002	2,159	3,353	2,332	3,040	3,064	2,237	2,481
Hydro generation	1,619	1,349	1,464	1,534	1,149	1,555	1,547	3,044	4,293	3,514	1,919	1,573	1,390	1,537	1,190	1,250
Nuclear generation	4,808	2,753	4,331	4,394	0	0	0	0	0	0	304	2,324	1,600	1,590	1,890	1,837
Net imports	-2,925	-2,547	-2,928	-2,918	-330	920	1,572	330	114	0	-61	-127	59	16	-258	(455)
Self use	...	...	...	...	...	754	720	518	316	210	340	467	458	458	400	389
System losses	...	...	...	...	...	1,650	1,675	3,025	2,390	2,245	2,183	2,321	2,070	2,112	1,413	1,480
Total electricity consumption	...	...	...	...	...	8,878	8,694	5,791	3,703	3,218	2,992	3,314	3,502	3,621	3,628	4,094
Households and budgetary	...	...	...	...	...	2,241	2,974	2,616	2,297	1,893	1,662	2,050	2,221	2,237	2,365	...
Agriculture	...	...	...	...	...	1,152	2,180	1,279	495	400	310	331	332	396	456	...
Industry, construction and transport	...	...	...	...	...	5,485	3,540	1,896	911	925	1,020	933	948	989	807	...

Sources: World Bank; and Ministry of Energy of Armenia.

1/ Preliminary data.

Table 51. Armenia: Survey of the Quasi-Fiscal Sector, 1998-2000  
(In millions of dram; unless otherwise indicated)

	1998	1999	2000 Prel.
Overall Balances 1/	-39,334	-42,943	-22,931
Energy sector 2/	-39,334	-23,307	-3,378
Nairit	...	...	...
Irrigation	...	-12,067	-11,409
Drinking water	...	-7,569	-8,144
District heating	...	...	...
Primary balance 3/	-30,264	-22,907	-13,266
Energy sector 2/	-30,264	-8,028	-198
Nairit	...	...	...
Irrigation	...	-7,372	-6,404
Drinking water	...	-7,507	-6,664
District heating	...	...	...
Subsidies from the republican budget	0	10,715	6,728
Total amount of subsidies	...	...	...
Energy sector (excl. district heating) 2/	0	0	0
Nairit	...	...	...
<i>Of which</i> : for electricity bill	...	...	...
Irrigation	...	6,724	5,408
<i>Of which</i> : for electricity bill	...	5,400	4,760
Drinking water	...	3,991	1,320
<i>Of which</i> : for electricity bill	...	3,250	1,277
District heating	...	...	...
<i>Of which</i> : for electricity bill	0	0	1,494
Payable debt (stock, end-of-the period)	100,973	133,755	142,963
Energy sector 4/	100,973	98,371	102,926
Nairit	...	...	...
Irrigation	...	14,391	14,587
Drinking water	...	20,993	25,450
District heating	...	...	...
Accumulation of new arrears during the period	0	438	9,894
Energy sector 2/	...	-2,602	4,555
Nairit	...	...	...
Irrigation	...	1,525	632
Drinking water	...	1,515	4,706
District heating	...	...	...
External sources 5/	10,788	2,330	6,965
Energy sector 2/	10,788	-2,696	...
Nairit	...	...	...
Irrigation	...	4,965	5,105
Drinking water	...	61	1,860
District heating	...	...	...

Sources: Ministry of Finance; and Ministry of Energy.

1/ The balance is defined as revenues minus expenditures.

2/ Data for 1998 and 2000 are still subject to revision.

3/ The primary (or basic) balance is defined as revenues minus expenditures, excluding interest payments and externally financed capital expenditures.

4/ Due to new tax legislation, the methodology for the determination of tax arrears has changed. Data for 1999 and 2000 are subject to revision.

5/ External disbursements minus external amortization plus external grants.

Table 52. Armenia: Operations of the Consolidated Energy Sector, 1998-2000  
(In millions of drams; unless otherwise indicated)

	1998 Prel.	1999	2000 Prel.
<b>Revenues</b>	71,442	75,347	79,384
Electricity revenues collected	60,669	73,428	74,807
Technical losses (high and low voltage), in percent of net generation	15.2%	14.8%	14.9%
Excess losses, in percent of net generation	15.5%	10.0%	11.6%
Domestic electricity sales collected	56,396	69,793	69,054
Tariffs, dram/kWh (average)	20.3	21.9	21.4
Domestic collection rate for electricity	77.1%	88.0%	88.5%
Electricity exports collected	4,273	3,635	5,753
Tariffs for electricity exports, dram/kWh	14.1	13.5	14.1
External collection rates for electricity	81.9%	37.4%	89.6%
Revenues collected for thermal energy supply	530	919	3,577
Technical losses, in percent of production potential	21.4%	23.4%	18%
Tariffs, dram/thousand gal	8,620	8,468	8,440
Collection rate for thermal energy	18.4%	22.6%	76%
Revenues collected for gas	7,431	0	0
Non-Core Activities	2,812	1,000	1,000
<b>Expenditures</b>	110,776	98,654	82,762
Expenditures excl. int. payments and capital expenditures related to foreign financed projects 1/	101,706	83,375	79,582
Inputs			
Imported gas	52,152	35,845	39,318
Imports of gas, in mlns of cubic meters	45,652	29,263	37,647
Price, U.S. dollar/cubic meter	1,505	1,011	883
Nuclear fuel	79.1	79.1	79.1
O&M Costs	6,500	6,582	1,671
Net payment of taxes accrued	44,702	32,331	24,130
Interest payments	4,852	15,199	14,067
On domestic debt	4,795	4,985	...
On external debt	2,487	3,508	...
Capital expenditures	2,308	1,477	...
Externally financed	4,275	10,294	5,247
Domestically financed	4,275	8,574	3,180
Of which: domestically financed from own resources	0	1,720	2,067
Of which: domestically financed from own resources	0	0	0
Primary balance 2/	-30,264	-8,028	-198
Overall Balance	-39,334	-23,307	-3,378
<b>Financing available</b>	-10,648	23,302	...
Domestic sources	-36,387	-10,619	...
Banks	-27,935	-9,654	...
Budgetary loans	...	...	...
Nonbank loans	-8,452	-19,542	...
Tax arrears	...	-2,759	...
Pay for shares in ArmRusgas acquired earlier	...	0	...
Production reserves	...	11,289	...
Transit fees for gas due to Armrusgasprom	...	0	...
Pre-payment for electricity	...	0	...
Collection of old arrears	...	10,047	...
Gas	...	7,047	...
Georgia (export)	...	3,000	...
External sources	-1,619	10,788	...
Disbursements	2,225	9,438	...
Amortization	-3,844	-4,320	...
Grants	0	5,670	...
Government subsidies on external loans	6,152	5,707	...
Interest	2,308	1,477	...
Amortization	3,844	4,230	...
ArmRosGasProm Gas, debt for equity swap	21,206	17,426	...
Errors and omissions 3/	49,982	5	...
Financing gap, ex-post	0	0	0

Source: Armenian authorities.

Note: From the second half of 1998 the cash-flow projections do not include the activities of ArmRusGasProm.

1/ This corresponds to current expenditures, if domestically financed capital expenditures are zero.

2/ The primary balance is defined as current revenues minus total expenditures excluding all interest payments and capital expenditures related to foreign financed projects.

3/ If positive this represents an additional accumulation of debts due to non-payment. If negative this is a use of available financing.

Table 53. Armenia: Operations of the Irrigation Sector, 1999-2000  
(In millions of drams; unless otherwise indicated)

	1999	2000 Prel.
Revenues	1,027.1	1,060.7
Total services billed	2,050.1	2,762.2
Water supplied to network, in mlns of m3	1,293.8	1,195.0
Total water supply in value (incl. VAT)	2,988.7	3,967.4
Loss	31.4%	30.0%
Water to users, in mlns of m3	887.5	832.0
Tariff in dram/m3	2.31	3.32
Collection rate in percent	50.1%	38.4%
Expenditures	13,094.0	12,470.0
Excluding int. payments and ext. financed capital expenditures	8,399.0	7,465.0
Inputs	6,733.0	5,710.0
Electricity with VAT	5,976.0	5,143.0
Other inputs	757.0	567.0
Operation and maintenance costs	1,089.0	1,228.0
Net taxes accrued	0.0	12.0
Interest payments	0.0	0.0
Capital expenditures	5,272.0	5,520.0
Externally financed	4,695.0	5,005.0
Domestically financed	577.0	515.0
Primary balance 1/	-7,371.9	-6,404.3
Overall Balance	-12,066.9	-11,409.3
Financing available	12,169.0	11,409.3
Domestic sources	480.0	896.3
Banks	-10.0	1,305.0
Nonbanks and government loans	490.0	-408.7
Budget loans	2,421.0	0.0
Arrears to energy sector	-1,879.0	-938.0
Arrears to social contribution	65.0	156.0
Arrears to other inputs and other debts	-221.0	248.3
Production reserve	60.0	20.0
Cash outstanding from prev. year	44.0	5.0
Collection of old arrears/receivables	0.0	100.0
Tax arrears	0.0	0.0
External sources	4,965.0	5,105.0
Total government subsidies	6,724.0	5,408.0
Budget grant for energy bill	5,400.0	4,760.0
For capital investment	577.0	515.0
For current repair and maintenance	587.0	0.0
Land protection	160.0	133.0
Other subsidies	0.0	0.0
Errors and omissions	-102.1	0.0
Financing gap, ex-post	0.0	0.0

Sources: Armenian authorities.

1/ The primary balance is defined as current revenues minus total expenditures excluding all interest payments and capital expenditures related to foreign financed project.

Table 54. Armenia: Operations of Yerevan Water and Sewer CSJC, 1999-2000  
(In millions of drams; unless otherwise indicated)

	1999	2000 Prel.
Revenue	1576.4	1192
Total services billed (accrued revenues)	6511.4	6386.0
Water supply	1,347.5	1,012.5
Water supplied to network, in mln of m3	296.8	431.0
Loss, in percent	59.2%	72.6%
Water to users mln m3	121	118
Value of billed services (accrued revenues)	5,566.0	5,423.4
Collection rate, in percent	24.2%	18.7%
Tariff dram/m3	46.0	46.0
Water removal (sewerage)	238.5	177.9
Water removal mln m3	98.5	95.3
Tariff dram/m3	10.0	10.0
Expenditures	6,500.9	7,333.0
Excluding int. payments and ext. financed capital expenditures	6,439.9	5,853.0
Inputs	4,767.6	4,644.2
Material, fuel etc.	216.8	342.2
Elect. incl. VAT, in mlns of drams	4,254.0	3,871.0
Resource fee, in mlns of drams	296.8	431.0
Water fee	0.0	0.0
Operations and maintenance costs	935.0	879.8
Net taxes Accrued	534.1	7.0
Interest payments (including penalties)	0.0	0.0
Capital expenditures	264.2	1,802.0
Externally financed	61.0	1,480.0
Domestically financed (from own resources)	203.2	322.0
Primary balance 1/	-4,863	-4,661
Overall Balance	-4,924.5	-6,140.7
Financing available	5,137.3	6,410.8
Domestic sources	2,655.6	3,952.3
Banks	0.0	0.0
Nonbanks and government loans	2,121.5	3,944.9
Budget loan	5370.0	0.0
Acc. arrears to energy sector during current year (+)	606.4	3,197.3
Reduction of old arrears to energy sector (-)	-4,379.5	0.0
Accum. of arrears to other inputs and other debts during current ye	442.7	804.0
Reduction of other arrears payable (-)	-109	-59.4
Production reserves	79	3
Cash outstanding from previous year	112	0
Collections of old receivables	0.0	0.0
Sales of secondary assets	0.0	0.0
Tax arrears	534.1	7.4
External sources	61.0	1,859.8
Government subsidies	2,420.7	598.7
Budget grant for energy bill	2,222.0	556.0
For cofinancing (capital repair)	15.0	7.7
For operation (capital repair) of prev. year	0.0	35.0
For budgetary loan interest	183.7	0.0
Errors and omissions	-212.8	-270.07
Financing gap, ex-post	0.0	0.0

Sources: Armenian authorities.

1/ The primary balance is defined as current revenues minus total expenditures excluding all interest payments and capital expenditures related to foreign financed project.

Table 55. Armenia: Operations of RA Armenia Water and Sewer CJSC, 1999-2000  
(In millions of drams)

	1999	2000 Prel.
Revenue	1,203.6	1,274.9
Total services billed (accrued revenues)	...	3,720.3
Water supply	1,036.8	1,098.6
Water supplied to network, in mlns of m3	141.9	149.0
Loss, in percent	37.0%	44.0%
Water to users, in mlns of m3	90.0	82.9
Value of billed services (accrued revenues)	3,456.0	3,544.0
Collection rate, in percent	30%	31.0%
Tariff dram/m3	38.40	42.75
Water removal (sewerage)	166.8	176.3
Water removal, in mlns of m3	50.0	52.9
Tariff dram/m3	11.12	10.75
Expenditures	3,848.0	3,278.2
Excluding int. payments and ext. financed capital expenditures	3,848.0	3,278.2
Inputs	2,176.0	2,319.0
Material, fuel etc.	136.0	233.0
Elect. with VAT, in mlns of drams	1,513.0	1,431.0
Resource fee mln drams	124.0	126.0
Water fee	403.0	529.0
Operation and maintenance costs	1,016.0	949.2
Net taxes accrued	113.0	10.0
Interest payments (include penalties)	0.0	0.0
Capital expenditures	543.0	0.0
Externally financed	0.0	0.0
Domestically financed	543.0	0.0
Primary balance	-2,644.4	-2,003.3
Overall Balance	-2,644.4	-2,003.3
Financing available	3,177.0	1,908.0
Domestic sources	1,607.0	1,187.0
Banks	-3.0	-1.0
Nonbanks and government loans	1,610.0	1,178.0
Budget loans	1,725.0	0.0
Acc. arrears to energy sector during current year (+)	166.0	624.0
Reduction of old arrears to energy sector (-)	-1,525.0	0.0
Accum. of arrears to other inputs and other debts during current year (+)	1,108.0	653.0
Reduction of other arrears payable	136.0	-99.0
Production reserve	0.0	0.0
Collection of old receivables	0.0	0.0
Cash outstanding from previous year	0.0	0.0
Sales of secondary assets	0.0	0.0
Tax arrears	0.0	10.0
External Sources	0.0	0.0
Government subsidies	1,571.0	721.0
Budget grant for energy bill	1,028.0	721.0
For cofinancing (capital repair)	543.0	0.0
For operation (capital repair) of prev. year	0.0	0.0
For budgetary loan interest	0.0	0.0
Accumulation of debts/interest	-1.0	0.0
Errors and omissions	-532.60	95.30
Financing gap, ex-post	0.0	0.0

Sources: Armenian authorities.

1/ The primary balance is defined as current revenues minus total expenditures excluding all interest payments and capital expenditures related to foreign financed project.