CHAPTER

3 Fiscal Adjustment

Fiscal consolidation has been the cornerstone of Armenia's successful stabilization. Between 1995 and 2000, the fiscal adjustment was primarily an expenditure-based phenomenon, and the quasi-fiscal sectors (energy, water, and irrigation) remained a major source of subsidies, arrears, and contingent liabilities. By 2000, Armenia still had a sizable fiscal deficit, a weak tax base, and a large stock of domestic and external expenditure arrears. Since 2001, the authorities have renewed their efforts to rein in lax expenditure controls and fiscal and quasi-fiscal deficits. From the point of view of fiscal consolidation and macroeconomic stability, these policies were remarkably successful. Fiscal deficits declined, debt sustainability indicators improved, and both domestic and external expenditure arrears were eliminated. Furthermore, the quasi-fiscal deficit was progressively reduced.

This section describes Armenia's fiscal developments, including an analysis of tax revenue performance and the role of the quasi-fiscal sectors. It also discusses Armenia's long-term fiscal challenges and the remaining measures needed to ensure fiscal sustainability.

A. Fiscal Developments

Severe political and economic disruptions in the late 1980s and early 1990s generated large fiscal and quasi-fiscal imbalances (Table 3.1). In 1994, the general government deficit stood at nearly 17 percent of GDP, largely financed with increases in the money supply. Moreover, the government revenue base was severely constrained, and domestic expenditure arrears were widespread. The quasi-fiscal sector suffered from collection problems that generated large interenterprise arrears, particularly in the energy, water, and irrigation sectors. Vested interests captured state-owned enterprises and benefited from a climate of financial chaos and corruption.

The end of hostilities in Karabakh provided the first serious opportunity to confront these difficulties. In 1995, the government reduced its dependence on central bank financing, introduced more effective expenditure control, and

Table 3.1. Consolidated General Government, 1994–2004
(In percent of GDP)

	1994	1996	1998	2000	2001	2002	2003	2004 Est.
Total revenue and grants	28.0	18.5	21.1	20.3	20.8	22.4	21.3	18.8
Total revenue	16.2	17.1	20.1	19.7	19.2	18.9	18.0	18.1
Tax revenue	13.5	13.8	17.4	18.5	17.7	17.9	17.2	17.4
Nontax revenues	2.8	3.0	2.7	1.3	1.3	0.9	0.6	0.6
Capital revenue	0.0	0.3	0.0	0.0	0.1	0.1	0.2	0.1
Grants	11.8	1.5	0.9	0.6	1.6	3.5	3.2	0.7
Total expenditure	44.9	26.8	26.4	26.7	24.5	22.7	22.2	20.4
Current expenditure	34.6	20.3	20.3	21.3	19.3	17.2	16.0	16.3
Wages	1.8	2.9	3.1	3.5	2.6	2.6	2.6	2.4
Subsidies	12.8	0.1	0.1	0.8	0.6	0.6	0.9	0.8
Interest	1.9	2.6	2.0	1.7	1.2	0.8	0.7	0.6
Transfers	4.5	5.6	6.4	7.2	6.5	5.8	5.0	5.5
Goods and services	13.6	9.1	8.9	8.0	8.4	7.3	6.7	7.0
Capital expenditure and net lending	10.2	6.5	5.9	5.4	5.2	5.6	6.2	4.1
Overall balance (commitment)	–16.8	–8.2	–5.3	–6.4	–3.7	–0.3	–1.0	–1.5
Net clearance of arrears	6.3	–0.7	0.7	1.3	–0.4	–2.2	–0.4	0.0
Statistical discrepancy	0.4	–0.5	0.1	0.5	–0.2	–0.1	0.0	0.0
Overall balance (cash)	–10.1	–9.5	–4.5	–4.5	–4.3	–2.7	–1.4	–1.5
Financing	10.1	9.5	4.5	4.5	4.3	2.7	1.4	1.5
Domestic financing	3.6	3.0	2.0	2.4	1.6	–0.4	–0.3	–0.2
External financing	6.5	6.5	2.6	2.2	2.7	3.1	1.7	1.7

Sources: Armenian authorities; IMF staff estimates.

enacted an arrears clearance program. Early results were promising: the deficit fell to 8.2 percent of GDP in 1996 and the government repaid most of the arrears built up during 1993–94.

Though the reduction in the overall deficit in the mid-1990s seemed impressive, the underlying fiscal position remained weak. The tax base was shrinking. The causes of the declining revenue base were manifold, but chief among them was poor tax administration and archaic tax legislation. Tax arrears and exemptions were widespread. Acute problems also emerged on the expenditure side. In 1996, public sector wages increased sharply, while net lending—primarily to ailing state-owned enterprises—accounted for 9 percent of the budget. These pressures threatened a return to macroeconomic instability and brought to the forefront the need for a revenue mobilization effort.

The 1997 budget marked the beginning of a more comprehensive adjustment effort with a central objective of increased revenues. The authorities introduced the destination principle for VAT and moved some VAT collection to the border. The parliament passed new laws that simplified customs duties and excises, and the profit tax was simplified. On the tax administration side, taxpayer identification numbers were introduced. The single treasury account became operational. Thanks to these reforms, tax revenues recovered. VAT reforms were particularly effective, with revenues almost doubling in two years. However, the tax arrears payments scheme failed, while tax netting-out operations continued, putting pressure on the government's cash position.

Political instability gradually derailed the 1997 reform program and the fiscal position weakened further in the run-up to the May 1999 parliamentary elections. Many firms delayed payments hoping for a tax amnesty, and the authorities started again to accumulate domestic and external expenditure arrears. Efforts to ensure fiscal sustainability faltered following the October 1999 assassinations in parliament. As the fiscal situation worsened, the government began to rely on domestic sources for financing the deficit, and interest rates rose sharply. Ironically, tax revenue performance in 1999 seems like a high-water mark, when the tax-to-GDP ratio reached 18.5 percent of GDP. However, a series of netting-out operations and an extension of the tax year into 2000 seriously distorted revenue performance. These bookkeeping operations added about 2 percent of GDP to tax collection.

After mid-2000, the political environment calmed and the adjustment effort resumed on the revenue side. A series of tax reforms was introduced, coupled with reductions in tax rates. For small businesses, the authorities inaugurated a turnover-based tax—known as the simplified tax. It offered an alternative to regular taxation. The authorities also reformed the excise tax law. A single 20 percent corporate profit tax rate replaced the multiple tax rates under the old law. The authorities also abolished some VAT exemptions. At the same time, the VAT threshold was increased threefold. However, the expenditure arrears problem became more severe (Table 3.2). During 2000–01, arrears on health expenditures accounted for approximately one-third of all arrears.

The adjustment effort on the expenditure side resumed in 2001. The 2001 budget was led by strengthened expenditure control. Both subsidies and the public sector wage bill were cut and family benefits and pensions were reduced. The authorities started to tackle financial indiscipline and formulated a plan to reduce the stock of domestic expenditure arrears. By the summer of 2003, the authorities had paid off all expenditure arrears. The improvement in the main fiscal indicators was impressive. Between 2000 and 2003, the general government deficit fell by 3.2 percentage points of GDP (Figure 3.1).

Table 3.2. Expenditure Arrears, 2000–04
(In billions of drams)

	2000	2001	2002	2003	2004
Total expenditure arrears	37	40	7	0	0
Current expenditures	35	35	5	0	0
Transfers	9	8	0	0	0
Goods and services	21	22	5	0	0
Of which:					
Health	13	13	…	0	0
Education	2	3	1	0	0
Capital expenditures	3	5	2	0	0
External amortization arrears	7	6	0	0	0
Memorandum Items:					
Arrears in percent of GDP	3.6	3.4	0.5	0.0	0.0

Sources: Armenian authorities; IMF staff estimates.

B. Expenditure Policies

Viewed in a medium-term perspective, Armenia's fiscal position adjusted significantly. Since 1999, the consolidated general government deficit has fallen by 6.5 percentage points of GDP. Despite this success, there is some concern about the emphasis of the adjustment effort on certain expenditure categories rather than increases in revenues.[33] In 1999, total expenditures were 30 percent of GDP (see Table 3.1). In the subsequent five years, expenditures fell by 8.6 percent of GDP, with the bulk of the adjustment taking place during 2000–01.

Current expenditures and, to a lesser extent, social expenditures bore the brunt of the adjustment. Table 3.3 shows an index of real expenditures between 1997 and 2003.[34] In the early stages of the adjustment effort, social expenditures suffered cuts in real terms. During 2000–01, expenditures on social security, science, and housing fell in real terms. By 2003, these cuts had been reversed.

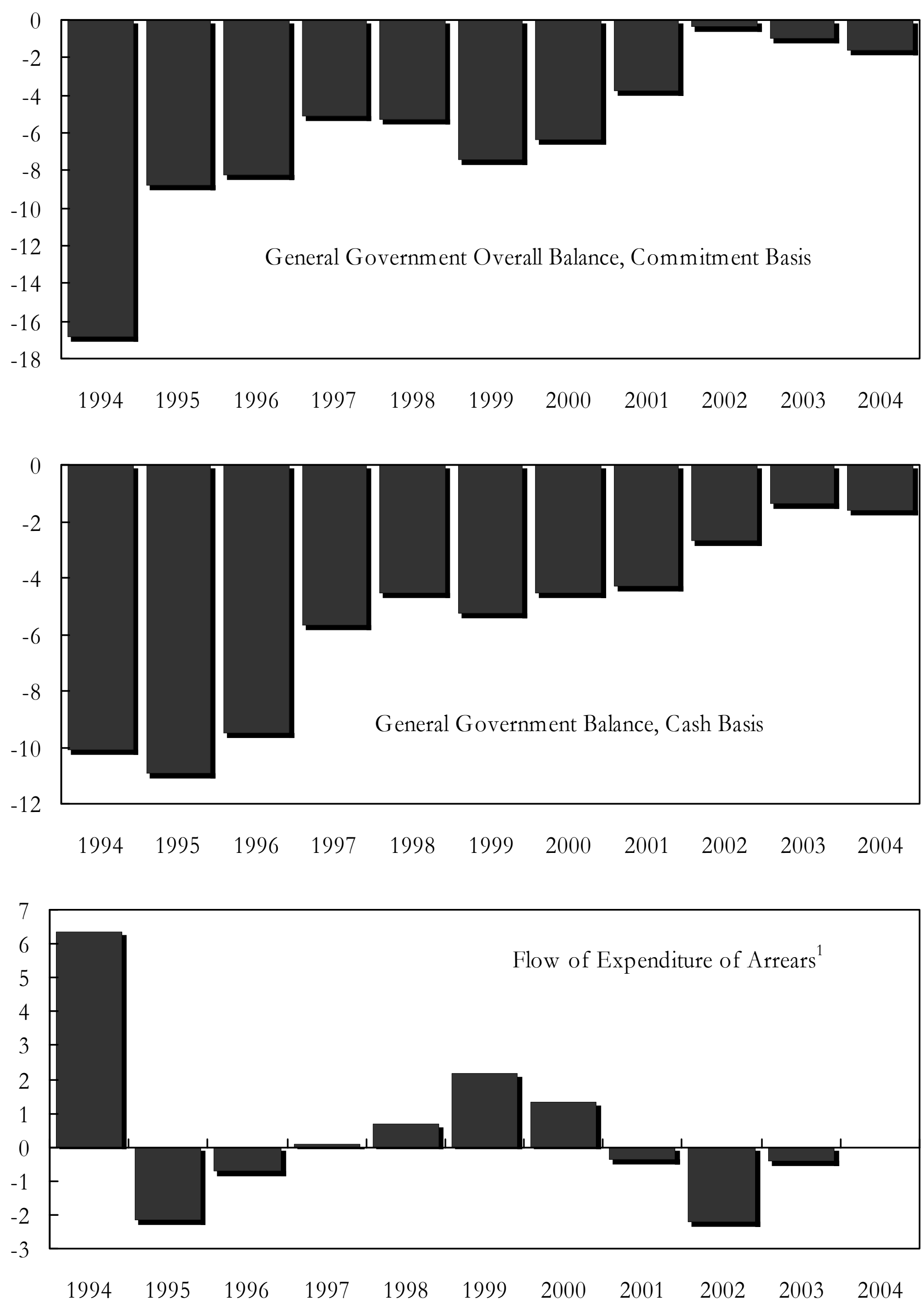
In 2002, the PRSP process began to influence the government's spending priorities, and social expenditures have increased at a faster pace since then. The

[33]For a further discussion of public expenditure issues in Armenia, see World Bank (2003).

[34]Current expenditures deflated by the GDP deflator.

Figure 3.1. Fiscal Indicators, 1994–2004

(In percent of GDP)



Sources: Ministry of Finance; IMF staff estimates.

[1]Negative number indicates repayment of arrears.

Table 3.3. Central Government Expenditure by Major Function, 1997–2003

(Index 1997 = 100) [1]

	1997	1999	2001	2003
Total expenditure	100	144	131	167
Of which: General public services	100	132	149	160
Defense	100	105	103	116
Public order and safety	100	118	121	155
Education	100	134	176	194
Science	100	93	84	134
Health	100	129	145	181
Social security	100	187	182	201
Recreation, culture, and religion	100	104	148	375
Housing and public utilities	100	201	103	471
Fuel and energy	100	72	102	171
Memorandum Items:				
Nominal GDP	804	988	1,176	1,618
GDP deflator	100	111	114	122

Sources: Armenian authorities; IMF staff estimates.

[1] Deflated by the GDP deflator.

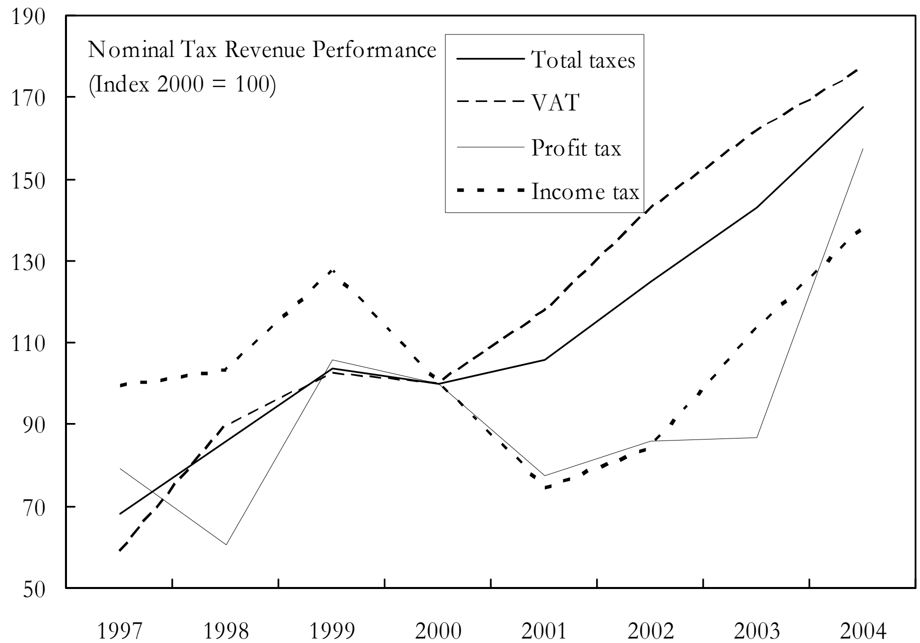
PRSP envisages increasing social expenditures to 12 percent of GDP by 2015, compared to 8.7 percent in 2003. This commitment will require a concomitant expansion of tax revenues that could be achieved by resolving remaining weaknesses in tax and customs administration.

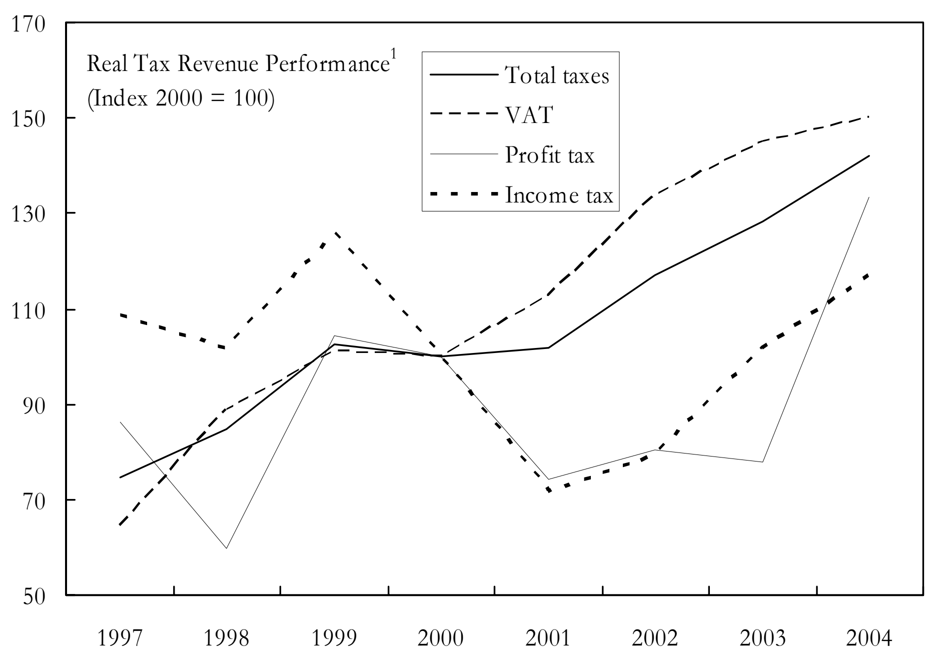
C. Why Has Revenue Performance Been Disappointing?

Despite efforts to increase the tax base, the overall tax revenue performance has been rather disappointing. During the early transition years, an archaic tax code and economic difficulties hampered tax collection. These factors declined in significance over time, as the authorities adopted a modern system of tax legislation. More recently, however, a combination of lower tax rates, tax administration weaknesses, tax holidays, and weak corporate accounting practices has prevented revenues from responding to the enhanced legal framework and the surge in economic activity.

Armenia's tax-to-GDP ratio remains low. Tax revenues increased rapidly in both real and nominal terms in recent years, especially since 2000. Since 2002, tax revenues increased by 64 percent in nominal terms and by 31 percent in real terms (Figure 3.2). However, economic growth has also been extremely rapid, suggesting that there is a large untapped source of tax revenues. In 2004, the tax-to-GDP ratio was just marginally higher than in 1997 (see Table 3.1).

Figure 3.2. Tax Revenue Performance, 1997–2004

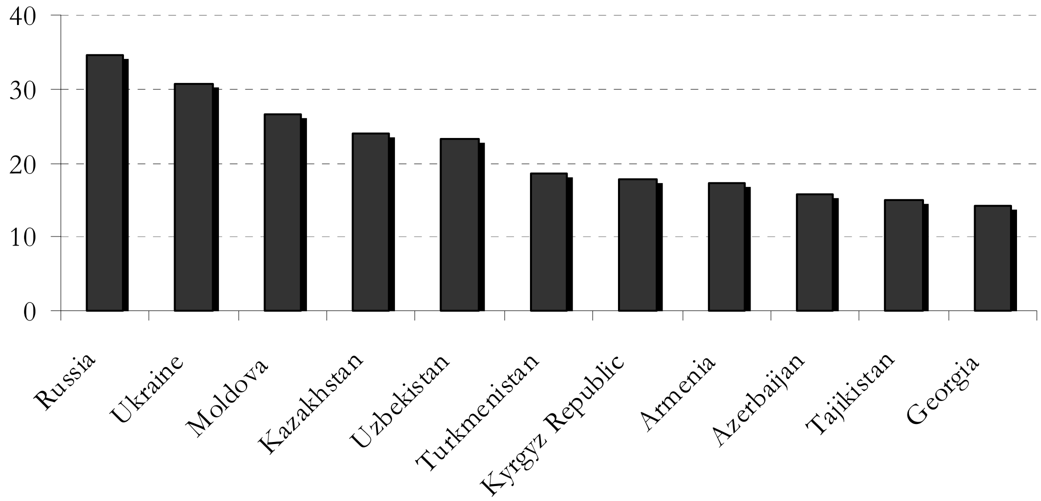




Sources: Ministry of Finance; IMF staff estimates.
[1]Deflated by the GDP deflator.

Figure 3.3. Former Soviet Union Countries: General Government Tax Revenue, 1999–2003

(Annual Average In percent of GDP)



Source: World Economic Outlook database, IMF.

Furthermore, Armenia's recent performance compares unfavorably to its neighbors in the former Soviet Union (Figure 3.3). In 2003, the region's unweighted average tax-to-GDP ratio was 22.9 percent, which is 4.9 percentage points higher than Armenia's. Only three countries have lower ratios: Azerbaijan, Georgia, and Tajikistan. Moreover, over the past three years, Azerbaijan and Tajikistan have improved their tax collection efforts.[35] Of the remaining eight countries, five have improved their collection efforts, while two (Russia and Belarus) have stabilized their collections at around 35 percent of GDP.[36] What are the factors behind Armenia's rather weak performance?

In the first six years of transition, economic difficulties and poorly designed legislation restricted revenue growth. A weak and unreconstructed enterprise sector generated substantial tax and interenterprise arrears, domestic tax exemptions were commonplace, and ineffective legislation encumbered the tax authorities. After 1996, economic growth returned and the restructuring of state-owned enterprises accelerated. Interenterprise arrears disappeared except in the energy and water sectors. While tax arrears continued to grow, the problem was largely confined to the quasi-fiscal sectors. The authorities comprehensively redrafted tax legislation, putting in place modern profits and income tax laws. While there is some room for improvement, Armenia now possesses a

[35]For 2004, it is expected that Georgia will have increased its tax-to-GDP ratio by more than 3 percentage points.

[36]For a survey of recent tax reform efforts in the Former Soviet Union, see Stepanyan (2003).

well-designed body of tax legislation. The profit tax is consistent with international accounting standards. Both profit and income tax rates are low and provide a favorable environment for enterprise growth. In short, neither legislative weaknesses nor economic difficulties account for the relatively low tax collection in recent years.

Four factors contributed to lackluster tax collection in recent years. First, the introduction of the simplified tax in 2001, coupled with cuts in profit and income tax rates, reduced direct tax collection. Second, foreign investments enjoy generous profit-tax holidays. Third, some of the recent growth in the economy was financed with foreign grants and loans, and those activities are not taxed through international agreements. Finally, notwithstanding some improvements in administration, tax and customs administration made limited progress toward countering a widespread culture of tax evasion.

The profit and income tax rate cut—introduced in 2000—also reduced direct tax collections. After the introduction of a single 20 percent tax rate and new depreciation allowances, which replaced a two-tier regime of 15 and 25 percent, profit tax collection fell by almost 23 percent. At the same time, income tax collection fell by 28 percent. Taken together, direct tax revenues fell by 1.1 percent of GDP.

Initially, the simplified tax was envisaged as a mechanism for including small enterprises in the tax base. However, many medium-sized companies quickly began to use it as a vehicle for minimizing their tax liabilities.[37] The simplified tax generates a negligible amount of revenues (0.3 percent of GDP in 2003).

Because of the above-mentioned cuts, the burden of taxation moved toward indirect sources.[38] The share of VAT in total revenues increased from 29 percent in 1997 to 37 percent in 2004 (Table 3.4). Over the same period, excise taxes were an important source of revenues. Meanwhile, direct taxes—such as profit and income taxes—became less significant. In 1997, profit taxes accounted for 11.9 percent of all revenues; by 2004, they accounted for just over 8 percent. The share of income and payroll taxes also fell during this period.

Tax holidays to foreign investors give considerable advantages to foreign companies, provided their investment is greater than $500,000. This threshold is quite low and cumulative. In order to meet the threshold, investors can make

[37]Rather than remain in the regular tax regime, many firms exploit the high thresholds in order to reconfigure their operations into a collection of "small" enterprises. Shone (2004) outlines many of the administrative difficulties arising from special taxes levied on small taxpayers.

[38]For further details, see Brown (2003).

Table 3.4. Structure of General Government Tax Revenues, 1997–2004
(Percent of total tax revenues)

	1997	2000	2003	2004[1] Est.
Tax revenue	100.0	100.0	100.0	100.0
Value-added tax	29.2	35.0	38.6	37.0
Excises	13.9	13.7	14.0	12.6
Enterprise profits tax	11.9	10.7	6.3	8.2
Personal income tax	10.9	7.8	6.0	6.5
Land tax	2.0	0.8	0.7	0.9
Customs duties	7.9	4.6	3.8	3.7
Payroll taxes	19.3	16.5	16.0	17.0
Other taxes	3.7	7.4	8.4	7.2
Presumptive income tax	0.5	2.1	2.9	3.8
Simplified tax	0.0	0.1	1.8	2.3
Property tax	0.8	1.4	1.4	1.5
Memorandum items:				
Direct taxes	22.8	18.4	12.3	14.6
Indirect taxes	77.2	81.6	87.7	85.4

Sources: Armenian authorities; IMF staff estimates.

investments over time. These incentives may have cost more than 0.5 percent of GDP in forgone revenues and may have had a marginal effect in attracting investment. Moreover, a significant proportion of imported goods enjoyed VAT exemptions at the border. These exemptions have been curtailed in recent years, but the remaining ones damage the integrity of the VAT chain of credits.

Tax evasion is widespread. Despite double-digit economic growth, many of Armenia's largest enterprises have reported massive losses. In 2002, the corporate sector recorded losses amounting to 20 percent of GDP, and many enterprises are effectively outside the tax system.[39]

Tax administration problems have played a central role in limiting revenue collection (Box 3.1). The institutional structure of the tax and customs services is

[39]The law on tax audits is a remaining area of legislative weakness. The current law prevents effective auditing of large enterprises. The tax authorities are limited to just one audit per year and have just five weeks to complete an audit. The tax authorities are further constrained by the requirement that they must report their findings three business days after the audit is concluded. Audits on large enterprises are typically complex and time-consuming, especially with enterprises reporting large losses. Inevitably, tax evaders benefit from this legal restriction on tax audits. Unsurprisingly, the collection rate for audit-generated reassessments is low.

Box 3.1. Tax Administration and the Business Environment

Despite the progress made in recent years, many firms complain about tax and customs administration. The World Bank regularly conducts business surveys in these areas, and the three most recent surveys point to serious administration problems. While these problems are found to be more severe in other CIS countries, they nonetheless are an obstacle to a better business environment in Armenia.

The surveys show that demands for extralegal advance payments seem widespread. Over half of firms surveyed say that the frequency of changes in rules and rates presented an obstacle to business, and almost a third of them complain about tax inspections, the frequency of payments, and excessive reporting requirements.

At the same time, the tax service also complains about the behavior of enterprises. Turnover and profits are often underreported. Many interenterprise transactions are conducted without invoices or paperwork, making the task of properly assessing taxes more difficult.

A move to a more rules-based tax administration will improve the business environment. In particular, more effective audit procedures would remove discretion from individual tax inspectors and remove the potential for rent-seeking behavior. Better administration would also improve corporate governance and tax compliance.

Dissatisfaction with Tax Administration

(Percentage of firms reporting major or moderate obstacles)

	2002	2003	2004
Extralegal requirements for advance payments of taxes	66.8	57.7	58.6
Frequency of changes in rules and rates	57.2	51.7	53.7
Availability of information updates on tax requirements	37.6	44.4	42.3
Inspections audits	31.2	37.0	37.3
Frequency of payments	27.6	26.4	30.3
Frequency of reporting	29.2	30.4	30.0
Tax accounting	20.4	27.7	26.0
Tax forms, filing	18.4	30.3	25.3
Payment methods	19.2	20.7	23.0

Source: World Bank, Annual Regulatory and Administrative Cost Surveys, 2003, 2004.

problematic. The state tax service and the customs committee are two independent agencies, and the heads of both agencies are appointed by the president and report to the prime minister. The two agencies operate under separate tax “targets” and, in practice, compete against each other. This competition has tended to promote an aggressive style of short-term revenue maximization, largely comprising confrontational tax inspections and customs overvaluations. While in the past this strategy stabilized revenues, the authorities need to move toward a tax regime based upon taxpayer self-assessment, risk-based audits, and better information exchange. This could be better achieved if the two revenue agencies were brought under the control of the Ministry of Finance and Economy.[40]

Superficial and poorly managed audits are a big part of the tax administration problem. Responsibility for tax audits is diffused throughout the state tax service, and the auditing process lacks strategic management. Since audits tend to be resource-intensive, this lack of coherence weakens their overall effectiveness. Furthermore, the large taxpayers' unit has been underperforming. The work of this unit would benefit if its audit capacity were strengthened. Lastly, technical difficulties, especially outdated information technology, also inhibit the work of the tax service. These difficulties mean that the service has only a limited facility to select audit cases effectively.

The tax authorities responded to these difficulties by increasing the number of random tax inspections, which take place in the absence of any risk-profiling mechanisms. Consequently, tax inspections proved to be a burden on many enterprises. More recently, the tax authorities started to develop risk-assessment procedures. However, these innovations are still evolving, and it will take a strong political will to ensure they are fully implemented.

D. The Quasi-Fiscal Sectors

The 1992–94 crisis in the energy sector forced a chaotic but rapid closure of many state-owned enterprises. This was painful in terms of employment and living standards, but eliminated a potential source of fiscal vulnerability. However, a core of large enterprises survived the crisis, particularly within the energy, chemicals, and water sectors. Due to collection difficulties and corruption, these firms incurred sizable financial losses and arrears (Table 3.5).[41] At times, the authorities felt compelled to bail out these firms through implicit subsidies and credits at below-market rates. Since 2001, the government's reform efforts have been focused on privatization and on improving the financial position and corporate governance in these enterprises.

[40]At present, the Ministry of Finance and Economy is responsible for tax policy yet has only an indirect influence on policy implementation.

[41]For an estimation of quasi-fiscal deficits in Armenia, see Freinkman, Gyulumyan, and Kyurumyan (2003).

Table 3.5. Key Indicators of the Energy, Water, and Irrigation Sectors, 1998–2004

	1998	1999	2000	2001	2002	2003	2004
Loss rate (as percent of supply)							
Energy sector							
Technical losses	15.2	14.8	15.0	15.4	14.5	4.2	2.3
Excess losses	15.5	10.0	10.6	11.1	11.3	…	…
Yerevan Water and Sewer Company	…	59	72	72	72	76	80
Armenia Water and Sewer Company	…	37	51	51	54	63	74
Irrigation	…	31	30	30	38	36	23
Collection rate (percent of billings)							
Energy sector	77	89	89	81	90	101	106
Yerevan Water and Sewer Company	…	24	19	27	48	102	71
Armenia Water and Sewer Company	…	30	31	40	46	69	50
Irrigation	…	50	38	53	50	55	77

Source: Armenian authorities.

Energy sector

Historically, the energy sector was the greatest source of quasi-fiscal problems. The state-owned enterprise—Armenergo—was at the center of these difficulties. In its heyday, the company was responsible for distributing electricity and handling all cash transactions within the sector. Its finances were chaotic. Many of its leading customers, particularly state-owned enterprises and institutions, were unable or unwilling to pay their electricity bills. These nonpayment difficulties meant that Armenergo could not fully pay the generators for the electricity they produced. The lack of payment stability created additional interenterprise arrears and tax arrears. In this atmosphere of nonpayment and turbid financial practices, there were considerable opportunities for corruption, which further compounded the difficulties of the sector.

As part of the 1997 reform effort, the authorities tried to restore some financial discipline to the sector. A new energy law established the Energy Regulatory Commission and separated Armenergo into generation, transmission, and distribution companies. However, these efforts met with only limited success and serious financial difficulties remained. Barter trade remained a primary way of settling debts, and the government continued to bail out the sector with loans.

After 2001, the authorities tried again to tackle these problems. They adopted a four-stage reform package. During the first phase, the authorities introduced some simple measures to ensure the financial viability of the sector. Tariff rates were raised, collection discipline was improved, and direct access to budgetary resources was curtailed. The privatization of the electricity distribution company to foreign investors in the autumn of 2002 marked another important effort to tackle the problems. The privatization agreement stabilized intra-industry financial flows and created the basis for resolving many sectoral debt issues. The new owners of the distribution company were committed to paying 100 percent for all delivered electricity and to dealing with electricity theft. Payments discipline improved drastically as nonpaying customers became subject to immediate service cutoffs. The authorities also transferred the ownership of two of the five main electricity generation companies to Russia.

In 2003, the authorities created separate midstream companies for financial settlements, electricity dispatch, and high-voltage distribution, and set up independent boards of directors for the new companies. The authorities also developed a medium-term strategy for the sector, which envisaged a move away from the single wholesale buyer structure based around Armenergo and move toward direct contracting among market participants.

After some delay, Armenergo was finally removed from all cash transactions in October 2004. Armenergo will soon be liquidated. In the future, the distribution company will purchase electricity directly from the generation companies. All financial settlements are expected to go through transparent and easily monitored settlement accounts.

These reforms met with considerable success. Collection rates improved and the sector's deficit fell from 4.1 percent of GDP in 1998 to 0.6 percent in 2003. Over the same period, the primary deficit fell from 2.6 percent of GDP to zero (Table 3.6).

A remaining issue is how to handle the debts the sector has accumulated in recent years. In mid-2004, this debt amounted to US$35 million. The authorities approved a financial rehabilitation plan for the energy, water, and transport sectors in 2003. The plan envisages the cancellation of cross-debts as well as further privatization in these sectors, and repayment of much of the remaining debt through collection of receivables.

Water and irrigation

Reforms in the water sector have been broadly successful, with the primary deficit of the water sector reduced to 0.3 percent of GDP in 2004. In 2000, a foreign management company signed a performance management contract for the Yerevan Water and Sewage Company (YWSC). This reform led to almost 100 percent collection rates, thanks to a successful metering program in which about 87 percent of customers now have installed meters. However, YWSC's technical losses remain unacceptably high. A similar contract for the Armenian water company, which provides water to customers outside the capital, has been introduced in 2005.

Table 3.6. Financial Balances in the Energy, Water, and Irrigation Sectors, 1998–2004
(In percent of GDP, unless otherwise indicated)

	1998 Estimated	1999	2000	2001	2002	2003	2004
Overall Balance							
Energy	–4.1	–2.4	–2.1	–3.5	–1.7	–0.6	–0.4
Irrigation	…	–1.2	–1.1	–0.5	–0.4	–0.1	0.0
Yerevan Water and Sewer Company	…	–0.5	–0.6	–0.5	–0.4	–0.6	–0.3
Armenia Water and Sewer Company	…	–0.3	–0.2	–0.1	–0.1	–0.1	–0.1
Primary Balance							
Energy	–2.6	–0.8	–1.3	–2.5	–0.4	0.0	0.2
Irrigation	…	–0.7	–0.6	–0.5	–0.4	–0.1	0.0
Yerevan Water and Sewer Company	…	–0.5	–0.5	–0.5	–0.3	–0.4	–0.2
Armenia Water and Sewer Company	…	–0.3	–0.2	–0.1	–0.1	–0.1	–0.1
Sum of all overall balances	…	–4.3	–4.1	–4.6	–2.7	–1.4	–0.8
Sum of all primary deficits	…	–2.3	–2.6	–3.6	–1.2	–0.6	–0.1
Memorandum item:							
Nominal GDP (in billions of drams)	959	988	1,031	1,175	1,356	1,618	1,618

Source: Armenian authorities.

Progress has also been made with reforms in the irrigation sector. There is now greater transparency in terms of fiscal support as subsidies are explicitly included in the budget. In 2004, technical losses were almost 23 percent of water distributed, compared with 31 percent in 1999. Collection rates rose to 77 percent in 2004. Nonetheless, further reforms are needed to reduce corruption and ensure the long-term financial viability of the sector. Despite a recent increase in tariffs, they remain below cost–recovery levels.

E. Long-Term Fiscal Challenges

Like most transition and industrial countries, Armenia has an aging population. In fact, severe demographic pressures are already evident. During the 1990s, many younger and more productive workers went abroad in search of work. This has reduced the ratio of workers to pensioners and accelerated the fiscal pressures associated with the aging population. These pressures were resolved by cuts in pension levels. These cuts increased poverty levels among the old, although they stabilized the financial position of the system.[42]

Notwithstanding the currently limited fiscal pressure arising from pension entitlement, Armenia can expect further fiscal pressures due to demographic change. The timing of this change is slightly later than in industrialized countries. The low number of births during the 1941–45 war means that the number of retirees will temporarily stabilize over the next 10 to 15 years and will rapidly start to increase after 2020.

Nevertheless, the energy sector poses the largest threat to long-term fiscal sustainability. Within the next 12 years, Armenia will have to decommission the Metzamor nuclear power plant, which produces about one-third of Armenia's total electricity supply. While there is some uncertainty about the precise magnitude of the costs, most estimates range between $700 million and $1.2 billion.[43]

The closure of Metzamor will generate four types of costs. First is the cost of physically dismantling the plant. Given the obvious safety implications, this task will require enormous external technical assistance. Second are the processing costs associated with the nuclear waste. Armenia does not have any capacity to process nuclear waste, and therefore will have to rely on external contractors. Third, the processed material will generate considerable and ongoing storage costs. Fourth, Metzamor will need to be replaced, given the country's supply needs and the fact that the remaining generation capacity will also be approaching obsolescence.

In order to illustrate the magnitude of these costs, we present two long-term fiscal scenarios: a baseline scenario consistent with the PRSP macroeconomic framework and an alternative scenario that adds the costs of closing Metzamor (Table 3.7). The baseline scenario assumes that Armenia maintains its current prudent fiscal policy framework but that economic growth will gradually slow to rates that are more moderate. In line with PRSP targets, tax to GDP increases by 4 percentage points of GDP, allowing for the gradual reduction of the deficit. This projection also includes moderate increases in social and investment expenditures in line with PRSP targets. As per capita GDP increases, external lending and grants are expected to decline. In the medium term, domestic debt instruments take an increasing role in financing the remaining fiscal deficit, resulting in a modest increase in the debt-to-GDP ratio. Over the long term, the

[42]In 2001, PADCO (a U.S. consulting firm implementing Armenia's Social Transition Reform Program) provided a detailed financial and actuarial forecast of Armenia's pension system. The study concluded that the current system is sustainable and does not engender any major risks for the fiscal system over the medium term.

[43]These costs are expressed in 2002 prices. The estimates are provided by EU TACIS, a USAID-financed project, and by the Ministry of Energy.

Table 3.7. Long–Term Fiscal Projections, 2005–20
(In percent of GDP, unless otherwise stated)

	2005	2010	2015	2020
Baseline scenario				
Total revenues and grants	19.3	21.1	22.8	24.5
Of which: Tax revenues	17.8	19.8	21.8	23.8
Total expenditures	21.8	23.0	24.3	25.7
Overall deficit (commitment basis)	–2.5	–1.9	–1.6	–1.2
Government debt (in percent of GDP)[1]	31.0	29.1	29.8	30.5
External debt-to-GDP ratio	28.1	25.8	26.4	27.4
External debt service (in percent of exports)	7.1	6.6	7.5	7.6
Environmental cleanup scenario				
Total revenues and grants	19.3	21.1	22.8	24.5
Of which: Tax revenues	17.8	19.8	21.8	23.8
Total expenditures	21.8	23.0	24.3	27.8
Overall deficit (commitment basis)	–2.5	–1.9	–1.6	–3.3
Government debt (in percent of GDP)[1]	31.0	29.1	29.8	37.9
External debt-to-GDP ratio	28.1	25.8	26.4	34.7
External debt service (in percent of exports)	7.1	6.6	7.5	9.3
Memorandum Item:				
Real GDP growth (percent change)	8.0	5.0	4.0	4.0

Source: IMF staff estimates.

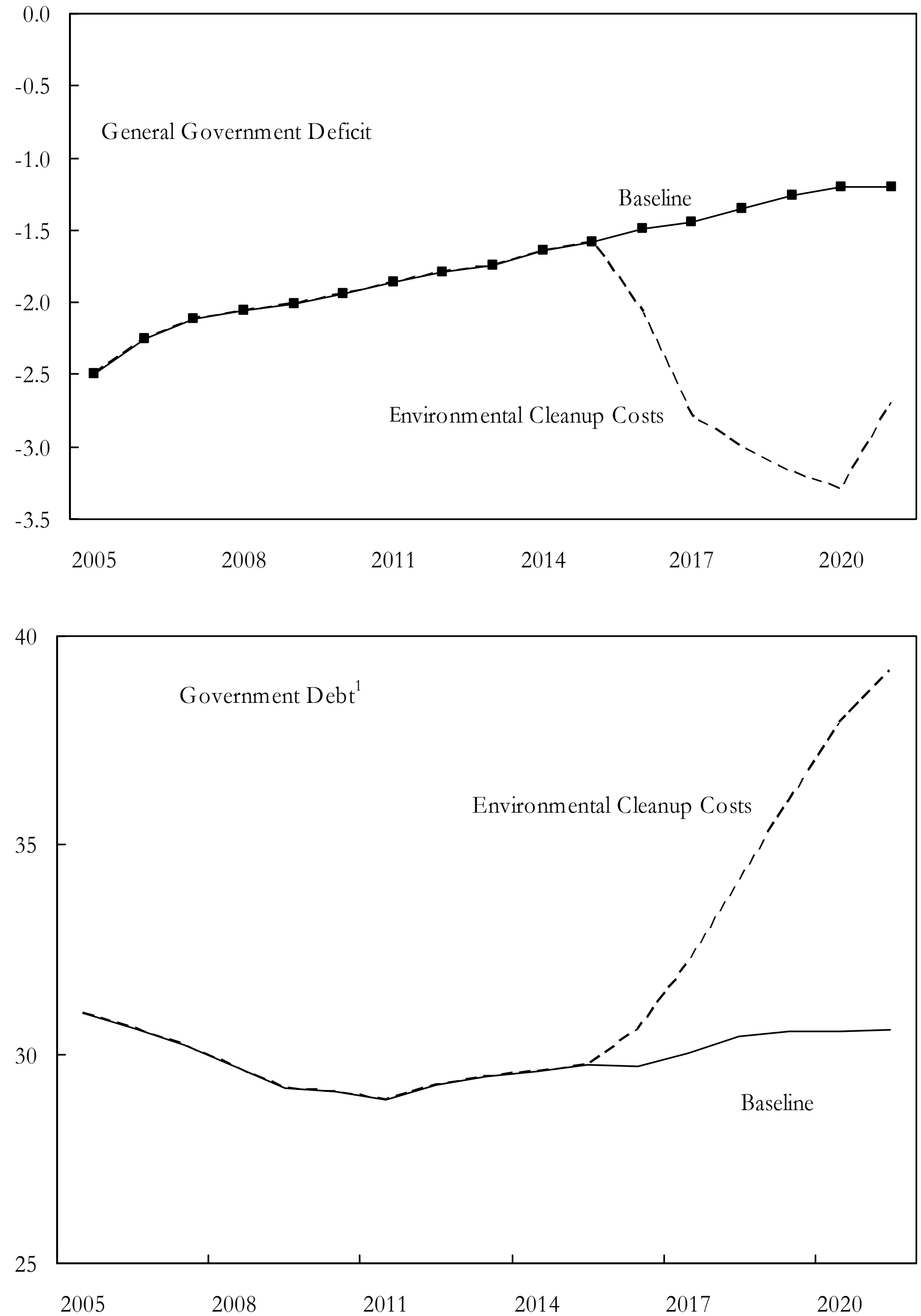
[1]Domestic and external debt.

debt-to-GDP ratio stabilizes at around 31 percent of GDP. External debt servicing is projected to remain broadly unchanged at around 7 percent of exports.

The environmental cleanup scenario assumes that the plant will close in 2016. It is generally accepted that the plant may be able to continue for another 10 years. The scenario takes a conservative estimate of $800 million in 2004 prices for the decommissioning and replacement costs. This cost is spread over five years, peaking in 2020. The macroeconomic and fiscal policy assumptions are identical to the baseline scenario and external borrowing finance the closure of the plant. This leads to a rapid worsening of the fiscal balance and deteriorating debt ratios. By 2021, Armenia's debt-to-GDP ratio is projected to be 9 percentage points higher than under the baseline scenario (Figure 3.4).

Figure 3.4. Fiscal Implications of Environmental Cleanup Costs, 2005–20

(In percent of GDP)



Source: IMF staff estimates.

[1]External and domestic debt.

The cleanup scenario assumes a benign macroeconomic environment. If there are other shocks, or if fiscal policy is not progressively tightened, the final burden could be much higher. The cleanup scenario highlights the need to take a proactive approach to address Metzamor's decommissioning costs. One option would be to save some of the current receipts from privatizations. A complementary option would be to create a decommissioning fund financed from higher electricity tariffs. Once the decommission starts, the fund would be used to partly finance the plant's closure. Lastly, donors can also be approached to fill in any remaining gap. Failure to plan in advance and save some of Armenia's wealth to pay for these costs could endanger fiscal and debt sustainability.

F. Fiscal Consolidation, Tax Reforms, and Growth

Over the past five years, Armenia has enjoyed an unparalleled period of economic growth and a strong fiscal consolidation. However, the tax base has not increased, and therefore the burden of adjustment has fallen on expenditures. This raises some difficult questions about the relationship between a low revenue base and the sustainability of growth.

The 2000–01 tax reforms were explicitly designed to enhance private sector growth, particularly through reductions in profit tax rates and the small enterprises simplified tax. The simplified tax has boosted the growth of small enterprises. In particular, the profit tax has been conducive to increased investment. The uniform profit tax rate of 20 percent is among the lowest in the region. The law also contains generous loss carry-forward and accelerated depreciation allowances. Notwithstanding these reforms, current tax legislation still permits generous tax holidays for foreign investments, which significantly weakens the tax base.

The tax regime also has been favorable for exporters. Certain exporters, particularly within the diamond sector, received preferential tax treatment. Armenia operates a highly open trade regime, with many goods entering duty-free. This is important, given the high import content of Armenian exports. However, many exporters suffered from delays in receiving VAT refunds in 2002–03.

Fiscal consolidation also prompted a fall in interest rates on government treasury bills. The fall was particularly marked after the government repaid all its outstanding domestic and external arrears. However, due to the slow development of the banking system, lending rates remained high and domestic credit expansion was muted until mid-2003. This process was reversed in mid-2003; lending rates started to fall and private sector lending has taken off.

Looking ahead, however, the implications of a weak tax base, evasion, and generous tax holidays are serious. A weak tax base will limit future increases in public investment and social expenditures. Over the long term, Armenia will face significant fiscal costs, which will put further pressure on public investment. In the end, growth could be jeopardized if the tax base is not strengthened.

G. Future Reform Priorities

Going forward, improving tax and customs administration is the single greatest challenge. Second, the authorities need to improve the quality of expenditures in line with PRSP priorities in social and infrastructure spending. Third, reforms in the quasi-fiscal sector—particularly the irrigation sector—need to be completed. Lastly, the authorities must confront the volatility of donor flows. Since the bulk of recent inflows have been directed toward capital expenditures, it would be prudent for the authorities to give the proper priority to public investment in the medium-term expenditure framework and ensure that higher amounts are financed from domestic sources.

Tax compliance reform needs to address two difficulties. First, the authorities need to select their subjects for inspection through effective risk profiling. Second, the legislative framework could be revisited to facilitate the ability of the authorities to counter corporate-sector evasion.

Better tax compliance will recalibrate the structure of taxation. At present, there is an excessive dependence on simplified and presumptive tax regimes. Over the long run, Armenia needs to incorporate more firms into the VAT and profit and income tax regimes. Given that tax evasion is greater in profit and income tax, better compliance would boost the relative importance of direct taxes and would reduce the necessity for presumptive and simplified taxes. Over time, the latter should be eliminated.

The authorities need to continue efforts to reform the quasi-fiscal sectors. In the energy sector, an ambitious reform agenda is reaching closure but a few outstanding issues remain. Armenergo needs to be liquidated and the sector's debts cleared. In addition, the water and irrigation sector reforms should be accelerated and tariffs should be raised to cost-recovery levels.

The authorities need to adjust the composition of expenditures. In the short run, further generous infusions of donor assistance and private grants may continue to finance some of the much-needed public investment. Still, the government should maintain a proper balance in expenditures by moving resources away from current expenditures and toward public investment. In the long run, Armenia must finance the closure of its nuclear power plant, while rising numbers of retirees, particularly after 2020, will put additional pressure on social expenditures. Robust economic growth during the next 15 years could actually provide much of the resources needed to meet these challenges.

H. Concluding Comments

Over the past decade, Armenia has won a difficult battle to achieve fiscal sustainability. Tax legislation was modernized and the overall fiscal deficit declined drastically. However, underlying structural weaknesses and political instability during the late 1990s led to reversals and new macroeconomic imbalances. The reform momentum resumed after 2000 and a virtuous cycle finally took hold after 2001. However, the effort was somewhat unbalanced, with the burden of adjustment falling on expenditures and limited progress on the revenue side.

Overall, fiscal adjustment supported economic growth. Low tax rates encouraged enterprise formation. Lower fiscal deficits reduced interest rates. Over time, however, the composition of fiscal expenditures has become biased toward current rather than capital expenditures. This needs to be corrected, especially in light of the prospective externalities to be generated.

The authorities need to implement the remaining reform agenda aimed at reinvigorating tax collection. In particular, they need to overhaul tax and customs administration through making wider use of risk-based methods for auditing, improving transparency, and treating all taxpayers equally. The tax base could be expanded by revamping the operations of the large taxpayers unit and tackling transactions in the informal sector, in particular within the large open-air retail markets. In addition, the recently approved codes of conduct for tax and customs operations should be fully implemented. The authorities have explicitly recognized this fact in their poverty reduction strategy. Over the medium term, the PRSP has set ambitious targets in social and infrastructure spending. This can only be financed with higher tax revenue collection.

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