

**Republic of Armenia: Fifth Review Under the Three-Year Arrangement Under the Poverty Reduction and Growth Facility and Request for Modification of Performance Criteria—Staff Report; Staff Supplement; Press Release on the Executive Board Discussion; and Statement by the Executive Director for the Republic of Armenia**

In the context of the fifth review under the three-year arrangement under the Poverty Reduction and Growth Facility and request for a modification of performance criteria, the following documents have been released and are included in this package:

- The staff report for the Fifth Review Under the Three-Year Arrangement Under the Poverty Reduction and Growth Facility and Request for Modification of Performance Criteria, prepared by a staff team of the IMF, following discussions that ended on September 19, 2007, with the officials of the Republic of Armenia on economic developments and policies. Based on information available at the time of these discussions, the staff report was completed on November 9, 2007. The views expressed in the staff report are those of the staff team and do not necessarily reflect the views of the Executive Board of the IMF.
- A staff supplement on the joint IMF/World Bank debt sustainability analysis.
- A Press Release summarizing the views of the Executive Board consideration of the staff report that completed the review and request.
- A statement by the Executive Director for the Republic of Armenia.

The documents listed below have been or will be separately released.

Letter of Intent sent to the IMF by the authorities of the Republic of Armenia\*

Memorandum of Economic and Financial Policies by the authorities of the Republic of Armenia\*

Technical Memorandum of Understanding\*

\*Also included in Staff Report

The policy of publication of staff reports and other documents allows for the deletion of market-sensitive information.

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INTERNATIONAL MONETARY FUND

REPUBLIC OF ARMENIA

**Fifth Review Under the Three-Year Arrangement Under the Poverty Reduction  
and Growth Facility and Request for Modification of Performance Criteria**

Prepared by Middle East and Central Asia Department  
(in consultation with other departments)

Approved by Lorenzo Pérez and Adnan Mazarei

November 9, 2007

**Executive Summary**

Armenia continues to post double-digit growth, declining poverty rates, moderate inflation, and a comfortable international reserves position, amid significant exchange rate flexibility. Program discussions focused on the scope for monetary and fiscal tightening, and on the need to accelerate structural reforms to improve competitiveness and sustain broad-based growth.

Fiscal policy has been prudent, but increasing expenditure pressures are creating medium-term fiscal risks. Tax collection still falls short of financing needs for infrastructure and poverty-reducing services, calling for further strengthening of tax administration.

Monetary policy will need to be tightened in light of rising inflationary risks. A firm commitment to a medium-term inflation target will be critical for anchoring price expectations and building credibility in the transition to full-fledged inflation targeting.

To limit real exchange rate appreciation, the authorities should rely more on fiscal policy and second-generation reforms, while maintaining exchange rate flexibility. Policies aimed at boosting domestic competition and productivity are needed to improve competitiveness.

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## I. INTRODUCTION

1. Following parliamentary elections, a new government took office in June 2007, with key portfolios remaining in the same hands. The government's economic program for 2008–2012 aims at sustaining growth, improving governance, and reducing poverty, while maintaining sound macroeconomic policies. Presidential elections (slated for February 2008) will dominate the political landscape in the coming months.
2. The PRGF-supported program remains on track, with declining poverty rates. The authorities have expressed interest in a successor arrangement after the current PRGF expires in May 2008.

Armenia: Main Poverty Indicators 1/

	1998/99	2004	2005	2006 Prel.
(In percent, unless otherwise specified)				
Poverty	56.1	34.6	29.8	26.5
Poverty line (in AMD)	17,663	19,373	20,289	21,555
Extreme Poverty	21.0	6.4	4.6	4.1
Urban areas				
Poverty	62.1	36.4	30.7	28.2
Extreme Poverty	26.2	7.5	5.3	5.0
Rural areas				
Poverty	48.2	31.7	28.3	23.4
Extreme Poverty	14.1	4.4	3.2	2.4

Source: National Statistical Service and World Bank.

1/ Poverty incidence is assessed as the percentage of population whose monthly per capita expenditures does not exceed the poverty line.

## II. BACKGROUND

3. Armenia continues to post double-digit growth and moderate inflation (Table 1 and Figure 1). Real GDP grew by 13.2 percent through September 2007, driven by the nontradables sector, while remittance inflows buoyed domestic demand. Following sharp increases in food import prices, 12-month inflation jumped from 2.6 percent in September to 5.7 percent in October (Figure 2).

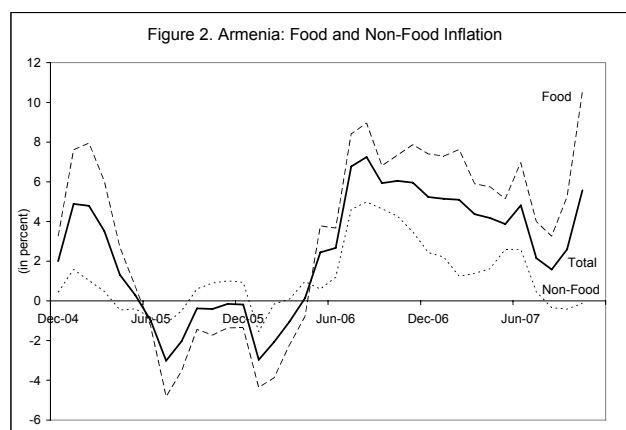
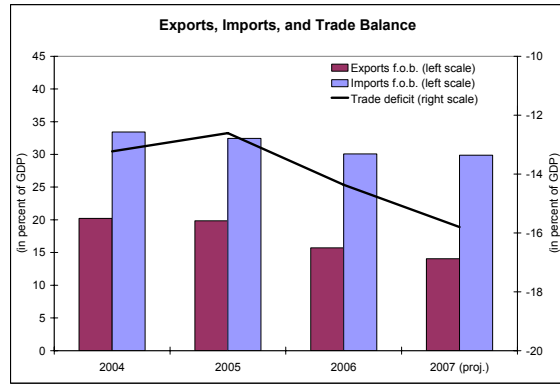
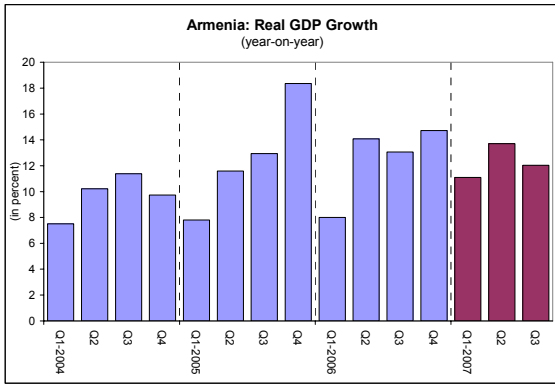


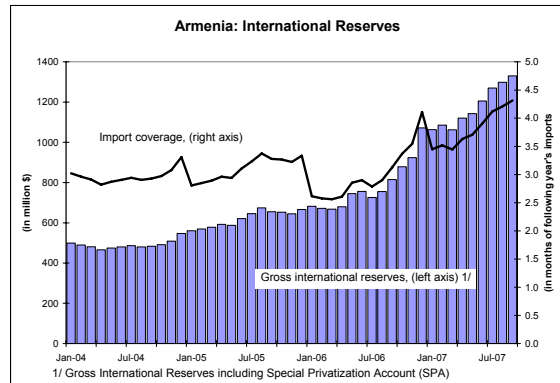
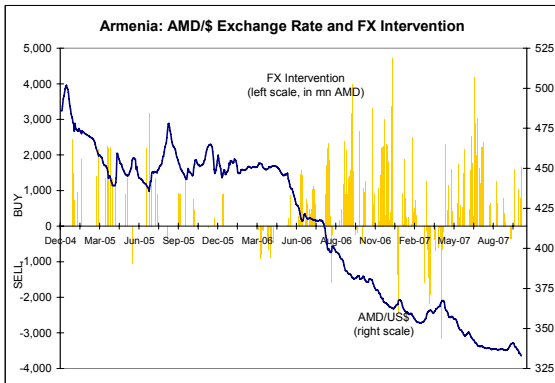
Figure 1. Armenia: Recent Economic Developments

*Real GDP has continued to grow briskly in 2007... .. but domestic demand is growing even faster, with surging imports leading to a widening trade deficit.*



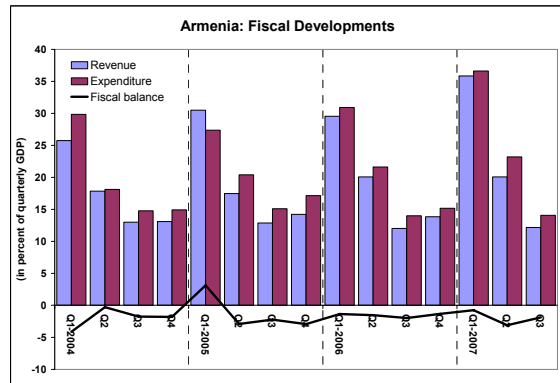
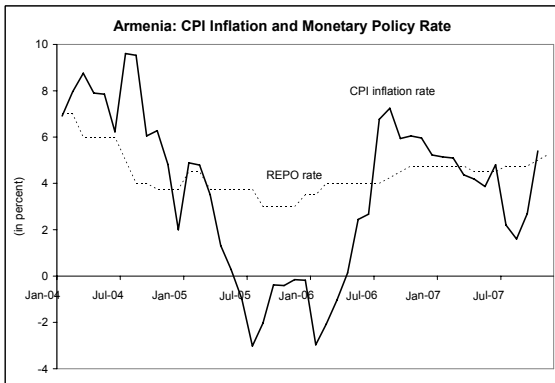
*Despite sizeable net purchases of foreign exchange...*

*... and related international reserves growth...*



*...inflation has remained moderate...*

*...supported by a prudent fiscal stance.*



Source: Armenian authorities; and Fund staff estimates.

4. Fiscal policy has been prudent (Table 2). Strong revenue performance and under-execution of capital expenditures resulted in a lower-than-programmed deficit during the first half of 2007, a trend that continued in the third quarter. While tax revenues are in line with the ambitious annual target, reflecting higher VAT and income tax collections, large amounts of unprocessed VAT refund claims have accumulated. The budget was amended four times in 2007, raising both revenues and expenditures by 1.2 percent of GDP, with the deficit target unchanged.

Armenia: Fiscal Indicators, 2007 1/		
	June 07 Prog.	June 07 Act.
	(In billions of AMD)	
Tax revenue	204.2	210.0
Total expenditures	275.4	262.7
Overall balance 2/	-32.8	-0.1
	(In percent of GDP)	
Tax revenue	6.8	6.8
Total expenditures	9.1	8.5
Overall balance 2/	-1.1	0.0
Memorandum item:		
GDP (annual, in billions of AMD)	3,021	3,076
Unprocessed VAT refunds (percent of GDP) 1/	...	0.12

1/ Cumulative flow from the beginning of the year until the end of June.

2/ Overall balance on a commitment basis. This excludes the gas subsidy, consistent with the program definition.

5. Monetary aggregates have been growing fast, fuelled by unsterilized foreign exchange intervention, dedollarization, and credit expansion (Table 3). Credit growth has accelerated to almost 65 percent (y-o-y), as Armenia's financial sector catches up with other transition countries (Box 1). Interbank money market activity has picked up markedly, largely due to efforts by the Central Bank of Armenia (CBA) to mop up surplus liquidity with CBA securities. The CBA raised the policy rate by 0.25 percentage points three times between July and November to counteract inflationary pressures stemming from higher food import prices.

Armenia: Monetary Indicators, 2007			
	June 07 Prog.	June 07 Act.	Sep. 07 Act.
	(In percent)		
12-month change in reserve money	41.6	44.3	44.1
12-month change in broad money	35.0	41.1	43.5
12-month change in credit to the economy	30.2	39.8	64.6
	(In millions of USD)		
Net international reserves 1/	910.6	990.5	1,096.2

1/ At program exchange rates, excluding the Special Privatization Account.

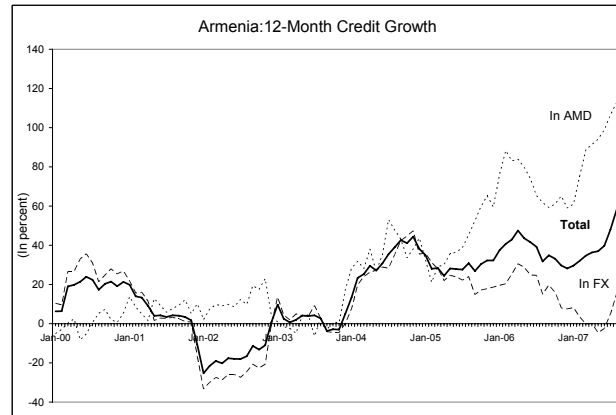
6. External developments reflect the persistence of remittances, capital inflows, and donor financing, leading to strong reserve accumulation (Table 4). Non-diamond exports rebounded from their lackluster performance in 2006, as investments in various sectors (notably base metals, mineral products, and food) started to pay off. But a domestic demand-driven surge in imports resulted in a burgeoning trade deficit in the first half of 2007. Robust private transfer inflows tempered the marked deterioration in the current account. The debt sustainability analysis (DSA) indicates that Armenia is at a low risk of debt distress, but is sensitive to a long-lasting terms of trade deterioration.



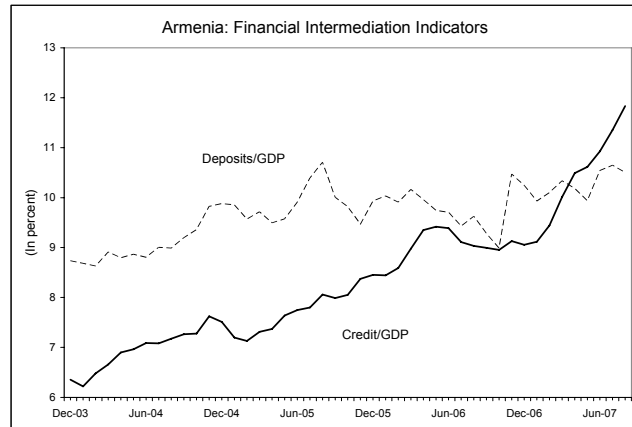
### Box 1. Accelerating Credit Growth—Is Financial Deepening Finally Taking Hold?

Credit growth has exceeded 30 percent during the past two years, but the current credit/GDP ratio (12 percent) remains low relative to other transition countries. Credit growth picked up further in 2007, notably regarding mortgage, construction, and consumer lending, mostly denominated in domestic currency.

Buoyant domestic demand, new bank entry, and further regulatory measures to encourage financial intermediation should foster much-needed financial deepening. Continued deposit growth and capital increases are expected to significantly expand banks' funding base, while less restrictive capital adequacy and liquid asset standards will free up resources for additional lending. Foreign bank entry (both through greenfield investments and acquisitions) will strengthen market competition and contribute to lower bank spreads.



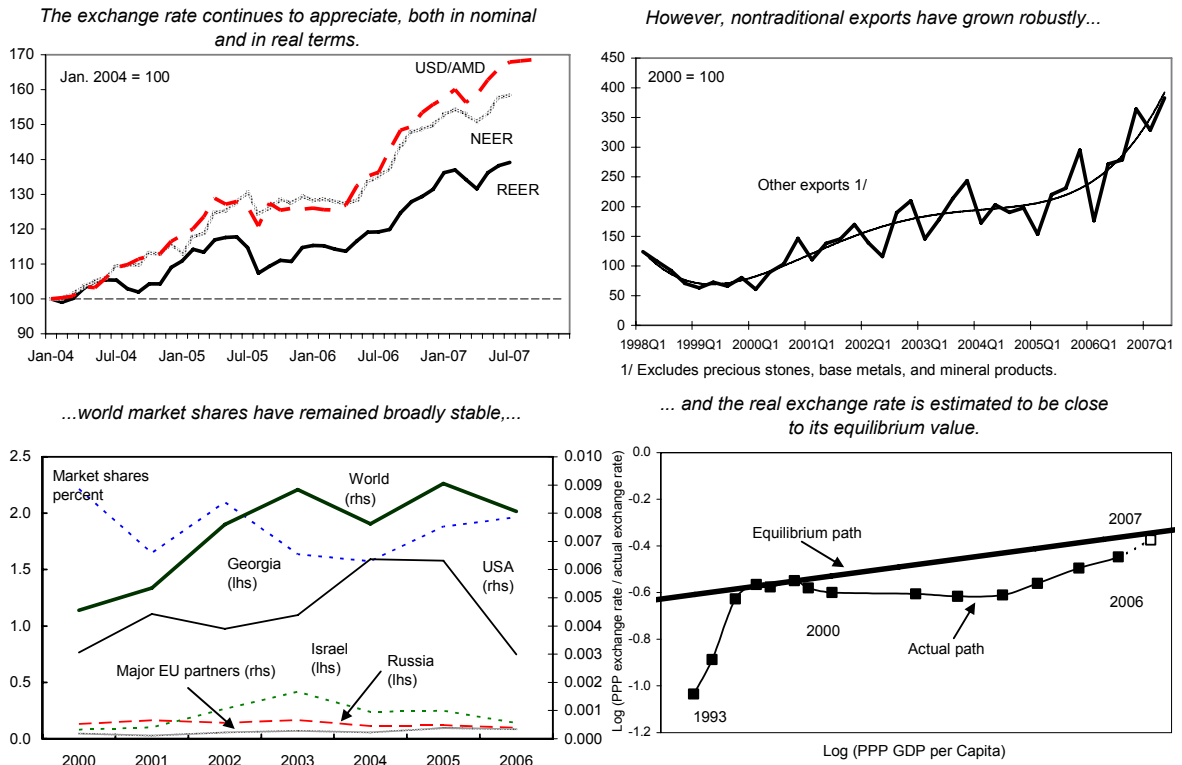
Armenia appears well prepared for the current surge in financial deepening. The financial sector is well regulated and supervised, and the banking system remains profitable, well capitalized and liquid (Table 5). While recent improvements in the financial infrastructure (such as the establishment of a private credit bureau) will help mitigate risks from accelerating credit growth,



CBA supervision should remain vigilant to avoid a deterioration in asset quality, especially since NPL ratios have increased somewhat during the past year. Moreover, banks' risk management capacity will need to be further strengthened.

7. The exchange rate has continued to appreciate, albeit at a slower pace than in 2006 owing to surging imports. The composition and destination of exports has been changing, but there is limited evidence of a deterioration in overall external competitiveness. Estimates of the long-run equilibrium exchange rate do not suggest that the dram is overvalued (Figure 3).

Figure 3. Armenia: Exchange Rate Developments and Export Performance



Source: WEO, IFS, Armenian authorities, and Fund staff estimates (see Country Report No. 06/433 for methodology of estimating the real exchange rate).

8. Most program targets have been met (Tables 6–8). All quantitative performance criteria were observed, but two structural benchmarks (for March and June) were not met (the new securities market law—a March benchmark—was submitted to parliament with delay). An update of the PRSP is expected by end-year.

9. During the past year, the authorities have made headway in tax and financial sector reforms (MEFP ¶8,9):

- The general part of the unified tax code was drafted, and legislation limiting access to the simplified tax regime and indexing all presumptive taxes to the CPI was passed.
- A medium-term modernization plan for the State Tax Service (STS), in line with FAD recommendations is under implementation.
- Legislation strengthening the operation of the securities market was adopted, and prudential regulations were streamlined.

### III. REPORT ON THE DISCUSSIONS

*Against the background of large-scale foreign exchange inflows and rising inflationary risks, discussions focused on the scope for monetary and fiscal tightening, and on the need to accelerate structural reforms to improve competitiveness and foster broad-based growth.*

#### A. Macroeconomic Outlook and Risks

10. The short-term outlook is bright, but inflationary risks are on the rise. Upside risks include further increases in imported food prices, unsterilized foreign exchange interventions, and spending pressures ahead of the presidential elections. Real GDP growth is projected to reach 11 percent in 2007, on the back of continued strong activity in construction and services. Given recent large hikes in food import prices, end-year inflation is now projected to reach 6 percent, thus exceeding the target band (4±1.5 percent). Growth in 2008 is projected at 10 percent, fuelled by buoyant domestic demand. Notwithstanding demand pressures and the higher end-user tariffs expected following the removal of the current gas subsidy, end-year inflation could be limited to 5 percent with appropriate monetary tightening.

11. The medium-term outlook remains positive, in view of favorable prospects for investment and external grants (Table 9). Against this backdrop, growth is expected to remain robust (around 6–8 percent), despite a potential hike in gas import prices in 2009. Inflation is expected to decline to around 4.5 percent in 2009 and to 4 percent in the medium term, as restrained monetary and fiscal policies help contain second-round effects of higher gas prices.

#### B. The Policy Mix

##### Fiscal policy

12. Understanding was reached on a tighter fiscal stance in 2007. In light of revenue overperformance and under-execution of capital projects to date, the overall deficit target will be limited to 1.8 percent of GDP, compared to 2.3 percent of GDP under the program. The authorities acknowledged that a lower deficit would help contain inflationary pressures, and could be achieved without constraining viable social and capital spending.

Armenia: 2008 Budget 1/			
	2007 Proj.	2008 Budg.	2008 Proj.
	(In billions of AMD)		
Tax revenue 2/	479	569	552
Total expenditure	596	722	703
Of which: capital	146	171	171
Overall balance	-56	-92	-92
	(In percent of GDP)		
Tax revenue 2/	15.6	16.2	15.7
Total expenditure	19.4	20.5	20.0
Of which: capital	4.7	4.9	4.9
Overall balance 3/	-1.8	-2.6	-2.6
Memorandum item:			
GDP (annual)	3,076	3,520	3,520

1/ The budget does not include the gas subsidy, consistent with the program definition. Expenditure projections have been adjusted accordingly.

2/ Tax revenue in 2007 includes tax arrears paid by Armentel in the amount of AMD 4.6 billion (0.2 percent of GDP).

3/ Including the SFSI, the fiscal deficit for 2008 is projected at 2.9 percent of GDP.

13. The main feature of the 2008 budget is a 60 percent increase in average pensions, which will permanently raise financing needs. In addition, the State Fund for Social Insurance (SFSI) will be consolidated with the state budget (MEFP, ¶12).

- Budgetary transfers for the pension increase will be up by 0.9 percent of GDP. Budgeted capital expenditure will benefit from scaled-up donor assistance, while being limited by capacity constraints (MEFP, ¶13).
- The authorities plan to remove the gas subsidy next spring, when privatization funds earmarked for this purpose are expected to run out. Appropriately, targeted protection for the poor is envisaged in the 2008 budget, but no general subsidy is contemplated when a new gas delivery contract comes into force (MEFP ¶10).
- The budget envisages an increase in tax revenues of about 0.8 percent of GDP relative to the expected 2007 outturn. Staff expressed concern about the realism of revenue projections, and cautioned against discretionary measures to boost tax collection. The authorities argued that the revenue target was feasible, given the considerable scope for improvement in tax administration and the strong political commitment to combat tax evasion and avoidance.<sup>1</sup>
- The deficit (2.6 percent of GDP) will be partly financed by an increase in treasury bills issuance (0.7 percent of GDP), contributing to domestic debt market development.<sup>2</sup>

14. The more expansionary fiscal stance in 2008 could reinforce real appreciation pressures. While the authorities remain committed to the deficit target, both revenues and expenditures have been revised upward, compared to understandings reached during the mission (MEFP, ¶12,13). However, given the authorities' strong track record, their commitment to cut expenditures in case of revenue shortfalls (MEFP, ¶13) provides some comfort that fiscal policy will remain supportive of macroeconomic stability.

15. Fiscal pressures are likely to emerge over the medium term. While fiscal deficits have hovered around 2 percent of GDP, the underlying primary balance has been deteriorating, in the context of a strongly expansionary phase. At the same time, the increase in average pensions envisaged in the government's program (to 1.5 times the poverty line by 2012) will permanently raise fiscal costs by about 2 percentage points of GDP (Figure 4). The impact on the public finances could be magnified by the introduction of a funded pillar, the expected

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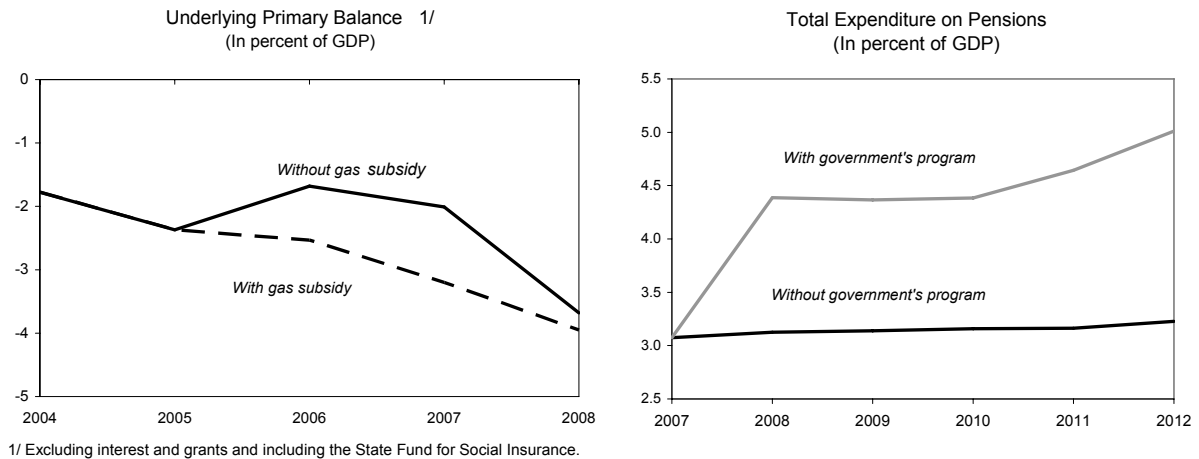
<sup>1</sup> To reduce incentives for artificially inflating revenues, the budget will provide some resources for the clearance of VAT refunds.

<sup>2</sup> Including the SFSI, the fiscal deficit is projected at 2.9 percent of GDP.

adjustment in gas import prices in 2009, and plans to build a new nuclear power plant.<sup>3</sup> Against this background, staff advised the authorities to avoid procyclical fiscal policies, and to create fiscal space through improved revenue mobilization and expenditure prioritization.

Figure 4. Armenia: Fiscal Stance

*Notwithstanding prudent fiscal policy, the underlying primary balance has deteriorated moderately and the planned pension increases will add to medium-term expenditure pressures.*



Source: Armenian authorities; and Fund staff estimates.

## Monetary and exchange rate policy

16. The CBA is committed to tightening monetary policy further if inflationary pressures persist (MEFP, ¶14). At the same time, it announced a revision of the 2008 inflation target from 3 to 4 percent ( $\pm 1.5$  percent), on the grounds that an overly tight stance would be needed to meet the original target. Staff advised against this move—especially since it would be the second year in a row that the inflation target is changed—stressing that a firm commitment to an inflation target over a multi-year horizon would be critical for anchoring expectations and building credibility in the move to full-fledged inflation targeting. Short-term deviations from the 2008 target reflecting supply-side shocks could be explained to the public, together with the envisaged corrective measures.

17. Appreciation pressures are likely to continue on the back of persistent foreign exchange inflows. The authorities remain committed to a flexible exchange rate regime, but noted the adverse impact of dram appreciation for remittance recipients and export competitiveness. Staff argued that external competitiveness would depend critically on

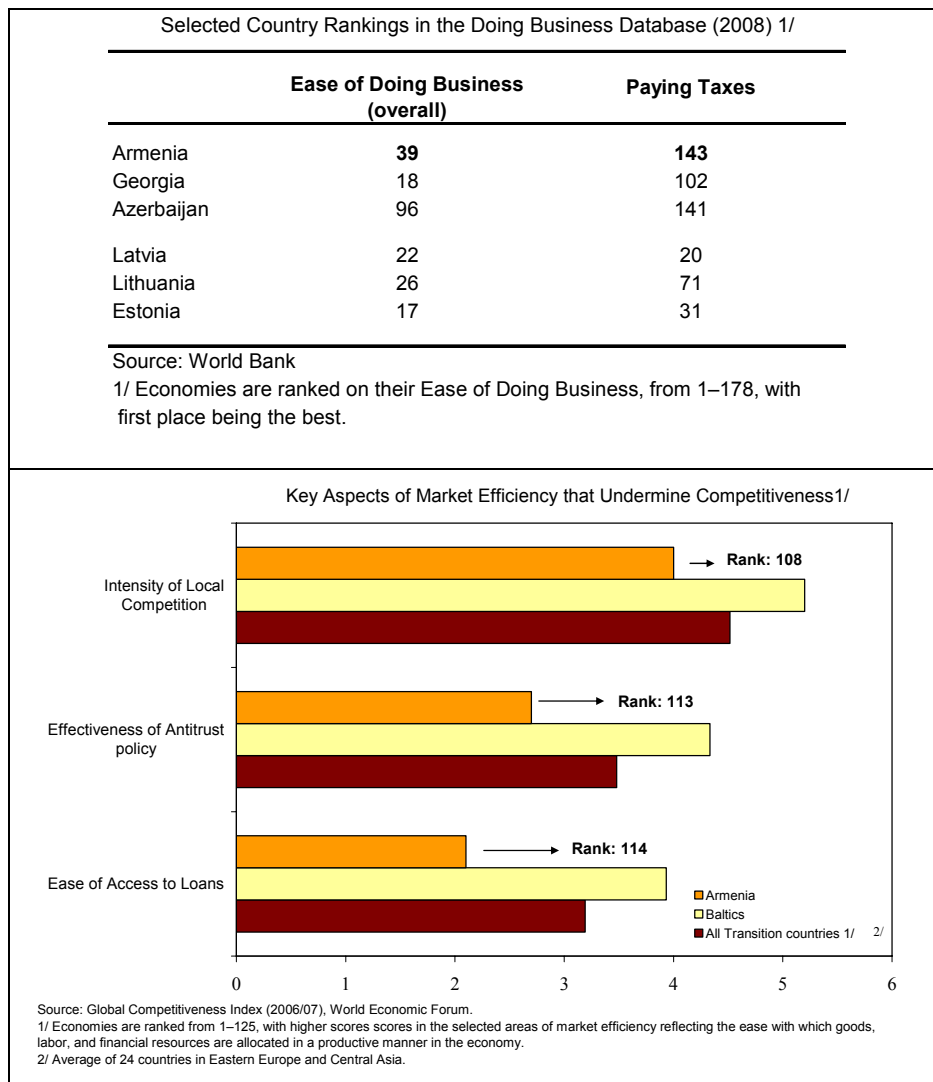
<sup>3</sup> The DSA shows that long-term sustainability prospects will be hampered by increases in pension liabilities.

accelerating second-generation reforms, such as strengthening domestic competition and the business environment, and keeping a tight fiscal stance. While the accumulated reserves seem broadly consistent with external vulnerabilities (Box 2), further large-scale unsterilized intervention would not be advisable, given its inflationary impact and the uncertainties related to the extent of dedollarization.

### C. Enhancing Growth Prospects and Strengthening Institutions

18. While the business environment has improved markedly, recent surveys highlight remaining challenges, particularly regarding tax administration, access to credit, and domestic competition (Figure 5).

Figure 5. Armenia: Structural Competitiveness



## Box 2. Reserves Adequacy and Optimal Level of Reserves

By standard adequacy measures, Armenia's reserves coverage appears to significantly exceed other transition countries. This reflects its relatively low levels of financial intermediation and short-term external liabilities.

Furthermore, these conventional measures do not take into account the nature, likelihood, and magnitude of potential pressures on reserves.

An alternative, model-based approach to assess the suitability of reserve coverage weighs the benefits in mitigating the impact of a crisis against the costs of holding reserves.<sup>1</sup> The optimal level of reserves is a function of short-term debt, output costs and probability of a crisis, opportunity cost of holding reserves, and relative risk aversion. As Armenia's access to international capital markets is limited, the external vulnerability analysis focuses on a slowdown or interruption of private transfer inflows.

The analysis shows that the current reserves level would be optimal, assuming probabilities of an interruption in foreign exchange inflows and associated output costs of about 10 percent and 16 percent of GDP, respectively. The analysis confirms that Armenia's reserves coverage is in line with its potential external vulnerabilities, with the reserves buildup serving as a precautionary measure to insure the economy against current or capital account crises.

Reserves Adequacy Measures, end-2006

	Armenia	CIS countries 1/	CEE countries 1/
(In percent, unless otherwise indicated)			
Current account-based			
Reserves-to-imports 2/	4.8	3.7	4.0
Reserves-to-GDP	16.7	21.1	19.5
Capital account-based			
Reserves-to-M2	113.8	87.6	36.5
Reserves-to-short term 3/	298.6	223.8	204.7

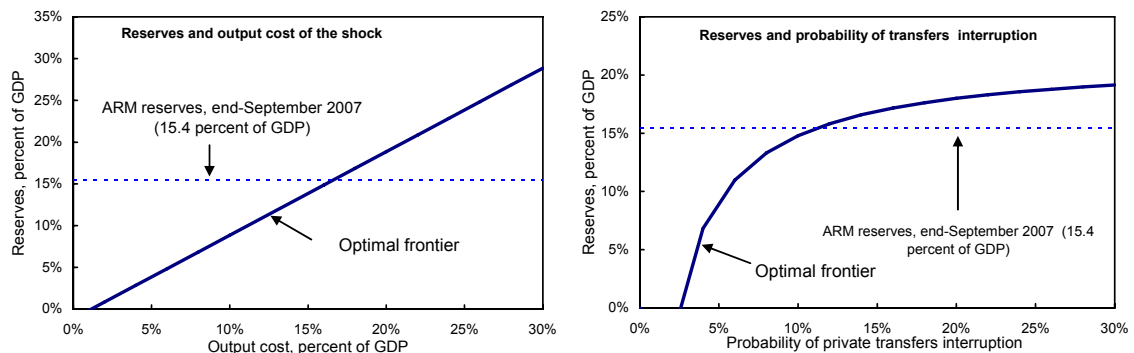
Source: Fund staff calculations.

1/ Medians for selected Commonwealth of Independent States (CIS) and Central and Eastern European (CEE) countries.

2/ In months of the current year imports.

3/ As of end-2005 for CIS and CEE countries.

Armenia: Optimal Level of Reserves



Source: Fund staff estimates.

<sup>1</sup> Jeanne, Oliver, 2007, "International Reserves in Emerging Market Countries: Too Much of a Good Thing?", draft.

### **Fiscal reforms**

- Tax reforms remain at the core of the program, focusing on eliminating tax loopholes, rationalizing the tax system, and improving tax administration (MEFP, ¶17–19).
- To improve expenditure management, the authorities are considering establishing separate accounts at the treasury for noncommercial organizations predominantly funded by the state, in line with FAD advice (MEFP, ¶21).

### **Financial sector reforms**

- Banking sector reforms will focus on promoting financial intermediation, enhancing the scope and quality of financial services, and improving market transparency (MEFP, ¶22). In line with the CBA's efforts to encourage the entry of reputable foreign banks, new banking licenses are expected to be granted.
- As part of a package of measures to promote capital market development, the authorities are considering tax incentives/amnesties for companies that list in the stock exchange (MEFP, ¶18, 23). Staff strongly advised against these measures, as their benefits are likely to be small and uncertain, while the costs—in terms of lost revenues and fiscal policy credibility—are likely to be significant.

### **Domestic competition**

- Policies aimed at boosting domestic competition would encourage innovation and enhance productivity, thereby strengthening competitiveness. Staff urged the authorities to address the monopolistic practices of importers of certain products (e.g. sugar and fuel), with a view to increasing the exchange rate pass-through to domestic prices.

## **IV. STAFF APPRAISAL**

19. Armenia's economic performance has been impressive, with double-digit growth, moderate inflation, declining poverty, and a comfortable international reserves position, amid significant exchange rate flexibility. Strong remittance inflows have dampened the impact of rapidly rising imports on the current account deficit. The medium-term outlook remains positive in view of favorable investment prospects, but inflationary risks are on the rise, stressing the need for continued sound macroeconomic policies.

20. Fiscal policy has been supportive of macroeconomic stability, but the more expansionary 2008 budget could reinforce real appreciation pressures and place an additional burden on monetary policy to safeguard price stability. The authorities' commitment to limit the fiscal deficit to 1.8 percent of GDP in 2007, thus creating fiscal space for the announced pension increases, is welcome. Their decision to allow the current gas subsidy to expire in



the spring and to include targeted assistance to the poor in the 2008 budget is also a positive step. However, current spending plans may be based on overly ambitious revenue targets. At the same time, staff welcomes the authorities' resolve to restrict expenditures in case of revenue shortfalls, in order to keep the central government's deficit at 2.6 percent of GDP.

21. Continued fiscal discipline will be important to maintain macroeconomic stability and external competitiveness in light of potential medium-term risks, including higher international commodity prices. Since the envisaged pension increase will permanently raise budgetary financing needs (especially if a funded pillar is introduced), the authorities should conduct cash flow and actuarial analyses of recent and envisaged changes in the pension system before moving ahead with pension reform. At the same time, increasing the tax/GDP ratio in a transparent and nondiscretionary manner will be crucial to expand essential poverty-reducing services and infrastructure. This is especially relevant as Armenia moves toward middle-income country status, relying less on grants and concessional borrowing. There is also a need to improve the budgetary process by avoiding frequent budget amendments, increasing expenditure efficiency, and setting realistic revenue and capital execution targets.

22. Controlling inflation is a challenge in an environment of unstable money demand, large-scale foreign exchange inflows, and a weak monetary transmission mechanism. This has been aggravated by the recent surge in food import prices, which is likely to push end-2007 inflation above the target band. Staff supports the CBA's commitment to tighten monetary policy as needed to manage inflationary expectations. In view of the upward trend in commodity prices, additional interest rate increases and more cautious foreign exchange intervention may be needed to dampen inflationary pressures, so as to achieve the 2008 inflation target. While the operational prerequisites for inflation targeting are largely in place, the authorities need to strengthen their institutional commitment to a firm medium-term inflation target and build policy credibility by refraining from frequent revisions of the target.

23. Credit growth has accelerated, and the expected entry of additional foreign banks will further contribute to financial deepening. To minimize latent risks related to rapid credit expansion, the CBA should closely monitor developments in credit quality, while continuing to hold banks to high prudential standards and encouraging them to improve their risk management.

24. A key policy challenge for Armenia is to maintain external competitiveness. Given the positive outlook for remittances, official transfers, and FDI, pressures on the real exchange rate are likely to persist. Resisting the associated nominal appreciation would necessarily imply higher inflation. Therefore, staff encourages the authorities to maintain exchange rate flexibility and to rely more on fiscal policy and structural reforms to limit real exchange rate appreciation.

25. Good progress has been made in advancing the structural reform agenda, but addressing remaining shortcomings in the business environment will be vital to enhance productivity and improve competitiveness. Specifically, additional action is needed to strengthen tax administration and encourage domestic competition. The top priorities are to modernize tax administration, by improving its organization and core operations while reducing discretion, and to ensure a level playing field in the import market to reduce monopolistic practices and increase the pass-through of exchange rate changes to domestic prices.

26. The authorities' plans to foster capital market development by providing tax incentives to companies seeking listings in the stock exchange would undermine efforts to strengthen tax policy and administration. These plans also contradict previous commitments to the Fund. International experience has shown that improving the business environment and removing entry barriers is crucial for enterprise development, but tax incentives and amnesties yield little results and severely dent policy credibility.

27. On the basis of Armenia's strong performance under the PRGF arrangement, staff supports the authorities' request for completing the fifth review. Staff also supports their request to modify the end-December 2007 structural performance criterion on the filing process, since the elimination of recording commissions does not require parliamentary approval (MEFP ¶19 and Table 2).

Table 1. Armenia: Selected Economic and Financial Indicators, 2003–08  
(Annual percentage change, unless otherwise indicated)

	2003	2004	2005	2006	2007		2008
					Prog.	Proj.	Proj.
<b>National income and prices</b>							
Real GDP growth	14.0	10.5	14.0	13.3	9.0	11.1	10.0
Gross domestic product (in billions of drams)	1,625	1,908	2,243	2,657	3,021	3,076	3,520
Gross domestic product (in millions of U.S. dollars)	2,807	3,578	4,909	6,387	7,625	8,618	10,444
Gross domestic product per capita (in U.S. dollars)	874	1,113	1,523	1,983	2,348	2,654	3,200
CPI (period average)	4.7	7.0	0.6	2.9	4.5	4.3	6.3
CPI (end of period)	8.6	2.0	-0.2	5.2	4.0	6.0	5.0
Unemployment rate (in percent)	10.1	9.6	8.1	7.2	...	...	...
Poverty rate (in percent)	42.9	34.6	29.8	26.5	...	...	...
<b>Investment and saving (in percent of GDP) 1/</b>							
Investment	24.3	24.9	29.7	28.9	30.3	29.7	30.3
National savings	17.5	20.4	25.8	27.6	25.3	25.8	26.1
<b>Money and credit (end of period)</b>							
Reserve money	6.6	11.3	51.9	41.1	25.2	31.7	21.7
Broad money	10.4	22.3	27.8	32.9	24.0	34.4	25.0
Commercial banks' 3-month lending rate (in percent)	22.5	17.5	18.3	17.1	...	...	...
<b>Central government operations (in percent of GDP)</b>							
Revenue and grants	17.8	15.4	15.7	15.8	16.7	17.5	17.4
<i>Of which</i> : tax revenue 2/	14.0	14.0	14.3	14.4	15.2	15.6	15.7
Expenditure and net lending 3/	18.9	17.1	18.3	17.7	19.0	19.4	20.0
Overall balance on a commitment basis	-1.1	-1.7	-2.6	-1.9	-2.3	-1.8	-2.6
Overall balance on a cash basis	-1.5	-1.6	-2.6	-1.2	-2.3	-1.8	-2.6
Government and government-guaranteed debt (in percent of GDP)	40.9	32.4	24.3	18.7	16.6	17.7	16.6
Share of foreign currency debt (in percent)	93.5	93.0	90.8	88.2	87.4	87.9	84.5
<b>External sector</b>							
Exports of goods and services (in millions of U.S. dollars)	903	985	1,337	1,389	1,548	1,650	1,878
Imports of goods and services (in millions of U.S. dollars)	-1,406	-1,514	-1,984	-2,400	-2,690	-3,129	-3,701
Exports of goods and services	29.5	9.0	35.7	4.0	10.0	18.8	13.8
Imports of goods and services	27.0	7.7	31.1	21.0	14.9	30.4	18.3
Current account (in percent of GDP) 1/	-6.8	-4.5	-3.9	-1.4	-5.0	-4.0	-4.2
FDI (net, in millions of U.S. dollars)	121	217	252	340	316	455	482
External debt-to-exports ratio (NPV, in percent)	60	59	60	70	51	61	59
Debt service ratio (in percent of exports of goods and services) 4/	15.6	9.7	5.7	10.0	3.3	8.1	7.3
Gross international reserves (in millions of U.S. dollars) 5/	502	547	667	1072	1246	1389	1610
Import cover 6/	4.0	3.3	3.3	4.1	5.0	4.5	4.6
Nominal effective exchange rate 7/	-4.6	11.5	13.6	14.3	...	...	...
Real effective exchange rate 7/	-2.6	6.5	7.4	13.6	...	...	...
End-of-period exchange rate (dram per dollar)	566	486	450	364	...	...	...
Average exchange rate (dram per dollar)	579	533	458	416	...	...	...
<b>Memorandum item:</b>							
Population (in millions)	3.212	3.214	3.223	3.221	...	...	...

Sources: Armenian authorities; and Fund staff estimates and projections.

1/ In July 2007, the 2006 external current account figures were revised following changes in methodology (see footnote 1 of table 4).

2/ Tax revenues in 2007 include 0.2 percent of GDP in tax arrears paid by Armentel, which were not part of the official target.

3/ Not including the gas subsidy.

4/ Private external debt included since 2006.

5/ Excluding the Special Privatization Account (SPA).

6/ Gross international reserves in months of next year's imports of goods and services.

7/ A positive sign denotes appreciation. Base year 1995=100. The calculations are based on 1999–2001 average trade weights.

Table 2. Armenia: Central Government Operations, 2006–08  
(In billions of drams)

	2006			2007				2008					
	Jan.-Dec.	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Jan.-Dec.			
	Act.	Act.	Act.	Prog.	Prel.	Prog.	Prog.	Prog.	Prog.	Prog.			
<b>Total revenue and grants</b>	<b>419.8</b>	<b>111.9</b>	<b>128.1</b>	<b>136.1</b>	<b>146.1</b>	<b>144.4</b>	<b>153.1</b>	<b>539.2</b>	<b>118.8</b>	<b>145.4</b>	<b>165.4</b>	<b>181.4</b>	<b>611.0</b>
Total revenue	407.7	108.1	123.6	131.6	137.6	137.5	143.1	505.4	113.3	138.9	153.5	167.2	572.9
Tax revenue	383.8	94.2	115.8	122.2	132.3	132.5	137.1	458.8	108.5	133.4	147.2	163.1	552.1
Value-added tax	165.9	44.6	52.3	...	...	...	...	...	...	...	...	...	...
Excises	39.9	8.5	9.3	...	...	...	...	...	...	...	...	...	...
Profits, simplified, and presumptive taxes	88.1	21.5	28.8	...	...	...	...	...	...	...	...	...	...
Personal income tax	35.5	8.4	10.8	...	...	...	...	...	...	...	...	...	...
Customs duties	18.3	6.7	5.2	...	...	...	...	...	...	...	...	...	...
Other taxes	36.2	6.7	9.5	...	...	...	...	...	...	...	...	...	...
Nontax revenue	7.9	9.6	2.2	2.5	1.8	3.4	-0.3	12.2	3.1	3.3	3.2	3.2	12.8
Capital revenue	15.9	4.3	5.6	6.9	3.6	1.6	6.4	19.5	19.8	1.7	2.2	3.1	8.0
Grants	12.1	3.8	8.4	4.5	8.4	6.9	10.0	15.1	15.5	26.8	6.5	12.0	38.0
Of which: Lincy and MCA	1.0	3.2	3.6	1.4	5.0	1.4	4.4	4.5	20.6	...	...	...	21.8
<b>Total expenditure</b>	<b>492.6</b>	<b>114.3</b>	<b>148.4</b>	<b>146.3</b>	<b>169.4</b>	<b>169.8</b>	<b>200.3</b>	<b>574.1</b>	<b>129.6</b>	<b>168.3</b>	<b>201.5</b>	<b>213.2</b>	<b>712.6</b>
Current expenditure	371.9	90.4	109.2	100.2	106.9	120.6	157.7	406.2	101.5	122.7	130.7	160.3	515.2
Wages	49.8	11.5	15.1	...	...	...	...	59.3	...	...	...	...	70.2
Subsidies	16.4	3.5	5.0	...	...	...	...	19.8	...	...	...	...	20.7
Interest	9.0	2.1	2.1	...	...	...	...	11.4	...	...	...	...	11.0
Transfers	124.3	34.7	35.9	...	...	...	...	97.9	...	...	...	...	160.7
Of which: pensions	19.5	4.5	4.4	...	...	...	...	...	...	...	...	...	52.6
gas subsidy 2/	22.7	12.1	5.3	...	6.0	...	13.2	...	9.6	0.0	0.0	0.0	9.6
Goods and services	172.4	38.6	51.1	...	...	...	...	217.8	...	...	...	...	252.6
Capital expenditure and net lending	120.7	23.9	39.2	46.1	62.5	49.3	42.6	167.9	28.1	45.6	70.8	52.8	197.4
Capital expenditure	104.2	19.1	33.4	...	...	...	...	146.5	...	...	...	...	170.8
<b>Overall balance with gas subsidy</b>	<b>-72.8</b>	<b>-2.4</b>	<b>-20.3</b>	<b>-10.2</b>	<b>-23.3</b>	<b>-25.4</b>	<b>-47.2</b>	<b>-68.4</b>	<b>-10.8</b>	<b>-23.0</b>	<b>-36.1</b>	<b>-31.8</b>	<b>-101.6</b>
<b>Overall balance without gas subsidy</b>	<b>-50.2</b>	<b>9.7</b>	<b>-15.0</b>	<b>-17.3</b>	<b>-17.3</b>	<b>-25.4</b>	<b>-34.0</b>	<b>-68.4</b>	<b>-1.3</b>	<b>-23.0</b>	<b>-36.1</b>	<b>-31.8</b>	<b>-92.1</b>
Total revenues of State Fund for Social Insurance (SFSI)	99.7	...	...	...	...	...	...	...	...	...	...	...	160.8
Of which: social contributions	80.2	...	...	...	...	...	...	...	...	...	...	...	105.0
Total expenditure of SFSI	91.1	...	...	...	...	...	...	...	...	...	...	...	171.1
<b>Balance of SFSI</b>	<b>8.6</b>	<b>...</b>	<b>...</b>	<b>...</b>	<b>...</b>	<b>...</b>	<b>...</b>	<b>...</b>	<b>...</b>	<b>...</b>	<b>...</b>	<b>...</b>	<b>-10.3</b>
<b>Overall balance without gas subsidy incl. SFSI</b>	<b>-41.6</b>	<b>...</b>	<b>...</b>	<b>...</b>	<b>...</b>	<b>...</b>	<b>...</b>	<b>...</b>	<b>...</b>	<b>...</b>	<b>...</b>	<b>...</b>	<b>-102.4</b>
<b>Overall balance without gas subsidy and SFSI 3/</b>	<b>-31.1</b>	<b>11.0</b>	<b>-11.1</b>	<b>-10.2</b>	<b>-14.4</b>	<b>-25.4</b>	<b>-42.0</b>	<b>-68.4</b>	<b>-1.3</b>	<b>-23.0</b>	<b>-36.1</b>	<b>-31.8</b>	<b>-92.1</b>
<b>Deficit/financing (excluding the SFSI)</b>	<b>26.0</b>	<b>-2.8</b>	<b>1.4</b>	<b>10.2</b>	<b>20.5</b>	<b>25.4</b>	<b>55.2</b>	<b>68.4</b>	<b>10.8</b>	<b>23.0</b>	<b>36.1</b>	<b>31.8</b>	<b>101.6</b>
Domestic financing	...	...	...	...	...	...	...	...	...	...	...	...	...
Bank financing	-9.3	-15.6	-10.4	3.6	7.5	3.2	21.0	2.3	2.5	1.8	25.7	12.0	34.6
Central Bank of Armenia (net)	-12.7	-14.0	-9.7	2.7	7.3	0.8	16.6	-4.7	14.4	-5.2	18.6	5.5	12.1
Commercial banks (net)	3.4	-1.5	-0.7	0.9	0.2	2.3	4.4	7.0	2.4	1.8	7.1	6.6	22.5
Nonbank financing (net)	4.7	0.7	-0.3	0.1	-0.3	0.3	-1.0	0.8	0.0	0.7	0.7	0.7	2.1
Privatization proceeds	30.7	12.1	12.1	0.0	6.0	0.0	13.2	0.0	9.6	0.0	0.0	0.0	9.6
Of which: gas subsidy 2/	22.7	12.1	5.3	0.0	6.0	0.0	13.2	0.0	9.6	0.0	0.0	0.0	9.6
<b>External financing 4/</b>	<b>27.8</b>	<b>3.9</b>	<b>14.9</b>	<b>6.5</b>	<b>7.2</b>	<b>22.0</b>	<b>22.0</b>	<b>46.2</b>	<b>6.2</b>	<b>20.4</b>	<b>9.6</b>	<b>19.0</b>	<b>55.3</b>
Gross inflow	34.9	6.0	16.0	8.1	8.8	23.2	23.2	52.3	8.3	20.9	11.5	19.5	60.1
Amortization due	-7.1	-2.1	-1.1	-1.6	-1.6	-1.2	-1.2	-6.1	-2.1	-0.4	-1.9	-0.4	-4.8

Table 2. Armenia: Central Government Operations, 2006–08 (concluded)  
(In percent of GDP unless otherwise indicated)

	2006			2007				2008							
	Jan.-Dec.	Q1	Q2	Q1	Q2	Q3	Prel.	Prog.	Q4	Prog.	Q1	Q2	Q3	Q4	Jan.-Dec.
	Act.	Act.	Act.	Act.	Act.	Prog.	Prog.	Prog.	Prog.	Prog.	Prog.	Prog.	Prog.	Prog.	Proj.
<b>Total revenue and grants</b>	<b>15.8</b>	<b>3.6</b>	<b>4.2</b>	<b>4.5</b>	<b>4.7</b>	<b>4.8</b>	<b>5.0</b>	<b>16.7</b>	<b>17.2</b>	<b>17.5</b>	<b>3.4</b>	<b>4.1</b>	<b>4.7</b>	<b>5.2</b>	<b>17.4</b>
Total revenue	15.3	3.5	4.0	4.4	4.5	4.6	4.7	16.2	16.7	16.7	3.2	3.9	4.4	4.8	16.3
Tax revenue	14.4	3.1	3.8	4.0	4.3	4.4	4.5	15.2	15.6	15.6	3.1	3.8	4.2	4.6	15.7
Value-added tax	6.2	1.4	1.7	...	...	...	...	...	...	...	...	...	...	...	...
Excises	1.5	0.3	0.3	...	...	...	...	...	...	...	...	...	...	...	...
Profits, simplified, and presumptive taxes	3.3	0.7	0.9	...	...	...	...	...	...	...	...	...	...	...	...
Personal income tax	1.3	0.3	0.3	...	...	...	...	...	...	...	...	...	...	...	...
Customs duties	0.7	0.1	0.2	...	...	...	...	...	...	...	...	...	...	...	...
Other taxes	1.4	0.2	0.3	...	...	...	...	...	...	...	...	...	...	...	...
Nontax revenue	0.3	0.3	0.1	0.1	0.1	0.1	0.0	0.4	0.4	0.4	0.1	0.1	0.1	0.1	0.4
Capital revenue	0.6	0.1	0.2	0.2	0.1	0.2	0.2	0.6	0.6	0.6	0.0	0.1	0.1	0.0	0.2
Grants	0.5	0.1	0.1	0.1	0.3	0.2	0.3	0.5	0.5	0.9	0.2	0.2	0.3	0.4	1.1
<b>Total expenditure</b>	<b>18.5</b>	<b>3.7</b>	<b>4.8</b>	<b>4.8</b>	<b>5.5</b>	<b>5.6</b>	<b>6.5</b>	<b>19.0</b>	<b>20.6</b>	<b>20.6</b>	<b>3.7</b>	<b>4.8</b>	<b>5.7</b>	<b>6.1</b>	<b>20.2</b>
Current expenditure	14.0	2.9	3.5	3.3	3.5	4.0	5.1	13.4	15.2	15.1	2.9	3.5	3.7	4.6	14.6
Wages	1.9	0.4	0.5	...	...	...	...	2.0	1.9	1.9	...	...	...	...	2.0
Subsidies	0.6	0.1	0.2	...	...	...	...	0.7	0.7	0.7	...	...	...	...	0.6
Interest	0.3	0.1	0.1	...	...	...	...	0.4	0.4	0.4	...	...	...	...	0.3
Transfers	4.7	1.1	1.2	...	...	...	...	3.2	5.1	5.0	...	...	...	...	4.6
<i>Of which: pensions</i>	0.7	0.1	0.1	...	...	...	...	...	0.6	0.6	...	...	...	...	1.5
<i>gas subsidy 2/</i>	0.9	0.4	0.2	...	0.2	...	0.4	...	1.2	1.2	...	...	...	...	0.3
Goods and services	6.5	1.3	1.7	...	...	...	...	7.2	7.1	7.1	...	...	...	...	7.2
Capital expenditure and net lending	4.5	0.8	1.3	1.5	2.0	1.6	1.4	5.6	5.4	5.5	0.8	1.3	2.0	1.5	5.6
Capital expenditure	3.9	0.6	1.1	...	...	...	...	4.8	4.6	4.7	...	...	...	...	4.9
<b>Overall balance with gas subsidy</b>	<b>-2.7</b>	<b>-0.1</b>	<b>-0.7</b>	<b>...</b>	<b>-0.8</b>	<b>...</b>	<b>-1.5</b>	<b>...</b>	<b>-3.4</b>	<b>-3.0</b>	<b>-0.3</b>	<b>-0.7</b>	<b>-1.0</b>	<b>-0.9</b>	<b>-2.9</b>
<b>Overall balance without gas subsidy</b>	<b>-1.9</b>	<b>0.3</b>	<b>-0.5</b>	<b>-0.3</b>	<b>-0.6</b>	<b>-0.8</b>	<b>-1.1</b>	<b>-2.3</b>	<b>-2.2</b>	<b>-1.8</b>	<b>0.0</b>	<b>-0.7</b>	<b>-1.0</b>	<b>-0.9</b>	<b>-2.6</b>
Total revenues of State Fund for Social Insurance (SFSI)	3.8	...	...	...	...	...	...	...	3.5	3.8	...	...	...	...	4.6
<i>Of which: social contributions</i>	3.0	...	...	...	...	...	...	...	2.8	3.1	...	...	...	...	3.0
Total expenditure of SFSI	3.4	...	...	...	...	...	...	...	3.5	3.4	...	...	...	...	4.9
<b>Balance of SFSI</b>	<b>0.3</b>	<b>...</b>	<b>...</b>	<b>...</b>	<b>...</b>	<b>...</b>	<b>...</b>	<b>...</b>	<b>0.0</b>	<b>0.3</b>	<b>...</b>	<b>...</b>	<b>...</b>	<b>...</b>	<b>-0.3</b>
<b>Overall balance without gas subsidy incl. SFSI 3/</b>	<b>-1.6</b>	<b>...</b>	<b>...</b>	<b>...</b>	<b>...</b>	<b>...</b>	<b>...</b>	<b>...</b>	<b>-2.2</b>	<b>-1.5</b>	<b>...</b>	<b>...</b>	<b>...</b>	<b>...</b>	<b>-2.9</b>
<b>Overall balance without gas subsidy and SFSI 3/</b>	<b>-1.2</b>	<b>0.4</b>	<b>-0.4</b>	<b>-0.3</b>	<b>-0.5</b>	<b>-0.8</b>	<b>-1.4</b>	<b>-2.3</b>	<b>-2.2</b>	<b>-1.8</b>	<b>0.0</b>	<b>-0.7</b>	<b>-1.0</b>	<b>-0.9</b>	<b>-2.6</b>
<b>Deficit/financing (excluding the SFSI)</b>	<b>2.0</b>	<b>0.0</b>	<b>0.5</b>	<b>0.3</b>	<b>0.7</b>	<b>0.8</b>	<b>1.8</b>	<b>2.3</b>	<b>3.4</b>	<b>3.0</b>	<b>0.3</b>	<b>0.7</b>	<b>1.0</b>	<b>0.9</b>	<b>2.9</b>
Domestic financing	1.0	-0.1	0.0	0.1	0.4	0.1	1.1	0.7	2.5	1.5	0.1	0.1	0.8	0.4	1.3
Bank financing	-0.4	-0.5	-0.3	0.1	0.2	0.1	0.7	0.1	0.7	0.1	-0.1	-0.1	0.7	0.3	1.0
Central Bank of Armenia (net)	-0.5	-0.5	-0.3	0.1	0.2	0.0	0.5	-0.2	0.5	0.0	-0.2	-0.1	0.5	0.2	0.3
Commercial banks (net)	0.1	-0.1	0.0	0.0	0.0	0.1	0.1	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.6
Nonbank financing (net)	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Privatization proceeds	1.2	0.4	0.4	0.0	0.2	0.0	0.4	0.0	1.6	1.4	0.3	0.0	0.0	0.0	0.3
<i>Of which: gas subsidy 2/</i>	0.9	0.4	0.2	0.0	0.2	0.0	0.4	0.0	1.2	1.2	0.3	0.0	0.0	0.0	0.3
External financing 4/	1.0	0.1	0.5	0.2	0.2	0.7	0.7	1.5	0.9	1.6	0.2	0.6	0.3	0.5	1.6
Gross inflow	1.3	0.2	0.5	0.3	0.3	0.8	0.8	1.7	1.1	1.8	0.2	0.6	0.3	0.6	1.7
Amortization due	-0.3	-0.1	0.0	-0.1	-0.1	0.0	0.0	-0.2	-0.2	-0.2	-0.1	0.0	-0.1	0.0	-0.1
Memorandum items															
Underlying primary balance (excl. grants, incl. gas subsidy and SFSI)	-2.5	...	...	...	...	...	...	-2.4	-3.6	-3.2	...	...	...	...	-3.9
Primary balance (excl. interest)	-2.4	0.0	-0.6	...	...	...	...	-1.9	-1.9	-2.7	...	...	...	...	-2.6
Government and government-guaranteed debt	18.7	...	...	...	...	...	...	16.6	17.7	17.7	...	...	...	...	...
<i>Of which: domestic debt</i>	2.2	...	...	...	...	...	...	2.1	2.1	2.1	...	...	...	...	...
Nominal GDP (annual, in billions of drams)	2,657	3,076	3,076	3,021	3,076	3,021	3,076	3,021	3,076	3,076	3,520	3,520	3,520	3,520	3,520

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

1/ Relative to the budget, the staff presentation reclassifies estimated military wages from 'Other goods and services' to 'Wages.'

2/ Projections based on consumption growth for small and large consumers of 20 and 10 percent respectively in 2007.

3/ Overall balance according to program definitions.

4/ As described in the government decree of 6th April, 2006, N449-N, part of privatization proceeds could include a grant element. Assumed to be disbursed evenly throughout the year.

Table 3. Armenia: Monetary Accounts, 2005–08  
(In billions of AMD, unless otherwise indicated)

	2005			2006			2007			2008		
	Act.	Dec.	Mar.	Act.	June	Mar.	Act.	June	Mar.	Act.	June	Dec.
<b>Central Bank of Armenia</b>												
Net foreign assets	249.9	321.8	317.8	332.5	349.1	383.3	423.4	406.5	434.7	458.9	489.7	
Net international reserves	220.3	329.9	326.1	341.9	357.3	393.3	433.8	410.5	433.3	458.1	489.5	
Special privatization account	38.5	0.0	0.0	0.0	0.0	0.0	0.0	7.3	13.4	13.4	13.4	
Medium and long-term	-8.9	-8.0	-8.2	-9.4	-8.2	-10.0	-10.4	-11.3	-11.9	-12.5	-13.1	
Net domestic assets	-49.4	-38.8	-53.0	-50.5	-61.8	-50.3	-50.7	-44.3	-50.4	-44.3	-36.4	
Claims on general government (net)	-17.4	-57.7	-66.6	-46.7	-93.8	-87.9	-68.8	-68.2	-67.4	-48.8	-43.3	
Of which: central government (net)	6.6	-16.2	-30.2	-5.2	-39.9	-32.6	-16.0	-15.4	-14.6	4.0	9.5	
Claims on banks	4.0	7.9	15.4	1.3	13.3	23.8	24.6	25.6	26.1	26.7	26.8	
KfW	11.7	11.9	15.4	13.3	13.3	23.8	24.6	25.6	26.1	26.7	27.3	
Monetary instruments (net) excluding CBA bills	-7.7	-4.0	0.0	-12.0	0.0	0.0	0.0	0.2	0.0	0.0	-0.5	
CBA bills	-21.2	-39.0	-52.1	-53.7	-45.3	-49.9	-50.3	-43.4	-44.4	-44.3	-50.3	
Other items (net)	-14.8	50.0	50.4	48.6	64.0	63.7	43.8	41.6	35.3	34.8	30.4	
SPA	-38.5	0.0	0.0	0.0	0.0	0.0	0.0	-7.3	-13.4	-13.4	-13.4	
Autonomous OIN	23.7	50.0	50.4	48.6	64.0	63.7	43.8	48.9	48.6	48.2	43.8	
Reserve money	200.6	283.0	264.8	282.0	287.3	333.0	372.6	362.2	384.3	427.4	453.4	
Currency issue	155.3	226.8	216.1	228.2	241.9	278.6	326.8	312.1	328.1	362.4	395.8	
Deposits	45.3	56.2	48.7	53.8	45.5	54.4	45.8	50.1	56.2	65.0	57.6	
<b>Banking system</b>												
Net foreign assets	275.0	332.5	322.9	333.8	353.4	355.8	415.5	406.5	434.7	458.9	489.7	
Net domestic assets	90.5	153.2	160.0	166.7	169.7	226.1	237.3	245.4	260.9	297.6	326.3	
Claims on government (net)	5.2	-31.8	-42.3	-36.3	-70.1	-61.5	-40.5	-45.5	-43.6	-17.9	-5.9	
Of which: claims on central government (net)	29.1	9.7	-5.8	5.2	-16.3	-8.8	12.2	7.3	9.1	34.8	46.9	
Claims on rest of the economy	188.3	241.5	271.6	285.3	306.3	371.2	360.5	393.2	432.8	508.2	491.4	
Other items (net)	-102.9	-56.4	-69.3	-82.3	-66.5	-83.7	-82.6	-102.3	-128.3	-192.7	-159.2	
Broad money	365.6	485.7	482.9	500.5	523.0	581.9	652.8	652.0	695.6	756.5	816.0	
Currency in circulation	144.3	211.5	201.7	215.2	227.0	260.3	306.8	290.1	306.1	340.4	373.8	
Deposits	221.2	274.3	281.3	285.3	296.0	321.6	346.0	361.8	389.6	416.1	442.3	
Domestic currency	80.5	130.9	145.4	151.7	158.4	186.3	208.9	234.7	260.9	287.5	319.9	
Foreign currency	140.8	143.4	135.8	133.6	137.6	135.3	137.1	127.1	128.7	128.6	122.4	
<b>Memorandum items</b>												
Exchange rate (in drams per U.S. dollar, end of period)	450.2	363.5	362.1	341.0	...	...	...	...	...	...	...	
Program e-rate	85.6	0.0	0.0	357.0	...	357.0	357.0	336.0	336.0	336.0	336.0	
Special privatization account (in millions of US\$)	439.9	837.4	821.9	...	...	...	...	...	...	...	...	
NIR (in millions of U.S. dollars) 2/	458.4	812.2	819.7	910.6	997.2	1096.2	1157.7	1166.8	1231.1	1303.8	1396.2	
NDA of the CBA (in billions of drams) 4/	-42.5	-115.4	-48.5	-50.5	-78.2	-74.5	-50.7	-37.0	-37.0	-18.2	-23.0	
12-month change in reserve money (in percent)	51.9	41.1	40.0	41.6	44.3	44.1	31.7	36.8	33.8	28.3	21.7	
12-month change in broad money (in percent)	27.8	32.9	34.7	35.0	41.1	43.5	34.4	35.0	33.0	30.0	25.0	
12-month change in private sector credit (in percent)	32.2	28.2	34.7	30.2	39.8	64.6	49.3	44.8	41.3	36.9	36.3	
Velocity of broad money (end of period)	6.1	5.5	5.6	5.6	5.3	5.1	4.7	4.8	4.6	4.5	4.3	
Money multiplier	1.8	1.7	1.8	1.8	1.8	1.7	1.8	1.8	1.8	1.8	1.8	
Dollarization in bank deposits 5/	63.6	52.3	48.3	46.8	46.5	42.1	39.6	35.1	33.0	30.9	27.7	
Dollarization in broad money 6/	38.5	29.5	28.1	26.7	26.3	23.3	21.0	19.5	18.5	17.0	15.0	
Currency in circulation in percent of deposits	65.2	77.1	71.7	75.4	76.7	80.9	88.7	80.2	78.6	81.8	84.5	
Stock of FCD (in millions of USD)	312.7	394.5	375.1	374.3	403.6	403.0	421.8	391.2	402.2	408.2	394.9	
Banking system financing of the central government (cumulative)	29.1	-19.4	-15.6	-4.5	-26.0	-18.5	2.5	-4.9	-3.1	22.6	34.6	

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

1/ At program exchange rate of 450 dram/US\$ for 2006 and program exchange rate of 357 dram per U.S. dollar for 2007.

2/ At actual exchange rates, excluding the SPA and foreign currency reserve money.

3/ At program exchange rates, excluding the SPA and foreign currency reserve money.

4/ Defined as reserve money minus NIR plus medium- and long-term liabilities.

5/ Ratio of foreign currency deposits to total deposits (in percent).

6/ Ratio of foreign currency deposits to broad money (in percent).

Table 4. Armenia: Balance of Payments, 2005–11  
(In millions of U.S. dollars, unless otherwise indicated)

	2005	2006 1/	2007	2008	2009	2010	2011
	Projections						
Current account	-193	-87	-341	-438	-548	-631	-670
Trade balance	-588	-903	-1,332	-1,623	-1,914	-2,087	-2,217
Exports, f.o.b.	1,005	1,019	1,242	1,429	1,600	1,744	1,884
Imports, f.o.b.	-1,593	-1,921	-2,574	-3,052	-3,515	-3,831	-4,101
Services (net)	-59	-108	-147	-201	-225	-271	-295
Credits	332	371	408	449	503	548	597
Debits	-391	-479	-555	-649	-727	-818	-892
Income (net)	45	228	278	320	345	369	392
Transfers (net)	409	695	860	1,066	1,246	1,358	1,451
Private	342	615	830	1,046	1,224	1,340	1,434
Official	67	80	30	20	22	17	17
Capital and financial account	330	516	642	660	751	759	746
Capital transfers (net)	51	88	120	100	95	70	51
Foreign direct investment (net)	252	340	455	482	511	537	563
Of which: Privatization/debt swap	57	75	0	0	0	0	0
Retained earnings/new investment	194	265	455	482	511	537	563
Portfolio investment (net)	-2	-1	0	0	0	0	0
Public sector (net)	36	68	110	146	172	168	136
Disbursements	50	83	127	160	191	191	162
Of which: World Bank program support	...	20	...	...	...	...	...
Amortization	-14	-16	-17	-14	-19	-23	-26
Other capital (net)	-6	21	-42	-68	-28	-16	-4
Errors and omissions	5	-3	0	0	0	0	0
Overall balance	142	426	301	222	203	128	76
Financing	-141	-426	-339	-245	-203	-128	-76
Gross international reserves (increase: -)	-120	-405	-317	-222	-182	-109	-57
Use of Fund credit, net	-24	-21	-23	-25	-22	-21	-21
Disbursements	10	10	...	...	...	...	...
Repurchases/repayments	-33	-31	-23	-25	-22	-21	-21
Exceptional financing 2/	1	1	1	1	2	2	2
Financing gap	...	...	38	23	0	0	0
IMF	...	...	10	5	0	0	0
World Bank	...	...	28	19	0	0	0
Memorandum items:							
Current account (in percent of GDP)	-3.9	-1.4	-4.0	-4.2	-4.7	-4.9	-4.8
Trade balance (f.o.b./f.o.b., in percent of GDP)	-12.0	-14.1	-15.5	-15.5	-16.5	-16.2	-15.9
Gross international reserves (end of period)	667	1072	1389	1610	1793	1902	1959
In months of next year's imports	3.3	4.1	4.5	4.6	4.6	4.6	4.4
Merchandise export growth, percent change	36.1	1.4	22.0	15.0	12.0	9.0	8.0
Merchandise import growth, percent change	33.1	20.6	34.0	18.5	15.2	9.0	7.0
Nominal external debt 3/	1,099	1,206	1,343	1,469	1,589	1,720	1,836
Nominal external debt stock (in percent of GDP) 3/	22	19	16	14	14	13	13
NPV of external debt in percent of exports 4/	60	70	61	59	60	62	64
External debt service in percent of exports 3/	5.7	10.0	8.1	7.3	6.8	6.8	7.2

Sources: Armenian authorities; and Fund staff estimates and projections.

1/ Starting from 2006, BOP were figures revised to reflect nonbank private transfers in the current account.

In 2005 and previous years, nonbank private transfers are reported in the financial account.

2/ Debt relief from the United Kingdom through 2015 (in respect of IDA credits).

3/ Starting from 2006, based on government, government-guaranteed, and private sector medium- and long-term debt.

4/ Based on low-income country debt sustainability analysis.

Table 5. Armenia: Financial Soundness Indicators for the Banking Sector, 2003–07  
(In percent, unless otherwise indicated)

	2003			2004			2005			2006			2007		
	Dec.	Jan.	Feb.	Dec.	Jan.	Feb.	Dec.	Jan.	Feb.	Dec.	Jan.	Feb.	Dec.	Jan.	Feb.
<b>Capital adequacy</b>															
Total regulatory capital to risk-weighted assets	33.8	32.3	33.7	33.8	33.7	35.3	34.9	35.3	34.9	35.3	32.7	31.4	35.3	32.7	31.4
Tier I regulatory capital to risk-weighted assets	32.2	30.2	31.7	31.6	30.0	31.4	32.7	33.4	31.4	32.7	33.4	31.4	33.4	31.4	30.2
Capital (net worth) to assets	18.1	17.8	21.5	21.3	22.0	24.3	22.9	23.2	23.9	22.3					
<b>Asset composition</b>															
Sectoral distribution of loans (billions of drams)															
Industry (excluding energy sector)	19.0	29.0	30.4	33.5	34.6	34.0	34.3	39.4	43.0	47.8					
Energy sector	10.7	6.6	8.7	6.3	8.3	7.2	5.0	5.4	6.4	10.1					
Agriculture	8.2	8.6	11.3	12.1	13.3	11.6	14.2	16.4	18.1	19.0					
Construction	4.8	5.3	7.9	8.5	8.2	9.8	11.5	13.1	14.8	17.4					
Transport and communication	0.7	1.2	3.7	4.1	4.9	3.7	3.9	4.2	4.5	4.4					
Trade/commerce	21.5	31.1	42.2	44.0	47.1	49.7	49.6	55.4	60.3	75.5					
Sectoral distribution of loans to total loans (percent of total)															
Industry (excluding energy sector)	20.1	22.2	17.0	17.5	16.6	16.1	16.2	15.4	14.8	13.5					
Energy sector	11.4	5.0	4.8	3.3	4.0	3.4	2.3	2.1	2.2	2.9					
Agriculture	8.6	6.6	6.3	6.3	6.4	5.5	6.7	6.4	6.2	5.4					
Construction	5.1	4.0	4.4	4.5	3.9	4.6	5.5	5.1	5.1	4.9					
Transport and communication	0.7	0.9	2.0	2.1	2.4	1.8	1.9	1.6	1.5	1.2					
Trade/commerce	22.7	23.8	23.5	23.0	22.7	23.5	23.4	21.7	20.7	21.4					
Foreign exchange loans to total loans	72.7	70.4	63.7	64.6	59.8	57.5	52.8	46.3	42.5	42.3					
<b>Asset quality</b>															
Nonperforming loans (billions of drams)															
Watch (up to 90 days past due)	6.7	3.1	3.8	6.5	6.6	9.1	6.0	7.3	8.6	10.6					
Substandard (91–180 days past due)	4.9	1.5	2.9	4.9	4.6	5.6	3.6	5.4	5.5	7.0					
Doubtful (181–270 days past due)	0.9	0.4	0.5	1.2	1.4	2.5	1.0	1.1	2.1	2.2					
Loss (>270 days past due)	0.9	1.1	0.5	0.5	0.6	1.0	1.4	0.9	0.9	1.4					
Nonperforming loans to gross loans	11.6	2.1	1.9	3.1	3.0	4.0	2.5	2.8	2.8	2.9					
Provisions to nonperforming loans	5.4	2.1	1.9	3.1	3.0	4.0	2.5	2.8	2.8	2.9					
Spread between highest and lowest rates of interbank borrowing in AMD	34.3	77.0	70.7	48.7	51.5	43.7	64.3	54.7	54.4	53.8					
Spread between highest and lowest rates of interbank borrowing in foreign currency	2.6	2.0	3.7	1.5	2.0	0.5	3.0	1.4	1.3	1.3					
Earnings and profitability	3.7	1.0	1.0	0.0	1.3	0.5	2.3	0.0	N/A	0.0					
ROA (profits to period average assets)															
ROE (profits to period average equity)	2.7	3.2	3.1	3.6	3.6	3.8	3.6	3.5	3.6	3.8					
Interest margin to gross income	14.4	18.4	15.5	16.6	16.6	17.2	15.9	15.2	15.6	16.7					
Interest income to gross income	42.0	44.2	41.1	48.8	49.6	46.9	47.1	48.6	49.1	48.6					
Noninterest expenses to gross income	62.7	63.7	59.8	70.0	70.2	66.3	66.3	69.9	69.6	69.0					
Liquidity	48.5	46.5	49.7	45.3	45.9	43.3	45.1	45.5	44.3	43.2					
Liquid assets to total assets															
Liquid assets to total short-term liabilities	47.5	47.1	44.2	44.7	40.8	42.3	41.2	41.0	36.7	34.7					
Customer deposits to total (non-interbank) loans	101.3	98.7	110.5	110.3	105.9	104.5	106.1	109.9	98.6	93.7					
Foreign exchange liabilities to total liabilities	177.1	177.3	140.5	142.5	121.2	121.1	130.8	119.3	118.3	105.9					
Sensitivity to market risk	73.2	73.3	66.8	68.2	64.5	59.3	56.0	52.4	51.0	48.7					
Gross open positions in foreign exchange to capital	13.8	7.4	4.9	4.3	3.9	11.9	4.4	4.3	4.8	5.5					

Source: Central Bank of Armenia.



Table 6. Armenia: Quantitative Targets, September 2006 – June 2007 1/  
(End of period ceilings on stocks, unless otherwise indicated)

	2006			2007				
	Sep.	Dec.		Mar.	Jun.			
	Prog.	Actual 2/	Prog.	Actual 3/	Prog. 2/	Actual 2/	Prog. 3/	Actual 3/
Net domestic assets of the CBA 4/	-32.0	-49.4	-19.8	-115.4	-52.2	-48.5	-50.5	-78.2
Net banking system credit to the government	7.1	-3.8	-3.9	-31.8	-30.6	-42.3	-36.3	-70.1
Domestic arrears of the central government	0	0	0	0	0	0	0	0
Tax revenues of the central government (floor) 2/ 5/	259.1	268.8	378.1	383.8	93.4	94.2	204.2	210.0
Balance of the central government on a cash basis (floor) 5/	-48.5	-31.8	-60.2	-50.4	-14.0	11.0	-32.8	-0.1
Reserve money (band/level) 2/	(216-225)	231.1	(246-256)	283.0	(265-276)	264.8	(276-288)	287.3
Contributions to the State Fund for Social Insurance 2/ 5/	52.4	52.6	74.0	73.3	17.1	18.7	37.7	39.7
Contracting or guaranteeing of new nonconcessional external debt 5/ 6/	0	0	0	0	0	0	0	0
External arrears (continuous criterion)	0	0	0	0	0	0	0	0
Net official international reserves (floor)	543.9	528.0	577.2	812.2	877.6	819.7	910.6	990.5

1/ All items as defined in the Technical Memorandum of Understanding.

2/ Indicative target.

3/ Performance criterion.

4/ At program exchange rates (500 dram per U.S. dollar in 2005, 450 dram per U.S. dollar in 2006, and 357 dram per U.S. dollar in 2007).

5/ Cumulative flow from the beginning of the calendar year until the end of the month indicated.

6/ Includes debt with maturity of more than a year as well as obligations with maturity of one year or less, excluding normal import-related credit and sales of treasury bills to nonresidents.

Table 7. Armenia: Status of Measures Under the Fifth Review of the PRGF

Item	Measure	Proposed Time Frame (End of Period)	Type of Conditionality	Status
<u>General</u>				
1	Government to approve a medium-term modernization program for the State Tax Service (STS) in line with IMF recommendations.	May 2007	Structural Benchmark	Observed
<u>Tax policy</u>				
2	Submit to parliament legislation to change the calculation of the income tax bases from cash to accrual so as to unify the calculation period of income tax and social contributions.	March 2007	Structural Performance Criterion	Observed
3	Finalize the general part of the unified tax code:			
	(i) Complete the general part of the unified tax code in consultation with stakeholders.	June 2007	Structural Benchmark	Observed
4	Submit to parliament amendments to all presumptive tax laws to index the rates to the CPI.	June 2007	Structural Benchmark	Observed
<u>Tax administration</u>				
5	Submit legislation to parliament to require the recording of taxpayers at the location of their main economic activity.	March 2007	Structural Performance Criterion	Observed
6	Strengthen the IT capacity of the State Tax Service (STS):			
	(i) Introduce a unified computer network linking all inspectorates of the STS.	June 2007	Structural Benchmark	Not observed
	(ii) Start the pilot testing of automated risk-based audit selection system.	June 2007	Structural Benchmark	Observed
<u>Financial sector</u>				
7	Submit to parliament a new Securities Market Regulation Law that corresponds to the standards of the International Organization of Securities Commissions.	March 2007	Structural Benchmark	Not observed

Table 8. Armenia: Indicators of Fund Credit, 2003–11  
(In units indicated)

	2003	2004	2005	2006	2007	2008	2009	2010	2011
	Projections								
Existing and prospective Fund outstanding credit 1/									
In millions of SDRs	144.4	140.1	123.4	108.8	99.9	86.2	71.0	56.9	42.4
In percent of exports 2/	28.3	20.5	16.0	10.5	10.1	7.7	5.6	4.0	2.7
In percent of external debt	22.7	21.5	17.4	13.7	12.7	10.8	9.5	6.9	4.6
In percent of gross reserves	39.3	33.8	23.6	13.1	10.1	7.9	5.9	4.4	3.2
In percent of quota	157.0	152.3	134.2	118.3	108.6	93.7	77.2	61.8	46.1
Existing Fund outstanding credit 1/									
In millions of SDRs	144.4	140.1	123.4	108.8	90.1	73.0	57.8	43.7	29.3
In percent of exports 2/	28.3	20.5	16.0	10.5	9.1	6.6	4.6	3.1	1.9
In percent of external debt	22.7	21.5	17.4	13.7	11.5	9.1	7.8	5.3	3.2
In percent of gross reserves	39.3	33.8	23.6	13.1	9.1	6.7	4.8	3.4	2.2
In percent of quota	157.0	152.3	134.2	118.3	97.9	79.4	62.9	47.5	31.8
Prospective Fund outstanding credit 1/									
In millions of SDRs	...	...	...	...	9.9	13.2	13.2	13.2	13.2
In percent of exports 2/	...	...	...	...	1.0	1.2	1.0	0.9	0.8
In percent of external debt	...	...	...	...	1.3	1.7	1.8	1.6	1.4
In percent of gross reserves	...	...	...	...	1.0	1.2	1.1	1.0	1.0
In percent of quota	...	...	...	...	10.7	14.3	14.3	14.3	14.3
Repurchases, repayments, and charges due from existing and prospective drawings									
In millions of SDRs	...	...	...	...	16.0	17.5	15.6	14.5	14.7
In percent of exports 2/	...	...	...	...	1.6	1.6	1.2	1.0	0.9
In percent of external debt	...	...	...	...	2.0	2.2	2.1	1.8	1.6
In percent of gross reserves	...	...	...	...	1.6	1.6	1.3	1.1	1.1
In percent of quota	...	...	...	...	17.3	19.1	16.9	15.7	16.0
Repurchases and charges due from existing drawings									
In millions of SDRs	...	...	...	...	16.0	17.5	15.6	14.4	14.7
In percent of exports 2/	...	...	...	...	1.6	1.6	1.2	1.0	0.9
In percent of external debt	...	...	...	...	2.0	2.2	2.1	1.8	1.6
In percent of gross reserves	...	...	...	...	1.6	1.6	1.3	1.1	1.1
In percent of quota	...	...	...	...	17.3	19.0	16.9	15.7	15.9
Repurchases and charges due from prospective drawings									
In millions of SDRs	...	...	...	...	0.0	0.0	0.0	0.0	0.0
In percent of exports 2/	...	...	...	...	0.0	0.0	0.0	0.0	0.0
In percent of external debt	...	...	...	...	0.0	0.0	0.0	0.0	0.0
In percent of gross reserves	...	...	...	...	0.0	0.0	0.0	0.0	0.0
In percent of quota	...	...	...	...	0.0	0.0	0.0	0.0	0.0

Sources: Armenian authorities; and Fund staff estimates.

1/ End of period stocks.

2/ Exports of goods and services.

Table 9. Armenia: Medium-Term Macroeconomic Framework, 2006–11  
(In percent of GDP, unless otherwise indicated)

	2006	2007	2008	2009	2010	2011
		Projections				
<b>National income and prices</b>						
Real GDP growth (percent change)	13.3	11.1	10.0	8.0	7.0	6.0
Gross domestic product (in millions of U.S. dollars)	6,387	8,618	10,444	11,614	12,852	13,950
Gross national income per capita (in U.S. dollars)	2,054	2,739	3,298	3,646	4,011	4,329
CPI inflation, end-of-period (annual percent change)	5.2	6.0	5.0	4.5	4.0	4.0
<b>Investment and saving 1/</b>						
Investment	28.9	29.7	30.3	30.8	31.2	31.2
Government	3.9	4.7	4.9	5.0	5.0	5.0
Other	25.0	25.0	25.4	25.8	26.3	26.2
National savings	27.5	25.8	26.1	26.1	26.3	26.4
Government	2.0	2.9	2.2	2.6	2.6	2.9
Other	25.5	22.9	23.9	23.5	23.7	23.5
<b>Government operations</b>						
Revenue and grants	15.8	17.5	17.4	17.4	17.5	17.8
<i>Of which:</i> tax revenue	14.4	15.6	15.7	16.1	16.5	16.9
grants 2/	0.5	0.9	1.1	0.7	0.5	0.5
Expenditure	17.7	19.4	20.0	19.9	19.8	20.0
<i>Of which:</i> social expenditure 3/	6.0	6.4	7.0	7.0	7.0	7.0
Current expenditure	13.1	13.9	14.4	14.2	14.2	14.3
Capital expenditure	3.9	4.7	4.9	5.0	5.0	5.0
Net lending	0.6	0.7	0.8	0.7	0.7	0.7
Overall balance (including grants)	-1.9	-1.8	-2.6	-2.4	-2.3	-2.1
Domestic financing	0.1	0.3	1.0	1.0	1.1	1.2
External financing	1.0	1.6	1.6	1.5	1.3	0.9
Government and government-guaranteed debt	18.7	17.7	16.6	15.8	15.2	14.6
<b>External sector</b>						
Exports of goods and services	21.8	19.2	18.0	18.1	17.8	17.8
Imports of goods and services	37.6	36.3	35.4	36.5	36.2	35.8
Current account (in percent of GDP)	-1.4	-4.0	-4.2	-4.7	-4.9	-4.8
Current account (in millions of U.S. dollars)	-87	-341	-438	-548	-631	-670
Capital and financial account (in millions of U.S. dollars)	516	642	660	751	759	746
<i>Of which:</i> direct foreign investment	340	455	482	511	537	563
public sector disbursements	83	127	160	191	191	162
Change in gross international reserves (in millions of U.S. dollars) 4/	-405	-317	-222	-182	-109	-57
Arrears and debt relief (in millions of U.S. dollars)	1	1	1	2	2	2
Financing/gap (in millions of U.S. dollars)	0	38	23	0	0	0
<i>Of which:</i> IMF	0	10	5	0	0	0
World Bank	0	28	19	0	0	0
External debt (NPV, in percent of exports of goods and services)	70	61	59	60	62	64
Debt service (in percent of exports of goods and services) 5/	10.0	8.1	7.3	6.8	6.8	7.2
Gross international reserves in months of imports	4.1	4.5	4.6	4.6	4.6	4.4

Sources: Armenian authorities; and Fund staff estimates and projections.

1/ Reflects a revision of the 2006 external current account figures to account for changes in methodology (see footnote 1 of table 4).

2/ For 2007-09, the figures include projections for disbursements under the U.S. Millennium Challenge Account.

3/ Defined as total expenditure on health, education, and social security.

4/ A negative figure indicates an increase.

5/ Private external debt included since 2006.

Table 10. Armenia: Poverty Indicators and Millennium Development Goals, 1990–2015

(In percent of total population unless otherwise indicated)

	1990	1998/99	2000	2003	2004	2005	2006 (prel.)	2015 Target
<b>1 Eradicate extreme poverty and hunger</b>								
Population below \$2.15 (PPP) a day 1/	...	35.8	...	...	...	...	...	...
Overall poverty rate	...	56.1	50.9	42.9	34.6	29.8	26.5	19.7
Rural poverty	...	48.2	45.7	47.5	31.7	28.3	23.4	...
Extreme poverty	...	21	16.2	7.4	6.4	4.6	4.1	4.1
Prevalence of child malnutrition (in percent of children under 5)	...	3.3	2.6	...	...	...	...	1.4
<b>2 Achieve universal primary education</b>								
Net primary enrollment ratio (in percent of relevant age group)	...	...	84.5	94.4	97	...	...	100
Youth literacy rate (in percent of group ages 15-24)	99.5	99.7	99.8	...	100	...	...	100
<b>3 Promote gender equality</b>								
Ratio of girls to boys in primary and secondary education (in percent)	...	...	104.0	101.1	102.8	...	...	100
Ratio of young literate females to males (in percent of group ages 15-24)	99.7	99.8	100.1	...	100.1	...	...	...
Proportion of seats held by women in national parliament (in percent)	36.0	6.0	3.0	...	5	...	...	...
<b>4 Reduce child mortality</b>								
Under 5 mortality rate (per 1,000)	60.0	47.0	37.0	35.0	32.0	29.0	...	20.0
Infant mortality rate (per 1,000 live births)	26.0	...	33.0	30.0	29.0	26.0	...	8.7
Immunization, measles (in percent of children under 12 months)	94.8	91.0	92.0	94.0	92.0	94.0	...	...
<b>5 Improve maternal health</b>								
Maternal mortality ratio (modeled estimate, per 100,000 live births)	40.1	32.9	21.8	18.6	...	...	...	10.0
Births attended by skilled health staff (in percent of total)	99.7	98.8	96.8	...	...	98.0	...	...
<b>6 Combat HIV/AIDS, malaria and other diseases</b>								
Prevalence of HIV, female (in percent of group ages 15-24)	...	0.0	0.2	0.1	0.1	0.1	...	Stabilize
Incidence of tuberculosis (per 100,000 people)	26.3	39.2	63.5	70.1	71.0	71.0	...	and
Tuberculosis cases detected under DOTS (in percent)	...	8.0	51.4	43.3	48.0	60.0	...	reduce
<b>7 Ensure environmental sustainability</b>								
Nationally protected areas (in percent of total land area)	...	7.4	7.6	7.6	...	...	...	...
GDP per unit of energy use (PPP \$ per kg oil equivalent)	...	3.5	3.3	4.8	5.0	...	...	...
CO2 emissions (metric tons per capita)	...	1.0	1.1	...	...	...	...	...
Access to an improved water source (% of population)	...	...	...	92.0	...	...	...	...
Access to improved sanitation (% of population)	...	...	...	83.0	...	...	...	...
<b>8 Develop a Global Partnership for Development</b>								
Fixed line and mobile telephones (per 1,000 people)	157.0	145.2	144.9	178.4	259.7	...	...	...
Personal computers (per 1,000 people)	...	5.3	9.2	15.8	66.1	...	...	...
<b>General indicators</b>								
Population (in millions)	3.5	3.1	3.1	3.2	3.2	3.2	...	...
Adult literacy rate (in percent of group ages 15 and over)	97.5	98.3	98.5	98.6	99.4	...	...	...
Total fertility rate (births per woman)	2.6	1.2	1.2	1.1	1.3	1.0	...	...
Life expectancy at birth (years)	71.7	73.0	73.6	74.8	75	73	...	...
Gini index of inequality (consumption)	...	...	34.4	27.1	31	...	...	...
Gini index of inequality (total income)	...	57.0	52.8	44.0	41.0	...	...	...

Sources: World Bank; and Armenian authorities.

Goal 1: Halve, between 1990 and 2015, the proportion of people whose income is less than \$2.15 a day. Halve, between 1990 and 2015, the proportion of people who suffer from hunger.

Goal 2: Ensure that, by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling.

Goal 3: Eliminate gender disparity in primary and secondary education preferably by 2005 and to all levels of education no later than 2015.

Goal 4: Reduce by two-thirds, between 1990 and 2015, the under-five mortality rate.

Goal 5: Reduce by three-quarters, between 1990 and 2015, the maternal mortality ratio.

Goal 6: Have halted by 2015, and begun to reverse, the spread of HIV/AIDS. Have halted by 2015, and begun to reverse, the incidence of malaria and other major diseases.

Goal 7: Integrate the principles of sustainable development into country policies and programs and reverse the loss of environmental resources. Halve, by 2015, the proportion of people without sustainable access to safe drinking water.

Goal 8: Develop further an open, rule-based, predictable, non-discriminatory trading and financial system. Address the special needs of landlocked countries and small island developing states. Deal comprehensively with the debt problems of developing countries through national and international measures in order to make debt sustainable in the long term. In cooperation with developing countries, develop and implement strategies for decent and productive work for youth.

1/ 2000 and 2003 poverty surveys based on different methodology than in other years.

**Attachment I. Republic of Armenia: Letter of Intent**

Mr. Rodrigo de Rato  
Managing Director  
International Monetary Fund  
Washington, D.C. 20431

October 1, 2007

Dear Mr. de Rato:

In the attached Memorandum of Economic and Financial Policies, we summarize progress to date in implementing our PRGF-supported program and set out our economic and financial policies for 2008. We request hereby the completion of the fifth review under the PRGF arrangement and the disbursement of SDR 3.28 million, as well as modification of the end-December quantitative and structural performance criteria.

The PRGF-supported program is on track. The Armenian economy continues to perform very well and all quantitative and all but one structural benchmark under the PRGF arrangement for end-June 2007 were observed (there has been some delay in introducing a unified computer network linking all STS inspectorates). The new Securities Market Regulation Law (structural benchmark, March 2007) was also submitted to parliament with some delay.

Despite the impressive progress achieved in recent years, we recognize that a number of challenges remain to sustain high economic growth and reduce poverty. To this end, our economic program for 2008 contains specific measures to address weaknesses in tax administration, enhance fiscal transparency and expenditure efficiency, and strengthen the financial system.

The Government of the Republic of Armenia believes that the policies and measures set forth in the attached memorandum are adequate to achieve the objectives of the program, and stands ready to take any additional measures that may be appropriate for this purpose. The Government will consult with the IMF in advance on the adoption of these measures in accordance with the IMF's policies on such consultation. The Government intends to make these understandings public and authorizes the IMF to publish this letter, the attached memorandum, and the staff report.

Sincerely yours,

Vartan Khachatryan  
Minister of Finance and Economy  
Republic of Armenia  
/s/

Tigran S. Sargsyan  
Chairman of the Central Bank  
Republic of Armenia  
/s/

**Attachment II. Republic of Armenia: Memorandum of Economic and Financial Policies  
(October 1, 2007)**

1. This memorandum sets forth the government's economic objectives and policies for the third year of the program supported under the Poverty Reduction and Growth Facility (PRGF). These policies constitute an integral part of the government's medium-term strategy for poverty reduction as envisaged in the Poverty Reduction Strategy Paper (PRSP), which is currently being updated.

**I. RECENT DEVELOPMENTS AND PERFORMANCE UNDER THE PROGRAM**

2. Economic performance of the Armenian economy has remained strong, with output growth to date exceeding expectations. **Real GDP** grew by 12 percent year-on-year in the first seven months of 2007, led by the construction and services sectors, which grew by 22 and 14 percent, respectively. Domestic demand continued to be buoyed by robust remittance inflows. Notwithstanding a sharp increase in grain import prices in the first half of the year, 12-month CPI inflation declined to 1.6 percent in August, largely on account of a seasonal decline in domestic food prices that was bigger than in the previous year. While end-year **inflation** is projected to remain within the target band ( $4\pm 1.5$  percent), upward risks remain, stemming from potentially higher international grain prices.

3. **Fiscal policy** has remained sound, with lower-than-budgeted expenditures and improving revenue performance in the first six months of 2007. As a result, the central government posted a cash surplus of AMD 1.9 billion or 0.1 percent of annual GDP during that period.<sup>4</sup> Tax revenues increased by 25 percent year-on-year in the first half of 2007 on account of improved collection (particularly in VAT and personal income tax). However, there was also a sharp increase in unprocessed VAT refund claims (around 0.14 percent of annual GDP) during the same period. As a result of expenditure under performance and the positive revenue outcome so far in the year, we expect to realize savings of around AMD 12 billion drams, resulting in a lower budget deficit (AMD 56.5 billion or 1.8 percent of GDP).

4. Monetary developments have been shaped by a sustained trend of dedollarization and remonetization, amid large foreign exchange inflows. **Reserve money** growth has been fuelled by (largely unsterilized) foreign exchange intervention and cash dedollarization, while **broad money** growth has picked up, mainly owing to accelerating credit to the private sector. To counteract inflationary pressures stemming from higher grain import prices, the

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<sup>4</sup> This incorporates non-tax revenues of AMD 6.8 billion (0.2 percent of GDP) related to the privatization of Zangezur. In the IMF classification, these revenues are classified as a financing item, in which case the overall balance is a deficit of AMD 4.9 billion (0.2 percent of GDP), compared to a programmed deficit of AMD 18.8 billion using the IMF classification.

CBA reversed its previous policy rate cut (25 basis points in April), raising it back to 4.75 percent in July. The dram continued to appreciate vis-à-vis the U.S. dollar and other major currencies during the first half of the year, but stabilized in the third quarter, in part due to surging imports.

5. **External developments** reflected the persistence of remittances, capital inflows, and donor financing, leading to strong reserve accumulation. Preliminary data for the first semester of 2007 indicate that FDI inflows increased significantly, with large inflows going to the telecommunication, air transport, construction, and food processing sectors. Non-diamond exports rebounded from their lackluster performance in 2006, as previous investments in the metals, minerals, and food sectors started to pay off. However, a surge in imports, driven by disposable income growth, buoyant investment and dram appreciation, resulted in a significant widening of the current account deficit in the first half of 2007. The methodology for estimating private transfer inflows was revised to take into account remittances that are not channeled through the banking system, resulting in a downward revision of the 2006 current account deficit from 4 to 1.4 percent of GDP. Similar revisions for previous years are under way.

6. All **quantitative performance criteria** for June 2007 and all but one June structural benchmarks were observed (there has been some delay in introducing a unified computer network linking all STS inspectorates). The new Securities Market Regulation Law (structural benchmark, March 2007) was also submitted to parliament with some delay.

7. We have made good progress in **structural reforms** in the fiscal and financial sector areas. We continued to press ahead with our ambitious reform plans to improve revenue collection, foster financial intermediation, and develop Armenian capital markets.

8. We have continued to strengthen tax policy and tax and customs administration as well as budget execution:

- In **tax policy**, we completed the draft of the general part of the unified tax code in consultation with all stakeholders. We also submitted to parliament amendments to all presumptive tax laws to index the taxes to the CPI. Finally, parliament approved legislation to limit access to the simplified tax regime.
- In **tax administration**, we submitted legislation to parliament to require the recording of taxpayers at the location of their main economic activity. We also approved a medium-term modernization program for the State Tax Service (STS) in line with IMF recommendations. Furthermore, we have continued to strengthen the capacity of the STS by (i) finalizing a unified computer network linking all inspectorates of the STS, and (ii) starting the pilot testing of an automated risk-based audit selection system. This will help strengthen core business processes and establish a modern audit operation.



- In **customs administration**, we continued to make progress with the implementation of Direct Trader Input (DTI), with 100 percent of declarations at the TIR Customs House and a significant share of declarations at the Araratyan Customs House being lodged by importers. Some progress was made in increasing the share of imports released through yellow and green channels. Finally, a refurbishment of the IT center is under way, with the implementation of a software upgrade significantly improving the capacity of risk management operations.
- On the **expenditure side**, we implemented two phases of the three-phase plan to design a financial reporting and monitoring framework for NCOs, in collaboration with the World Bank. In this regard, we are considering establishing separate accounts at the treasury for individual NCOs predominantly funded by the state in order to strengthen their monitoring while maintaining their managerial autonomy. In the 2008 budget, we are using a new classification system that is generally consistent with GFSM 2001. We continue to pilot budgeting programming in ministries and other state bodies.

9. We are continuing to strengthen the regulatory and supervisory framework of the **financial sector** and encourage the entry of additional international banks into the Armenian market. In this connection, we approved the purchase of shares of two existing banks by foreign investors and granted preliminary approval for a license for a new bank. We submitted to parliament a new Securities Market Regulation Law that corresponds to the standards of the International Organization of Securities Commission. In addition, we are developing a strategy to develop the securities market in cooperation with Scandinavian stock market operator OMX, which is expected to take over the operation of Armenian stock exchange (ARMEX). We are also contemplating reforms to further develop the foreign exchange market.

10. In the **energy sector**, we introduced a temporary gas subsidy in April 2006 to cushion the impact on end-users of an unexpected increase in gas import prices. The government adopted a national program to boost energy saving and efficiency in January 2007. The program envisages reducing the economy's reliance on natural gas and increasing energy efficiency by 10 to 12 percent by 2010 by developing and using most energy-efficient technologies, and also by maximizing the country's reliance on locally available renewable energy resources.

## II. THE 2008 PROGRAM

11. We remain committed to our growth and poverty-reduction strategy in line with the government program adopted in May 2007. Our macroeconomic policies will continue to focus on price stability and forceful implementation of tax and financial sector reforms to generate additional resources to fund infrastructure development, expand poverty-reducing services, and improve the quality and depth of financial intermediation. We expect real GDP

growth to be 10 percent in 2008 on the back of continued strong activity in construction, and investments in the energy, transportation, telecommunication, and industrial sectors. End-period inflation is expected to be around 4.5 percent on account of the removal of the gas subsidy and the associated increase in end-user tariffs.

### A. Fiscal Policy

12. The proposed **2008 budget** aims for a deficit of AMD 92.1 billion (2.6 percent of GDP). In the context of the planned pension increase, we will consolidate the State Fund for Social Insurance (SFSI) with the state budget in 2008. Including the resources generated by the SFSI's 2007 surplus (AMD 10.3 billion or 0.3 percent of GDP), which will be used to finance the increase in average pensions, the deficit will reach AMD 102.4 billion (2.9 percent of GDP). Tax revenues and total expenditures, excluding the resources from the SFSI surplus of 2007, are budgeted at AMD 545.1 billion (15.5 percent of GDP) and AMD 696.0 billion (19.8 percent of GDP), respectively. On the **revenue** side, we are committed to increasing the tax-to-GDP ratio by at least 0.3 percent of GDP in 2008 by implementing the structural measures discussed below.<sup>5</sup>

13. On the **expenditure** side, given their currently low level, we will increase average pensions by 60 percent. Health and education allocations will be maintained broadly stable in terms of GDP. Budgetary sources to fund pensions will increase by 190 percent, to 1.5 percent of GDP. Capital expenditures are planned to increase from 4.7 percent to 5.2 percent of GDP on account of scaled-up donor assistance, in particular from the Millennium Challenge Account (MCA). A supplementary budget will be passed to allocate funds to additional capital expenditures if more funds become available. Should there be a shortfall in revenues, expenditures for the year will be reduced accordingly to ensure that the deficit target is met. Given medium-term expenditure pressures and uncertainties, any potential revenue over performance will be partially saved in order to reduce the overall deficit.

### B. Monetary and Exchange Rate Policies

14. Monetary policy will continue to focus on price stability, supported by a flexible exchange rate. Should inflationary pressures increase, we will stand ready to tighten monetary policy by increasing the repo rate to safeguard monetary policy credibility in the transition to full-fledged inflation targeting. Given the rapid increase in monetary aggregates to date in 2007 and the associated inflationary risks, the CBA is projecting a reduction in money supply growth for the remainder of the year and in 2008. The monetary program seeks to limit reserve money growth to 32 percent in 2007 and under 22 percent in 2008.

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<sup>5</sup> This increase does not take into account a one-off payment of tax arrears by Armentel of around 0.2 percent of GDP.

Foreign exchange interventions will be used as an instrument to manage liquidity and smooth out exchange rate volatility. Recognizing that international reserves are at a comfortable level, we envisage a slowdown in foreign reserves accumulation. We intend to increase the net issuance of treasury bills by AMD 25 billion, which will contribute to the development of the domestic government debt market.

15. We have achieved further progress in strengthening the institutional prerequisites in support of an inflation targeting (IT) framework and have continued to improve our operational framework. With support of IMF technical assistance (TA), we conducted a review of our strategy, organizational framework, and timeline to adopt full-fledged IT in the medium term. This review concluded that most of the key elements for successful inflation targeting are present in Armenia, including the independence of the CBA, appropriate internal organization and sufficient capacity in the central bank, a quarterly inflation projection model as one of the inputs in the monetary policy decision-making process, and a well-developed communication strategy. Since 2006, the CBA has issued quarterly inflation reports and published the minutes of its monthly board meetings on monetary policy. It is also in the process of moving from an end-year to a continuous inflation target. While the monetary transmission mechanism is still weak, it is being strengthened by financial deepening, the recent increase in interbank money market activity, and by the increased issuance of CBA securities. The latter also helped to significantly reduce excess bank liquidity in the first half of 2007. Over the medium term, the CBA intends to increase its holdings of treasury securities in order to strengthen its capacity to conduct reverse repo operations.

### **C. Structural Reforms**

16. We will continue to press ahead with reforms to improve tax and customs collection, improve the tax system, and strengthen the financial sector.

#### **Fiscal reforms**

17. **Tax policy** will focus on:

- Finalizing the general part of the unified tax code and submitting it to parliament (structural benchmark, December 2007); we will also start preparing the specific part of the unified tax code, which we will submit to parliament by the end of next year;
- Submitting legislation to parliament to help increase tax revenues from imported and domestically produced tobacco products, preferably by moving these products from the presumptive to the regular VAT and excise regime; alternatively, we will raise the current tax rates on these products by at least 10 percent (structural benchmark, December 2007).

18. To promote the initial phase of stock market development, we contemplate, together with OMX, the Nordic stock exchange operator, to design temporary and limited tax incentives that will apply to those listed companies that will maintain a significant free float. At the same time, our position is not to introduce any further new tax privileges or granting tax amnesties. In particular, we will allow the profit tax exemptions for foreign investors to expire at the end of 2007, and will remove the exemption for agriculture in 2009 under our agreement with the WTO. We also intend to limit the use of the presumptive tax regime, including by moving large-scale operations from the presumptive tax to the regular tax regime.

19. In **tax administration**, we will focus our efforts on improving tax audits, tax arrears collection, and the VAT refund system. In particular, we will

- Submit legislation to parliament to change the filing process by conducting cameral audits as part of the audit (not filing) program. We will also issue an order to eliminate recording commissions effective September 2008 (structural performance criterion, December 2007) since this does not require parliamentary approval;
- Continue to strengthen the IT capacity of the STS by (i) starting the pilot testing of risk-based software for VAT refunds (structural benchmark, October 2007), and (ii) implementing the automated risk-based audit selection system (structural benchmark, December 2007).
- Start the implementation of the three-year modernization program for the STS by, among other things, advancing in the establishment of self-assessment, improving VAT administration (including the implementation of risk-based VAT refunds), and developing training programs.
- Establish an institutional mechanism to avoid accumulation of unprocessed VAT refund claims.

20. In the area of **customs administration**, we continue to work with the World Bank on introducing risk-based Asycuda selectivity at all customs locations, increasing the proportion of imports directed through the green channel, and improving the exchange of information between the tax and customs administrations. We also plan (i) to increase the effectiveness of DTI and (ii) to implement a comprehensive post-release review strategy for imports with the aim of determining the real customs value of goods. The post clearance audit unit will start reporting quarterly statistics of its activities (with World Bank support), with a view to evaluating its efficiency and preparing a compliance model for importers and their agents.

21. We recognize the importance of better targeting government **expenditures** to ensure adequate public investment and social spending as well as high expenditure quality. In this regard, we plan to continue developing our program budgeting framework in ministries and

other state bodies. We will discontinue the current gas subsidy in spring 2008, once earmarked privatization proceeds are exhausted, and will not introduce any new general subsidies in the energy sector. In order to strengthen the financial reporting framework of NCOs, we are working with the World Bank and other donors to design and implement the NCO financial management and reporting framework.

### **Financial sector reforms**

22. We will continue to move forward with **banking sector** reforms:

- To promote the development of the mortgage market, we will submit to parliament legislation allowing asset securitization and the issuance of mortgage-backed securities (structural benchmark, end-December 2007).
- To prevent opportunities for money laundering, we will submit to parliament a new law on Anti-Money Laundering and Combating the Financing of Terrorism in line with FATF 40+9 recommendations (structural benchmark, end-December 2007).
- To improve market transparency, we will take measures to enhance the ability of bank customers to obtain information on banks' financial terms from a single source, as mandated in the amendment to the Law "On Banks and Banking." A Consumer Protection Law to improve transparency in financial services is projected to be sent to parliament by the end of this year. The law will improve disclosure on financial terms of consumer loans and bank deposits and create the basis for the establishment of financial ombudsperson services.
- To further increase competition, we are actively encouraging the entry of reputable international commercial banks. The CBA has recently granted approval to two foreign financial institutions to acquire local banks and preliminary approval for a license for a new bank. Several more international banks have expressed interest to enter the Armenian market. Furthermore, the Dutch company Postfinance International is establishing postal bank services at Haypost.
- To improve efficiency of the unified banking regulation and supervision framework, we will move from a model of institutional supervision (separately for banks, credit organizations, and insurance companies) to a functional or process-oriented structure, separating the main functions of (i) prudential requirements; (ii) market conduct; and (iii) consumer protection.
- The CBA is currently preparing a draft law on the establishment of an independent Financial Supervision Agency (FSA). We plan to submit the draft law to parliament in 2008 and to establish the FSA by 2010/11.

23. In the area of **nonbank financial sector** reforms, we intend to do the following:
- **Pension reform.** With technical assistance from the World Bank and other donors, the pension reform working group has drafted a pension reform framework. Specific details on the various scenarios are still being analyzed. In deciding the timing and final modalities of pension reform, we will ensure that macroeconomic stability is preserved, and will continue to adopt sound fiscal policies.
  - **Insurance reform.** Further measures are planned for 2007 to develop the infrastructure supporting the insurance sector. These include (i) establishing procedures for the liquidation of insurance companies; (ii) introducing principles of corporate management based on international best practice; (iii) training actuaries and risk assessment specialists; (iv) creating a manual for conducting examinations in the insurance sector; and (v) creating a statistical center used for risk assessment and determination of insurance premium.
  - **Securities market reform.** OMX has agreed to become the operator and owner of ARMEX. It is expected that a contract will be signed in early November 2007. The CBA has already identified a number of companies that are interested in issuing securities by means of initial public offerings (IPOs), which would provide market capitalization of at least \$1.3 billion (17 percent of GDP) in 5 years time, of which 30 percent would be freely tradable. There have already been first bond issues.

### III. OTHER ISSUES

24. We have initiated discussions on a new three-to-five-year **anti-corruption strategy**, which will be drafted through a participatory process. The focus of the strategy will be on the implementation of legislative measures introduced in recent years. A first draft of the document is expected by June 2008.

25. We have prepared a draft of the **Law on State Debt**, intended to regulate the public debt management process and to improve monitoring of external debt contracted by private physical and legal entities. We plan to submit the draft to parliament by [November 2007].

### IV. PROGRAM MONITORING

26. Program monitoring will be based on semi-annual quantitative performance criteria and indicative targets as well as structural performance criteria and benchmarks. The Technical Memorandum of Understanding (TMU) of October 2005 and the attached amendments to the TMU define the quantitative targets, the program adjustors, and specific reporting requirements. In particular, the performance criterion on tax revenues became an indicative target starting in June 2007. Completion of the sixth review under the PRGF arrangement, scheduled for May 16, 2008, will require observance of the revised quantitative

performance criteria for December 2007, shown in Table 1, as well as the December 2007 structural performance criteria listed in Table 2.

Table 1. Armenia: Quantitative Targets, September 2006 – December 2007 1/  
(End of period ceilings on stocks, unless otherwise specified)

	2006				2007							
	Sep.		Dec.		Sep.		Dec.					
	Prog.	Actual 2/	Prog.	Actual 3/	Prog. 2/	Actual 3/	Prog. 2/	Actual 3/				
Net domestic assets of the CBA 4/	-32.0	-49.4	-19.8	-115.4	-52.2	-48.5	-50.5	-78.2	-35.5	-50.6	-27.1	-50.7
Net banking system credit to the government	7.1	-3.8	-3.9	-31.8	-30.6	-42.3	-36.3	-70.1	-32.7	-46.5	-29.6	-40.5
Domestic arrears of the central government	0	0	0	0	0	0	0	0	0	0	0	0
Tax revenues of the central government (floor) 2/ 5/	259.1	268.8	378.1	383.8	93.4	94.2	204.2	210.0	326.4	337.8	458.8	479.3
Balance of the central government on a cash basis (floor) 5/	-48.5	-31.8	-60.2	-50.4	-14.0	11.0	-32.8	-0.1	-43.0	-28.2	-68.5	-56.5
Reserve money (band/level) 2/	(216-225)	231.1	(246-256)	283.0	(265-276)	264.8	(276-288)	287.3	(311-324)	(334-348)	(347-361)	(366-381)
Contributions to the State Fund for Social Insurance 2/ 5/	52.4	52.6	74.0	73.3	17.1	18.7	37.7	39.7	59.0	59.0	82.1	82.1
Contracting or guaranteeing of new nonconcessional external debt 5/ 6/	0	0	0	0	0	0	0	0	0	0	0	0
External arrears (continuous criterion)	0	0	0	0	0	0	0	0	0	0	0	0
Net official international reserves (floor)	543.9	528.0	577.2	812.2	877.6	819.7	910.6	990.5	967.8	1067.0	1050.8	1157.7

1/ All items as defined in the Technical Memorandum of Understanding.

2/ Indicative target.

3/ Performance criterion.

4/ At program exchange rates (500 dram per U.S. dollar in 2005, 450 dram per U.S. dollar in 2006, and 357 dram per dollar in 2007).

5/ Cumulative flow from the beginning of the calendar year until the end of the month indicated.

6/ Includes debt with maturity of more than a year as well as obligations with maturity of one year or less, excluding normal import-related credit and sales of treasury bills to nonresidents.



Table 2. Armenia: Status of Measures Under the Sixth Review of the PRGF

Item	Measure	Proposed Time Frame (End of Period)	Type of Conditionality	Status
<u>Tax policy</u>				
1	Submit to parliament the general part of the unified tax code.	December 2007	Structural Benchmark	
2	Submit legislation to parliament limiting access to the simplified tax regime to the retail and household services sectors.	December 2007	Structural Performance Criterion	
3	Submit legislation to parliament to help increase tax revenues from imported and domestically produced tobacco products preferably by moving these products from the presumptive to the regular VAT and excise regime; alternatively raise the current tax rates on these products by at least 10 percent.	December 2007	Structural Benchmark	
<u>Tax administration</u>				
4	Submit to parliament legislation to change the filing process by conducting cameral audits as part of the audit (not filing) program.	December 2007	Structural Performance Criterion	
5	Issue an order to eliminate recording commissions effective September 2008.	December 2007	Structural Performance Criterion	
<u>Financial sector</u>				
6	Strengthen the IT capacity of the State Tax Service (STS): (i) Start the pilot testing of risk-based software for VAT refunds. (ii) Implement the automated risk-based audit selection system.	October 2007 December 2007	Structural Benchmark Structural Benchmark	
7	Submit to parliament legislation allowing asset securitization and issuance of mortgage-backed securities.	December 2007	Structural Benchmark	
8	Submit to parliament a new law on Anti-Money Laundering and Combating the Financing of Terrorism in line with FATF 40+9 recommendations.	December 2007	Structural Benchmark	

**Attachment III. Republic of Armenia: Amendments to the Technical Memorandum of Understanding (TMU)**

The TMU dated October 26, 2005 and its amendments dated April 27, 2006, November 1, 2006, and June 1, 2007 will remain valid for the remainder of 2007, with the revised baseline assumptions for (program) exchange rates of the Central Bank of Armenia (CBA), foreign-financed project loan disbursements, World Bank lending, and *Kreditanstalt für Wiederaufbau* (KfW) loan disbursements as indicated in Tables 1 to 5 below, and the following amendment to apply from December 1, 2007.

Table 1. Armenia: (Program) Exchange Rates of the CBA  
(As of December 31, 2006 for dollars per currency rates. Dram per currency rates are calculated using the 357 dram per U.S. dollar rate)

Country	Dram Per Currency	Dollars Per Currency
Australian dollar	281.53	1.268070
Canadian dollar	306.20	1.165900
Swiss franc	292.86	1.219000
Danish krone	63.18	5.650100
Euro	470.51	1.317962
Pound sterling	699.33	0.510491
Japanese yen	3.00	119.070000
Norwegian krone	57.25	6.236000
Russian ruble	13.56	26.325500
Swedish krone	52.12	6.849700
U.S. dollar	357.00	1.000000
SDR	537.07	0.664717
Gold 1/	7,307.93	20.470378

1/ Per gram.

Table 2. Armenia: Cumulative Foreign-Financed Project Loan Disbursements 1/ 2/  
(In billions of dram)

2007			
<u>March</u>	<u>June</u>	<u>September</u>	<u>December</u>
5.7	11.0	17.2	38.1

1/ Cumulative from December 2006, at program exchange rates.

2/ Excludes World Bank PRSC lending and KfW loan disbursements.

Table 3. Armenia: World Bank PRSC Lending 1/  
(In billions of dram)

2007			
<u>March</u>	<u>June</u>	<u>September</u>	<u>December</u>
0.0	10.2	10.2	10.2

1/ Cumulative from December 2006, at program exchange rates.

Table 4. Armenia: KfW Loan Disbursements 1/  
(In billions of dram)

2007			
<u>March</u>	<u>June</u>	<u>September</u>	<u>December</u>
1.1	1.5	4.2	7.2

1/ Cumulative from December 2006, at program exchange rates.

Table 5. Armenia: Total Grant Disbursements  
(In billions of dram)

2007 1/			
<u>March</u>	<u>June</u>	<u>September</u>	<u>December</u>
3.8	8.4	16.8	26.8

1/ Cumulative from December 2006, at program exchange rates.

INTERNATIONAL MONETARY FUND

REPUBLIC OF ARMENIA

**Fifth Review Under the Three-Year Arrangement Under the Poverty Reduction and Growth Facility and Request for Modification of Performance Criteria**

**Informational Annex**

Prepared by Middle East and Central Asia Department

November 9, 2007

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**ANNEX I. ARMENIA: RELATIONS WITH THE FUND**

(As of September 30, 2007)

**Mission:** Program discussions were held in Yerevan, September 5–19, 2007.

**Country interlocutors:** The mission met with President Kocharian, Mr. S. Sargsyan (Prime Minister), Mr. Khachatryan (Minister of Finance and Economy), Mr. Yeritsyan (Minister of Trade and Economic Development), Mr. T. Sargsyan (Chairman of the Central Bank), other senior officials, and representatives of the donor community and civil society.

**Staff team:** Ms. Castello-Branco (head), Ms. Dabla-Norris, Mr. Floerkemeier (all MCD), Mr. Atoyán (PDR), and Mr. Gracia (FAD). Ms. Manookyan and Mr. Stepanyan (economists in the local office) assisted the mission. Mr. Pérez (MCD) joined the mission to participate in the policy discussions.

**Fund relations:** Armenia has accepted the obligations under Article VIII Sections 2, 3, and 4, and maintains an exchange system free of restrictions on payments and transfers for current international transactions, except for exchange restrictions maintained for security reasons that have been notified to the Fund pursuant to Executive Board Decision No. 144-(52/51).

**Data:** Armenia's data are adequate for surveillance and program monitoring. Armenia subscribes to the Special Data Dissemination Standard (SDDS).

I. **Membership Status:** Joined 05/28/1992; Article VIII

II.	<b>General Resources Account:</b>	<b>SDR Million</b>	<b>Percent of Quota</b>
	Quota	92.00	100.00
	Fund holdings of currency	92.00	100.01
III.	<b>SDR Department:</b>	<b>SDR Million</b>	<b>Percent of Allocation</b>
	Holdings	2.30	n.a.
IV.	<b>Outstanding Purchases and Loans:</b>	<b>SDR Million</b>	<b>Percent of Quota</b>
	PRGF arrangements	101.83	110.68

V. **Latest Financial Arrangements:**

<u>Type</u>	<u>Approval Date</u>	<u>Expiration Date</u>	<u>Amount Approved (SDR Million)</u>	<u>Amount Drawn (SDR Million)</u>
PRGF	05/25/2005	05/24/2008	23.00	16.40
PRGF	05/23/2001	12/31/2004	69.00	69.00
PRGF	02/14/1996	12/20/1999	109.35	109.35

**VI. Projected Payments to Fund <sup>1/</sup>**

(SDR Million; based on existing use of resources and present holdings of SDRs)

	Forthcoming				
	2007	2008	2009	2010	2011
Principal	5.19	17.06	15.19	14.13	14.44
Charges/interest	<u>0.25</u>	<u>0.45</u>	<u>0.37</u>	<u>0.29</u>	<u>0.22</u>
Total	5.44	17.50	15.55	14.42	14.66

<sup>1/</sup> When a member has overdue financial obligations outstanding for more than three months, the amount of such arrears will be shown in this section.

**VII. Safeguards Assessment**

Under the Fund's safeguards assessment policy, the Central Bank of Armenia (CBA) is subject to a safeguards assessment update in the context of the current arrangement. A safeguards update of the CBA was completed on November 7, 2005. The update found that the CBA's safeguards framework has been strengthened since the previous assessment completed in 2002. In particular, measures have been put in place to improve data reported to the Fund, to strengthen controls and reporting on externally managed foreign exchange investments, and to address weaknesses in the legal framework. Furthermore, the appointment term of the external audit firm has been lengthened and new regulations and procedures have been put in place to better define the actions and scope of the internal audit function. A number of areas were identified where further steps could be taken. This includes strengthening controls over reporting of monetary program data to the Fund, improving oversight of the audit processes and the internal control systems by establishing an audit committee, and enhancing the CBA's internal audit function. The CBA agreed with the specific recommendations and their implementation schedule.

**VIII. Exchange Rate Arrangement**

- (a) The exchange rate system can be classified as a managed float without a predetermined path. In 2005–06, the CBA intervened heavily in the foreign exchange market to smooth out volatility in the exchange rate. The official exchange rate is quoted daily as a weighted average of the previous day's interbank exchange rates.
- (b) Armenia maintains no exchange restrictions on the making of payments and transfers for current international transactions except for exchange restrictions maintained for security reasons, and notified to the Fund pursuant to Executive Board Decision No. 144-(52/51).

**IX. Article IV Consultations**

The 2004 Article IV consultation with Armenia was concluded on November 22, 2006. Armenia is subject to the 24-month consultation cycle.

## X. FSAP Participation and ROSCs

A joint World Bank-International Monetary Fund mission assessed Armenia's financial sector as part of the Financial Sector Assessment Program (FSAP) update during February 16–March 4, 2005. The Financial Sector Stability Assessment (FSSA) report was discussed by the Executive Board on May 25, 2005.

### ROSC Modules

Standard	Timing	Publication Status	Document Number
Basel Core Principles for Effective Banking Supervision (BCP)	April 2001	Unpublished	...
Core Principles for Systemically Important Payments Systems (CPSS)	April 2001	Unpublished	...
Insurance Principles set by the International Association of Insurance Supervisors (IAIS)	2001	Unpublished	...
Principles set by the International Organization of Securities Commissions (IOSCO)	2001	Unpublished	...
Code of Good Practices in Monetary and Financial Policy Transparency (MFPT)	April 2001	Unpublished	...
Code of Good Practices on Fiscal Transparency	March 2001	Published	02/37
Data ROSC module	September 2000	Published	02/06
AML-CFT assessment by MONEYVAL	July 2004	Unpublished	...
Basel Core Principles for Effective Banking Supervision (BCP) update	May 2005	Unpublished	...
Corporate Governance	May 2005	Unpublished	...

## XI. Resident Representatives

Ms. Nienke Oomes, since August 2006.

## XII. Technical Assistance

The following table summarizes the Fund's technical assistance to Armenia since 2002.

### Armenia: Technical Assistance from the Fund, 2002–06

Subject	Type of Mission	Timing	Counterpart
<b>Fiscal Affairs Department (FAD)</b>			
Tax policy and administration	Short-term	September 17– October 3, 2003	MFE, State Tax Service (STS), and Customs Committee
Tax policy	Short-term	April 22–May 6, 2004	MFE, STS, and Customs Committee
Tax administration	Short-term	July 13–27, 2004	MFE, STS, and Customs Committee
Public expenditure management advisor		November 7, 2003– November 6, 2004	
Tax administration reform	Short-term	October 5–18, 2006	MFE, STS
Public financial management reform	Short-term	November 27 – December 8, 2006	MFE
Tax administration reform	Short-term	October 31 – November 13, 2007	MFE, STS
<b>Legal Department</b>			
Tax legislation		September 1, 2004– December 31, 2005	
Legislation Development & FIU		July 31–August 7, 2006	
Unified Tax Code		June 16–23, 2007	MFE
<b>Monetary and Capital Markets Department</b>			
Banking system issues	Short-term	April 15–19, 2002	CBA
Banking system, deposit insurance, foreign exchange market development, and CBA monetary operations.	Short-term	June 24–July 4, 2002	CBA
Unified financial supervision, mortgage financing markets and inflation targeting	Short-term	January 26– February 6, 2004	CBA
Financial sector assessment program update	Short-term	February 16– March 4, 2005	CBA
Recapitalization of the Central Bank of Armenia	Short-term	December 8–14, 2005	CBA
Monetary policy and markets		December 4, 2005– December 31, 2006	
Strengthening the implementation of monetary policy	Short-term	March 8–21, 2006	CBA



Monetary policy implementation and money market development	Short-term	October 5–17, 2006	CBA
AML/CFT preventive measures		April 1, 2006–April 30, 2007	
Inflation Targeting, Foreign Exchange Market Development and Responding to Dedollarization	Short-term	August 29—September 10, 2007	CBA
<b>Statistics Department</b>			
Data dissemination standards	Short-term	September 18–25, 2003	National Statistical Service
Balance of payments: remittances		August 22–September 5, 2006	
<b>International Capital Market Department</b>			
Sovereign credit quality	Short-term	September 6–10, 2005	CBA
Sovereign credit risk	Short-term	August 20, 2005–August 20, 2006	

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**ANNEX II. ARMENIA: RELATIONS WITH THE WORLD BANK**  
(October 31, 2007)

Country Director: Donna Dowsett-Coirolo

Telephone: (202) 473-0121

**I. IMPLEMENTATION OF STRUCTURAL REFORM MEASURES**

**A. Legal Framework**

1. The World Bank has supported the Armenian government to establish the core legal framework necessary for private sector operations, including the Civil Procedure Code, the Procurement law, the Business Registration law and the Public Auction law. The fully restructured and enacted Bankruptcy law is now harmonized with the Civil Code and the Civil Procedure Code, and strengthens the enforcement mechanisms for bankruptcy procedures. The Concession law has been enacted and the National Assembly has adopted a new Labor Code, which is compatible with the requirements of a market economy and is an important instrument of flexible job-creation. The government also has made significant progress in drafting the necessary legislation to improve the lending environment through strengthening the procedures for collateral registration and for foreclosure and enhancing the knowledge of the judiciary concerning commercial contracts. Specifically, the government has adopted amendments to civil code, criminal code, civil procedure law, law on compulsory enforcement, and public auction law. The World Bank has also supported the rehabilitation of 12 courthouses and the installation of an automated case management system.

**B. Business Environment**

2. The World Bank has supported the government to make satisfactory progress in removing administrative barriers for business and investment and has strengthened the consultative mechanisms with the business community. The steps taken include, inter alia, consolidating, downsizing, and clarifying mandates of various government inspections; enacting the new law on business registration; streamlining licensing procedures; issuing new accounting recommendations for small and medium-sized enterprises; establishing a regulatory framework that allows privatization of urban land by business entities; and adopting simplified procedures for obtaining site development and construction permits. The capacity of the Armenian Development Agency as a focal point for government's efforts to promote investment and exports as well as for identifying the remaining bottlenecks in the business environment has been strengthened. The functioning of the Business Council has been improved and the private sector's awareness of its activities has been enhanced.

3. The recent business surveys of Armenian entrepreneurs suggest that these efforts have already resulted in a more positive private sector perception of the business and

investment environment. For example, the average time necessary to get construction and building renovation permits was reduced from 310 days in 2001 to 112 days in 2006. The FDI increased by almost 20 percent in 2005 compared with 2003. The State Customs Committee's websites became operational and during 2003, on average 467 references per month were made to it. As part of the PRSC I, II and III the Customs introduced a self declaration system and reduced the role of reference prices.

On tax administration, the government strengthened the operation of Large Tax Payers Unit (LTPU), which should help to reduce the stock of VAT refunds owed to exporters and ensure that no additional VAT arrears will be incurred to exporters. The government adopted decision announcing its intention to widen participation in the provision of international civil aviation services, raise efficiency and cut costs and initiated policy work. Despite these improvements, there is still considerable scope for further reforms in the areas of competition, deregulation and strengthening of business and investment climate, especially in commercial debt recovery procedures, improvements in the transparency and efficiency of the judicial system, tax and customs administrations, improvements in governance and implementing the anti-corruption strategy. In addition to the above-stated, further strengthening of both tax and customs administration were at the core of the PRSC III, in particular implementation of self-assessment systems; adherence to reforms for the Large Taxpayer Unit; completion, implementation and expansion of DTI facilities in major customs and implementation of intelligence-based system based on risk assessment. **PRSC-IV** supports the next phase of reforms. A series of measures have been adopted aimed at promoting the development of the self-assessment system. A separate division for taxpayer service has been established within the STS headquarters and the capacity built up **PRSC-IV** also supports building institutional capability in specialized audits and a national audit strategy was approved. Under PRSC-IV, annual action plans were developed to improve the performance of tax inspectorates servicing large taxpayers.

### C. Energy and Infrastructure

4. Since its privatization in the second half of 2002, the Electricity Distribution Company has remained in compliance with its licenses agreement as confirmed by making full payments to the generation and service providers, reporting to the regulator on a timely basis, and submitting investment plan to the regulator. Supported by the World Bank, the government has also made satisfactory efforts to improve the legal and regulatory framework in the energy sector in order to establish a supportive environment for the new private operator. Budget allocations have been increased to ensure full payments to the energy sector by the budgetary organizations and public utilities. The government implemented the Integrated Rehabilitation Plan for state-owned utilities (including energy, irrigation, drinking water companies and Yerevan metro) with strengthened corporate governance, creation of electricity market, and cessation of operations of the state electricity wholesale company. In addition, the Public Sector Regulatory Commission (PSRC) has made considerable progress

in improving utilities regulatory framework and adopted several measures including, monitoring indicators for electricity service quality and standard. Despite this satisfactory performance, continued efforts are crucial for improvements in the energy sector through restructuring the midstream companies and strengthening the regulatory framework to ensure adequate functioning, transparency, and reliability of this sector.

5. There has been progress in improving fiscal discipline and reducing losses in the irrigation and water sectors. The World Bank has been working with the government to: (i) upgrade the management capacity of public companies in these sectors; (ii) ensure a gradual increase in tariffs to cost recovery; (iii) provide additional investments to improve technical efficiency; and (iv) ensure that the budget provides adequate financing for water consumed by public sector entities. The World Bank has supported an innovative public-private partnership in water supply, which has substantially increased reliable water supply throughout the country (70% of Yerevan now has 24 hour service). The government has adopted a schedule for irrigation tariff increases in order to move closer to full cost recovery in the irrigation system. As part of the PRSC III reforms, the Government has also developed and now considering a step-by-step civil aviation liberalization action plan. Railway restructuring plan and development of telecommunication regulations are also underway.

#### **D. Education and Health**

6. The World Bank has supported reforms in education and health. The government implemented a major rationalization program during the 2003 school year. As a result, 37 schools were merged or closed and about 9,000 teachers were made redundant. Later in 2006, during the second phase of the reforms, in the scope of the staff optimization and social assistance program approximately 3,200 new redundant teachers have been registered and were provided with different type of social assistance. The medium-term action plan for improving the financial management, accounting, and financial reporting for higher education institutions was adopted by the government on January 26, 2003. Accountants at the higher institutions have been trained and special software has been prepared for use. Since the second quarter of 2003, the new accounting procedures are being used. The government increased the state budget allocation for primary and secondary education and improved teachers' salaries. The government also developed an action plan and cleared arrears in the education sector and prevented further arrears in this sector. The ratio of pupils to full-time equivalent teachers increased to over 14 and teacher salaries increased by 65 percent in 2005, by 16.1 percent in 2006, and by 27.0 percent in 2007. In addition, the government developed a strategy on early childhood education and options for its piloting in two marzes. The government has also made initiatives to carry out the three year implementation plan for higher education reforms. Despite these improvements, there is scope for further reforms in education, including adoption of new curricula for upper secondary education in the framework of the high school consolidation program, strengthening the strategy for teacher education and ongoing professional development,

introduction of new mechanisms of higher education financing and establishment of a national quality assurance framework, enhancement of standards for higher education to make it more responsive to employers' needs, improving preschool systems and increasing enrollment rate, and strengthening monitoring and financial reporting of the noncommercial organizations (NCOs) in the education sector.

7. The government adopted the hospital master plan for Yerevan in late 2002. As a result, the remaining public hospitals in Yerevan were to be merged into smaller number of hospital networks with necessary steps to be taken to restructure them. The government adopted a decree on November 21, 2003, identifying the configuration of ten hospital networks through consolidation of twenty-four public hospitals and thirteen outpatient health care institutions. Directors for nine of these hospital networks have been appointed. While the hospital merger process is being implemented, introduction of further appropriate adjustments is required. In addition, in 2006 the Government adopted a regional hospital optimization/modernization plan, aimed at improving efficiency and productivity of outpatient services in regions. The consolidation of regional hospitals in smaller networks is in the process. The medium-term action plan for improving financial management accounting and reporting for the public hospitals was adopted by the government to prepare new reporting and accounting procedures and cost accounting manuals.

8. Implementation progress has been satisfactory and about 200 hospital accountants have been trained in new accounting procedures. All public hospitals use updated financial management and accounting procedures. The government cleared all accumulated arrears in the health sector. Furthermore, the level of public financing in health sector has been continuously increasing as projected under the MTEF. The government also adopted a decision to introduce further reforms in the Basic Benefit Package in the health sector. The Government strategy for increasing revenues in the short term is to not expand the benefits package but to raise the reimbursement rates to reduce the gap with the cost of services. The government undertook measures for increasing financing of the Primary Health Care in order to secure access to quality basic health services, in particular for the poor and in rural areas. Further reforms are needed in increasing the population overall health status, reducing child and maternal mortality, increasing use of healthcare system by rural and low-income groups, monitoring public health and promoting better health behavior, and strengthening monitoring and financial reporting of the noncommercial organizations (NCOs) in the health sector. The government developed the national strategy on combating non-communicable diseases and plans to take necessary steps to address the public health threats from non-communicable diseases through development and implementation of specific priority programs on non-communicable diseases and through allocation of adequate public resources in the health care budget.

## **E. Social Protection and Insurance**

9. Since 1999, the government has been replacing a range of fragmented cash and non-cash benefits and privileges with better-targeted transfers to families. The government has been supported by the World Bank to complete several important steps to enhance its capacity for administration of transfers to families, including: (i) re-registration of poverty benefit recipients; (ii) beneficiary assessment of the existing benefits; and (iii) establishment of a central database for poverty benefit recipients. Data from the recent household survey suggest that the system of benefits and transfers to the poor has become an efficient instrument for reducing extreme poverty. The government introduced differentiation of benefits within the family poverty benefits. Continued efforts are needed to ensure the adequacy of the level and administrative capacity of the social protection systems to guarantee coverage of transfers to people with special needs.

10. The Government of Armenia is in the process of designing a new pension system. In August 2007 the Government prepared a new Draft Framework Law on Pension Reform in Armenia which defines benefits and beneficiaries of pillars zero and pillar one and the accumulation phase of the mandatory accumulation system. The draft pension reform concept would also involve the mandatory introduction of a second pillar for those above 30 years of age financed by an add-on contribution rate, a flat-benefit budget-financed first pillar and a universal zero-pillar for those that did not contribute to the system. Prior to the Law enactment, the fiscal and social impact of the selected design of the pension system is being assessed and compared to alternative solutions. A Pension Task Force has been established in the Government to analyze these issues.

## **II. LENDING**

11. World Bank lending to Armenia as of October 31, 2007 totals US\$ 1,042 million, of which US\$972 million has been disbursed. The current Bank portfolio consists of 19 IDA credits and 2 GEF projects, for a total commitment of \$325 million, of which \$188 million is disbursed. All projects in the Bank's portfolio are rated as satisfactory. In March 2007 three new operations (Health II, Judicial II and PRSC3) for a total of \$73 million were approved. In FY08, one investment operation—Irrigation Development: Additional—was approved in July 2007 for \$5 million and one development policy operation—PRSC-IV for \$18.5 million—is scheduled for the Board in November 2007.

12. Building on the major Poverty Reduction Strategy Paper's (PRSP) themes, the fourth Country Assistance Strategy (CAS) for Armenia was discussed in the World Bank Board of Executive Directors on June 10, 2004 and focuses on three main objectives of: (i) promoting private sector led economic growth; (ii) making growth more pro-poor; and (iii) reducing non-income poverty. CAS PR (Progress Report) was approved by the Board on March 8, 2007 and reconfirmed this focus. Pursuant to agreements reached in the context of IDA-14,

country resource envelopes are determined annually based on the Country Policy and Institutional Assessments and performance of the ongoing portfolio. Armenia has a very strong IDA performance rating and as a consequence was eligible for about \$60 million per year in FY06-08. Based on a 2006 review of Armenia's creditworthiness, Armenia will now be eligible to receive a small amount of IBRD lending beginning in FY08, although it is not yet decided whether to do so.

13. The CAS includes four Poverty Reduction Support Credits (PRSCs) for FY05, 06, 07, and 08. These will support the PRSP objectives and focus on four main components: (i) supporting private sector development and governance; (ii) advancing public infrastructure reforms; (iii) improving core public sector functions; and (iv) enhancing human development and improving social safety nets. Macroeconomic stability is a precondition for the PRSC and is vital for facilitating an enabling environment necessary for successful structural reforms implementation. The PRSC's preparation is being closely coordinated with the IMF Poverty Reduction and Growth Facility (PRGF). The first PRSC was approved by the World Bank Board on November 18, 2004, became effective and disbursed in December 2004. The second PRSC in the amount of \$20 million equivalent was approved by the World Bank's Board on January 19, 2006 and fully disbursed in April 2006. The third PRSC in the amount of USD\$28 million was approved by the Board on March 8, 2007 and is scheduled to be disbursed by the end of FY07. The fourth PRSC in the amount of US\$18.5 million is currently scheduled for Board presentation in November 2007.

List of World Bank Lending to Armenia  
(In millions of U.S. dollars)

Active Projects	Credit Amount as of 03/31/07	Disbursement as of 10/31/07	Approval Date	Closing Date
<b><i>Active Projects</i></b>	<b>324.9</b>	<b>187.6</b>		
1. Irrigation dam safety	26.6	25.6	06/24/99	12/31/08
2. Irrigation development	29.9	30.9	08/30/01	03/31/09
3. Social protection admin.	5.2	3.2	06/10/04	12/31/07
4. Natural resource management	8.3	7.9	06/04/02	01/31/09
5. Natural resource management (GEF)	5.1	1.5	06/04/02	01/31/09
6. Educ. qual. & relevance (APL #1)	19.0	11.6	01/20/04	11/30/08
7. Municipal water and WW	23.0	17.8	05/04/04	02/28/09
8. Health system mod.	19.0	14.2	06/10/04	06/30/09
9. Irrigation dam safety 2	6.8	3.4	06/10/04	03/31/09
10. Public sector mod.	10.2	3.0	05/04/04	03/31/09
11. Rural Enterprise & small scale	20.0	6.6	07/07/05	05/31/10
12. Urban Heating Project	15.0	7.3	07/12/05	06/30/10
13. Yerevan water/waste water services	20.0	4.1	02/24/05	02/28/11
14. Renewable Energy Project	5.0	2.0	03/29/06	12/31/10
15. Renewable Energy Project (GEF)	3.0	2.6	03/29/06	12/31/10
16. Avian Influenza Prep. Project	6.3	2.4	06/02/06	07/31/09
17. SIF III	25.0	9.7	10/26/06	30/06/11
18. Health system mod (APL-II)	22.0	1.5	03/08/07	12/31/12
19. PRSC III	28.0	29.4	03/08/07	06/30/08
20. Judicial reform II	22.5	2.9	03/08/07	12/31/12
21. Irrigation Development - Additional	5.0	0.0	07/31/07	3/31/09
<b><i>Completed Projects</i></b>	<b>718.0</b>	<b>784.0</b>		
22. Economic rehabilitation	60.0	61.1	02/28/95	06/30/96
22. SAC	60.0	60.3	02/29/96	12/31/97
23. Institution building	12.0	10.7	03/30/93	11/30/97
24. Earthquake rehabilitation	28.0	28.4	02/01/94	06/30/97
25. Power maintenance	13.7	13.6	12/08/94	06/30/99
26. SAC II	60.0	67.7	08/26/97	06/30/99
27. SATAC I	3.8	3.0	02/29/96	06/30/00
28. Highway	31.0	32.0	09/14/95	12/31/00
29. Social Investment Fund	12.0	12.1	11/09/95	12/31/00
30. Irrigation rehabilitation	43.0	42.7	12/08/94	05/31/01
31. SAC III	65.0	72.5	12/22/98	06/30/01
32. Enterprise development	16.8	17.4	12/24/96	07/01/02
33. SATAC II	5.0	5.2	08/26/97	12/31/02
34. Education	15.0	17.4	11/20/97	10/31/02
35. SAC IV	50.0	60.3	05/22/01	03/31/03
36. Health	10.0	11.2	07/29/97	12/30/03
37. SAC V	40.0	47.4	03/13/03	06/30/04
38. Title registration	8.0	9.3	10/13/98	09/30/04
39. Transport	40.0	46.9	06/08/00	12/31/04
40. PRSC I	20.0	21.5	18/11/04	12/31/05
41. Agric. Reform support	16.3	18.6	01/27/98	06/30/05



42.	Social Investment Fund II	20.0	23.4	05/11/00	12/31/05
43.	Investment and export facilitation	1.0	1.3	04/16/02	12/31/05
44.	Municipal development	30.0	35.0	06/11/98	01/31/06
45.	PRSC II	20.0	22.1	01/19/06	06/30/07
46.	Enterprise incubator	5.0	5.9	11/30/01	12/31/06
47.	Judicial reform	11.4	13.4	09/14/00	12/31/06
48.	Electric. Trans. & dist.	21.0	23.6	03/04/99	06/30/07
	<b>Total</b>	<b>1 042.9</b>	<b>971.6</b>		

**ANNEX III. ARMENIA: RELATIONS WITH THE EUROPEAN BANK FOR  
RECONSTRUCTION AND DEVELOPMENT (EBRD)**  
(As of August 31, 2007)

1. As of August 31, 2007, the EBRD approved 35 projects in the power, transport, agribusiness, textile, mining, construction and financial sectors. Total commitments amounted to EUR 192.9 million.

There are three sovereign projects. First, the EBRD approved a sovereign guaranteed loan of EUR 54.8 million for construction of the Hrazdan Unit 5 thermal power plant in March 1993, partly aimed at the eventual closure of Armenia's nuclear plant in Medzamor. The government is contemplating the privatization of Hrazdan Unit 5 as the completion of this plant is constrained by limited budgetary resources. The EBRD had funded technical assistance for the Hrazdan privatization prospectus and continues to follow the privatization process. The Hrazdan Thermal Power Complex excluding the unfinished Unit 5 has been transferred to the Russian Federation in the context of the debt-for-equity deal. Second, in November 1994, the agreement on a EUR 21.8 million loan to build an air cargo terminal in Zvartnots airport was signed under a guarantee by the Armenian government. The airport was transferred to private management in 2002. The new management has prepared a master plan for the development of the airport, which is expected to generate further cargo traffic for the cargo terminal. Third, the EBRD approved a 7 mill EUR loan to the State Committee for Water Systems, owner of the water and wastewater assets located in the small municipalities outside of Yerevan, in April 2007. The proceeds of this loan will be used to improve wastewater treatment in five municipalities located near Lake Sevan.

2. Most of the Bank's projects in Armenia are in the private sector. The EBRD has provided a loan to the Yerevan Brandy Company owned by Pernod Ricard of France (EUR 16.5 million). In the banking sector, a first equity participation in the Commercial Bank of Greece-Armenia (EUR 1.1 million) was approved in late 1999 and a second equity participation in Arneconombank was approved in 2004. The Bank also acquired an equity stake in an Armenian non-bank financial intermediary, CIRCO, an insurance subsidiary of Cascade Capital. Moreover, a multi-bank on-lending facility of EUR 10 million was activated in early 2000. Within the framework of multi-bank facility the Bank currently has credit lines for micro and small enterprises with three local banks (a total of EUR 8.0 million). The EBRD is committed to further expanding lending under this facility to other banks. A Trade Facilitation Program with the purpose to facilitate access of Armenian banks to trade financing was also made available to four Armenian banks. In 2002, a loan to finance EUR 2.9 million in working capital expansion was signed with the Armenian Copper Programme (the only copper smelter in the region), and a new loan (EUR 4.3 million), including the refinancing of the existing loan, was signed in August 2004. Moreover, the EBRD has launched the Turn Around Management (TAM) and Business Advisory Service programmes in Armenia in 2003, originally funded by the EU-Tacis program but now funded from the ETC Fund, to support micro, small, and medium-sized enterprises. There were seven new projects completed during 2004 for a total amount of EUR 6.7 million. Two of them are in the banking sector (including equity investment), one in general industry sector (direct investment in equity of a local enterprise), one pre-export finance facility with a local company in the extractive industry and

three trade facilitation programmes with local commercial banks. Commitments during 2005 include a trade facilitation project with a local bank, two direct lending facility with a small hydro power plant and gold mining company, three new SME loans, three equity investment projects with a pharmaceutical company, plastic preform manufacturer (under Direct Investment Facility), an insurance and reinsurance company, and two medium-sized co-financing facility allowing local banks to share the risk of their selected clients with EBRD. During 2006 the EBRD signed 2 projects with the total commitments of Euro 20 million one of them a on-lending long-term loan to support renewable energy projects and the other one to Armenian International Airports CJSC to complete the construction of a new international passenger terminal.

3. The key priorities of the EBRD for the coming years are: (i) financial sector; (ii) enterprise sector, particularly SME and micro-enterprise financing through credit lines to Armenian banks or direct loans and equity investments, (iii) infrastructure investments in the development of alternative energy sources and municipal infrastructure projects and (iv) portfolio monitoring and implementation support. The EBRD's current country strategy was approved in February 2006.

#### ANNEX IV. ARMENIA: STATISTICAL ISSUES

1. While data provided for surveillance are adequate overall, further improvements are needed in real, fiscal, and external sector statistics in order to facilitate enhanced design and monitoring of economic policies. The overall quality, timeliness, and coverage of macroeconomic statistics have improved significantly over the past few years. The Fund has substantially facilitated this process, through technical assistance from the Statistics Department, the Fiscal Affairs Department, and the Monetary and Capital Markets Department. On November 7, 2003 Armenia subscribed to the Special Data Dissemination Standard (SDDS). The Data ROSC mission planned for February-March 2008 will prepare a detailed evaluation of macroeconomic statistics.
2. National **accounts and price statistics.** The National Statistics Service (NSS) has made significant changes to the national accounts methodology to bring it in line with best international practices. Progress has been made in developing estimates of monthly and (constant price) quarterly GDP that are now published. Basic data collection procedures have also improved. The national accounts have adopted the concept of gross value added using transaction prices mostly recorded on an accrual basis. Presently the NSS is introducing national accounts estimates compatible with the European System of Accounts-95 and the *SNA 1993*. The first step in this direction was to group and publish value added indicators by A3, A6, A17 and A60 codes of the EU nomenclature of economic activities (NACE).
3. GDP is compiled at current prices, at comparable prices of the previous year and at average annual base year (1998). Data are re-estimated in comparable prices of the previous year using the double deflation method. Comparable prices are based on indices of physical volumes, price indices and extrapolation. Indicators used in these cases are the number of employees, or other volume indicators which characterize the activity of the branch. GDP at constant prices is computed at average annual 1998 year prices, but the NSS plans to change the base year to 2005. There is some concern that adequate use is not being made of price deflators for volume series, with undue reliance on volume extrapolation. The quarterly data at average annual prices are derived through deflation using quarterly price indices (by branches and components).
4. The CPI covers 11 large population centers and the capital city. The CPI has recently benefited from new 2005 weights. The NSS compiles a ten-day and monthly CPI, though the former is not published in advance and is disseminated with the monthly index.
5. Fiscal **statistics.** The budget execution reporting system is compiled on a cash basis and supplemented with monthly reports on arrears and quarterly reports on receivables and payables. Daily revenue and cash expenditure data for the central government are available with a lag of one to two days. The Ministry of Finance is undertaking a comprehensive reform of the treasury system, including the introduction of an internal auditing system in

line ministries and their budgetary institutions. A single treasury account (TSA) was introduced in 1996, and all bank accounts held by budgetary institutions were closed, except for Project Implementation Units that are required by donors to operate with commercial banks' accounts. Starting in 2002, some budgetary institutions have been converted into "noncommercial organizations" (NCOs). These units have been taken out of the treasury system and have their own bank accounts but report data on cash flows and balances to the Ministry of Finance since 2003. These exceptions notwithstanding, all government receipts and payments are processed through the TSA, although there are still shortcomings on the timeliness and quality of data on the operations of local governments. Classification of government transactions by function and economic category are generally in line with the *Manual on Government Finance Statistics 1986*, and monthly data on central government operations are disseminated one month after the reporting period.

6. By law, expenditures are classified and presented in the budget in accordance with the *1986 GFSM*, but the Ministry of Finance is working to implement the *2001 GFSM*. The budget presentation and the classification of items under the economic and functional classification of expenditures needs to be made more transparent; for instance, the data have been subject to frequent reclassifications, and wages for military personnel are reported in the broader category of "other" goods and services rather than as a wage item. The reconciliation of central government with general government operations is done by the NSS in cooperation with the Ministry of Finance.

7. The authorities submitted cash data, converted to the framework of the *Government Finance Statistics Manual 2001*, for publication in the *2007 Government Finance Statistics Yearbook*. The authorities began providing data for publication in the *IFS* in July 2007. The *GFSM 2001* implementation plan is currently limited to bringing the classification of budgetary central government revenue, expense, and transactions in nonfinancial assets in line with international practices.

8. **Money and banking statistics.** Money and banking statistics are provided on a timely basis. Daily data on the accounts of the Central Bank of Armenia (CBA) are provided weekly with a one-day lag, while weekly data on the monetary survey are provided with a one-week lag. Monthly interest rate data are provided with an one-week lag. A new chart of accounts meeting International Accounting Standards (IAS) was introduced in January 1998. Since then, the balance sheets of the CBA and of the deposit money banks follow IAS methodology.

9. Responding to a STA request, the CBA has compiled and submitted a complete set of monetary data beginning from December 2001 using Standardized Report Forms (SRF). STA validated the resulting monetary aggregates and the data have been published in the December 2006 issue of *IFS Supplement*.

10. **External sector statistics.** The coverage of external sector data has improved in recent years. Trade statistics are provided on a timely basis, and trade data by origin, destination, and commodity are generally available within a month. Price data for exports and imports are less readily available. The NSS plans to implement by end-2007 monthly price indexes for imports and exports. Quarterly balance of payments data are generally available with a three-month lag. However, on remittances, which account for a significant part of the inflows, there are considerable discrepancies among available source data. Survey data are considerably lower than data obtained through the money transfer system. The NSS and CBA are working on establishing a compilation program that would enable proper measurement of remittances by end-2007. The absence of a comprehensive, continuously updated business register hampers the coverage of transactions and institutional units; in particular, the coverage of the financial account items for the private sector, excluding banks.

11. Quarterly data on international investment position is published by the NSS within one quarter after the reporting period, and the annual data within two quarters. These data are also provided by the NSS for publication in IFS, as well as placed in the National Summary Data Page and the official website <http://www.armstat.am/arm/Publications>.

**Armenia: Table of Common Indicators Required for Surveillance**  
(As of October 30, 2007)

	Date of latest observation	Date received	Frequency of Data <sup>6</sup>	Frequency of Reporting <sup>6</sup>	Frequency of publication <sup>6</sup>
Exchange Rates	Sept 2007	10/12/2007	D	M	M
International Reserve Assets and Reserve Liabilities of the Monetary Authorities <sup>1</sup>	Aug. 2007	10/2/2007	D	M	M
Reserve/Base Money	Aug. 2007	10/15/2007	D	M	M
Broad Money	Aug. 2007	10/15/2007	M	M	M
Central Bank Balance Sheet	Aug. 2007	10/15/2007	D	M	M
Consolidated Balance Sheet of the Banking System	Aug. 2007	10/15/2007	M	M	M
Interest Rates <sup>2</sup>	Sept 2007	10/15/2007	W	M	M
Consumer Price Index	Aug. 2007	9/27/2007	M	M	M
Revenue, Expenditure, Balance and Composition of Financing <sup>3</sup> — General Government <sup>4</sup>	Q2 05	8/28/05	Q	Q	Q
Revenue, Expenditure, Balance and Composition of Financing <sup>3</sup> — Central Government	Q4 06	7/17/07	M	M	M
Stocks of Central Government and Central Government-Guaranteed Debt <sup>5</sup>	Q2 05	8/31/05	Q	Q	Q
External Current Account Balance	Q1 07	7/20/2007	Q	Q	Q
Exports and Imports of Goods and Services	Q4 06	04/05/2007	Q	Q	Q
GDP/GNP	Q2 07	9/27/2007	M	Q	Q
Gross External Debt	Q1 05	6/30/05	Q	Q	Q

<sup>1</sup> Includes reserve assets pledged or otherwise encumbered as well as net derivative positions.

<sup>2</sup> Both market-based and officially determined, including discount rates, money market rates, rates on treasury bills, notes and bonds.

<sup>3</sup> Foreign, domestic bank, and domestic nonbank financing.

<sup>4</sup> The general government consists of the central government (budgetary funds, extra budgetary funds, and social security funds) and state and local governments.

<sup>5</sup> Including currency and maturity composition.

<sup>6</sup> Daily (D), Weekly (W), Monthly (M), Quarterly (Q), Annually (A), Irregular (I); and Not Available (NA).

INTERNATIONAL MONETARY FUND

REPUBLIC OF ARMENIA

**Joint IMF/World Bank Debt Sustainability Analysis**

Prepared by the staffs of the International Monetary Fund and  
The International Development Association

November 9, 2007

*The IMF-World Bank staffs' debt sustainability analysis (DSA) suggests that Armenia is at a low risk of debt distress, with all debt indicators well below the relevant country-specific debt-burden thresholds. However, the envisaged increase in pension liabilities will worsen public debt dynamics and, if not addressed, could eventually weaken long-term debt sustainability. The analysis highlights the importance of continued sound macroeconomic policies and structural reforms for safeguarding the favorable debt outlook.*

1. The DSA was prepared jointly by Fund and World Bank staffs in consultation with the authorities, using the joint Bank-Fund Low-Income Country Debt Sustainability Framework.<sup>1</sup> Macroeconomic assumptions underlying the baseline scenario are consistent with the framework presented in the staff report for the fifth review under the PRGF (Box 1). The external debt data used for this exercise were updated by staffs based on information provided by the authorities and multilateral institutions. In addition to a menu of standard alternative scenarios and bound tests, Armenia's debt outlook is also stress-tested under a scenario of a sharp increase in Armenia's gas import prices.

**Structure of debt**

2. Armenia's external debt stock as of end-2006 is estimated at \$1,448 million (23 percent of GDP), mostly represented by public and publicly guaranteed (PPG) debt owed

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<sup>1</sup> The most recent assessment of Armenia's debt sustainability was conducted in November 2006 in the context of Article IV Consultations and Third Review Under the Three-Year Arrangement Under the Poverty Reduction and Growth Facility (See Country Report No. 06/433).



### **Box 1. Macroeconomic Assumptions for the DSA Baseline Scenario, 2007–27**

Annual real GDP growth is projected to average around 7 percent over the medium term, gradually declining to its long-run rate of 4 percent. The near-term growth is supported by the robust activity in construction and services, on the back of continued private transfers and FDI inflows.

Consistent with the CBA's target, the average inflation rate is assumed to be around 4 percent in the long-run. The near-term inflation is projected to be higher, largely on account of higher food and energy prices.

The external current account deficit is projected to average around 4 percent of GDP over the DSA projection period. Somewhat higher deficits are envisaged in the near term, against the background of strong import growth. Exports are projected to grow robustly over the medium term, as new investments in base metal, minerals, and food processing sectors become operational. Private transfers will grow strongly in the near term, financing a significant share of the trade deficit, but will gradually moderate thereafter.

In 2007–12, net FDI is expected to average about 4.5 percent of GDP, gradually moderating from the high levels explained by the privatization in base metal and mineral sectors. In the near term, FDI is expected to be concentrated mostly in these two traditional sectors, but also in food processing, telecommunication, banking, and energy sectors. Improvements in the business climate, however, should yield a more diversified FDI structure, with new investment going into new industries (e.g., tourism and IT sector). The long-run net FDI is projected to average around 3 percent of GDP.

Central government revenues (excluding grants) are projected to gradually increase from 16.7 percent of GDP in 2007 to 17.8 percent of GDP in 2012, and will continue to improve over the long run.

The overall fiscal deficit, including the balance of the State Fund for Social Insurance, is projected at about 3 percent of GDP in 2007 and 2008, reflecting the fiscal costs of the envisaged pension increases and the current gas subsidy. Consistent with the government's program, basic pensions are assumed to increase to 1.5 times the poverty line by 2012 and remain at that level thereafter. The baseline does not envisage an introduction of a funded pillar to the pension system. The baseline also assumes that the current subsidy will be allowed to expire and no new subsidy will be introduced, resulting in a lower fiscal deficit in 2009 and beyond (about 2 percent of GDP), and that the import prices for gas will increase in 2009 from their current level of \$110 to \$170 per 1,000m<sup>3</sup>.

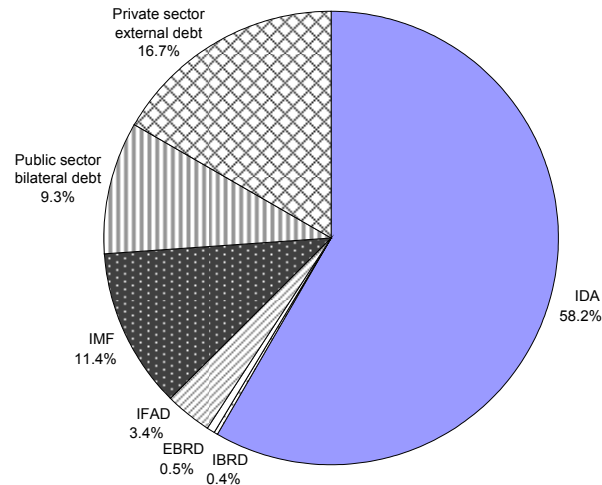
The level of concessionality of new external borrowing is envisaged to decline in the future, as Armenia's income increases. The projected disbursements from the World Bank—Armenia's largest creditor, accounting for about 60 percent of country's total external debt stock as of end-2005—assume that starting from 2009 Armenia will begin receiving IBRD loans in addition to IDA credits, gradually shifting to exclusively IBRD disbursements by 2017. Starting 2007, IDA repayment terms are hardened, with the maturity period shortened to 20 years. This reflects the fact that Armenia's per capita income exceeded the IDA eligibility threshold for two consequent years. Unidentified residual lending for 2009 and beyond is assumed to be on EBRD terms.

Consistent with the authorities' intention, deficit financing is assumed to be increasingly financed by domestic, rather than external, borrowing. Residual borrowing from domestic sources reduces risks associated with currency mismatch of debt portfolio and contributes to deepening of domestic financial markets.

The private sector external debt stock in 2006 is estimated as the difference between Armenia's long-term total external debt and government's external debt. The new external borrowing by the private sector is assumed to match the balance of payments' conservative assumption on commercial banks' inflows of about 1 percent of GDP per annum. As the terms of Armenia's private sector borrowing are unknown, they are assumed to be similar to those in other comparable countries. Specifically, the maturity period is assumed to be 6 years (with a 1 year grace period) and the interest rate is set at 8 percent—a compromise between the interest rate on U.S. dollar-denominated sovereign bonds of similar maturity in Russia and Ukraine (about 6.5 percent), and the ongoing lending rate in U.S. dollars charged by Armenian banks on long-term loans (about 15–17 percent). To the extent that most of this lending is likely to be from foreign banks to their Armenian subsidiaries, this relatively low interest rate assumption is justified.

to multilateral international organizations (Figure 1).<sup>2</sup> The outstanding debts of the government to the World Bank and to the Fund account for 59 percent and 11 percent of total external debt stock, respectively. Armenia's private sector external debt outstanding accounts for about 17 percent of total external debt.

Figure 1. Armenia's External Debt Stock, end-2006



3. The external debt outlook improved considerably in 2006. Prudent debt management, combined with favorable exchange rate dynamics and robust economic growth, contributed to a decline in the external debt ratio from 27 percent of GDP in 2005 to 23 percent of GDP in 2006.

4. The share of domestic debt in the stock of public and publicly guaranteed debt is rather small, reflecting the small size of domestic debt markets. In 2006, the PPG debt owed to domestic creditors accounted for only about 2 percent of GDP, virtually unchanged from the year before.

### The baseline scenario

5. The baseline scenario shows that the fiscal position remains sustainable, but the upward trend in debt ratios is a concern (Table 1, Figure 2). The planned increases in domestic debt issuance and—notably—in basic pensions generate medium and long term liabilities, bringing the net present value of public sector debt to 39 percent of GDP in 2027, from 12 percent of GDP in 2007. The debt service-revenue ratio is projected to increase moderately from 5.5 percent in 2007 to 11 percent in 2026, reflecting continued buoyancy of fiscal revenues in the long term.

<sup>2</sup> In contrast to the DSA in the World Bank's PRSC IV documents (Annex IV), the current exercise covers the central government and the State Fund for Social Insurance. Other public sector debt is believed to be negligible.

6. The external debt outlook remains benign, notwithstanding a notable moderation in external concessional financing (Table 3, Figure 3). The net present value of external debt falls only moderately from 12 percent of GDP in 2007 to 8 percent of GDP in 2027, reflecting a gradual increase of the share of the deficit financed by domestic sources and increasingly greater importance of external borrowing by the private sector. While Armenia's reliance on external financing gradually diminishes, the borrowing terms are projected to harden, resulting in a moderate increase of the external debt service in percent of exports to about 9 percent over the long term. The net present value of public external debt in percent of exports falls from 47 percent in 2007 to 24 percent in 2027.

### **Stress testing**

7. The standard menu of alternative scenarios and bound tests indicate that Armenia's public debt outlook is particularly sensitive to a lasting shock to economic growth and increases in debt-creating flows (Table 2).<sup>3</sup> Under the extreme scenarios considered, Armenia's debt ratios exceed relevant thresholds, highlighting the critical importance of steady progress on the "second generation" structural reform agenda. More generally, the stress tests indicate that all public debt ratios show an upward trend through the projection horizon, reinforcing the importance of continuing with prudent policies and preserving macroeconomic stability in order to safeguard the debt outlook.

8. Armenia's public debt outlook is sensitive to an increase in debt-creating flows. The staffs also considered the possible impact on debt sustainability of a "significant" fiscal event, such as the introduction of a funded pillar in the pension system. If such an event were to occur in 2008 and would cost around 10 percent of GDP, the net present value of public debt to GDP ratio in 2027 would rise to about 44 percent, as compared with 39 percent under the baseline.

9. Armenia's external debt outlook is robust to a variety of shocks (Table 4). Under all alternative scenarios and bound tests, the external debt ratios remain well below the relevant thresholds. Nevertheless, the outcome of a scenario reflecting gas import prices increasing to the regional level (Box 2) highlights the sensitivity of Armenia's balance of payments to a long-lasting deterioration in the terms of trade. Under this scenario, the net present value of public external debt in percent of exports—while still remaining manageable—rises from 47 percent in 2007 to 60 percent in 2017 but falls only moderately thereafter. This is in a marked contrast with a gradual decline in the corresponding ratio envisaged under the baseline scenario.

10. The authorities welcomed the finding that Armenia is at a low risk of debt distress. Sound debt management continues to be a priority for the government. Since 2001, the

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<sup>3</sup> The framework for low-income country DSA incorporates alternative scenarios and bound tests aimed at identifying the sensitivities of the baseline projection to a range of potential shocks.

Ministry of Finance and Economy has produced an Annual Report on Public Debt of Armenia, covering both domestic and external debt. This publication reports on the evolution of debt aggregates and the government's debt management strategy. The authorities also informed the staff about the progress made in improving monitoring of the private sector's external borrowing.

### Box 2. Alternative Scenario: Gas Price Increase in 2009

The alternative scenario considers the macroeconomic implications of bringing gas import prices to the level currently paid by Armenia's neighboring countries. The price increase (from the baseline assumption of \$170 to \$235 per 1,000m<sup>3</sup>, the price offered by Gazprom to Armenia's neighboring countries) is assumed to come in effect in 2009, upon the expiration of the current delivery contract.

- The scenario assumes that the current subsidy will be allowed to expire in 2008, raising the final consumers' tariffs to a level consistent with the current gas import price (\$110 per 1,000m<sup>3</sup>).
- The new gas import price (\$235 per 1,000m<sup>3</sup>) is assumed to be gradually passed through to consumers by end-2011, with the difference subsidized by transfers from the budget.

The macroeconomic implications caused by the hike in gas import prices are projected to be significant (see Table):

- Real GDP growth over the medium term will be lowered by about 1 percent and adjustments in final consumers' tariffs will significantly worsen the inflation outlook.
- Assuming inelastic demand for gas, higher final consumer tariffs will have only moderate impact on gas volume consumptions but will encourage improvements in efficiency and conservation over time.
- Imports will surge as the gas import bill more than doubles in 2009, resulting in a significant deterioration in the trade balance. The nominal exchange rate is assumed to depreciate moderately on account of continued appreciation pressures arising from robust foreign exchange inflows.
- While sizeable reserves minimize the initial balance of payments implications of the higher import bill, it is assumed that reserves will stay around 3–4 months of imports in the long term, with the additional external borrowing computed as a residual.
- The fiscal impact of the new subsidy is estimated to be 2.4 percent of GDP in 2009, and rapidly declining thereafter. The deterioration in the overall fiscal balance is assumed to be financed exclusively by domestic borrowing, with no new external borrowing assumed.

Macroeconomic Implications of the Gas Price Increase

	2007	2008	2009	2010	2011	2012	2013
Change relative to the baseline:	(in percent, unless indicated otherwise)						
Real GDP growth	0.0	0.0	-1.0	-1.0	-0.5	-0.5	0.0
CPI inflation	0.0	0.0	1.5	1.5	1.0	0.5	0.0
AMD/US\$ rate	0.0	0.0	2.3	2.4	1.0	0.5	0.0
Gas volume consumption	0.0	0.0	-5.0	-5.0	-5.0	0.0	0.0
Gas consumption efficiency gain	0.0	0.0	2.0	3.0	4.0	5.0	6.0
Transfers from the budget, percent of GDP	0.0	0.0	2.4	1.4	0.6	0.0	0.0
Gas import bill, US\$ million	0.0	0.0	110.0	101.2	92.1	87.5	82.2
Assumptions on gas prices and tariffs:	(in US\$/1,000m <sup>3</sup> )						
Gas import price	110	110	235	235	235	235	235
Average tariff for final consumers	120	123	182	232	282	330	330
Average subsidy	57	59	148	98	48	0	0

Source: Fund staff estimates.

Table 1. Armenia: Public Sector Debt Sustainability Framework, Baseline Scenario, 2004-2027  
(In percent of GDP, unless otherwise indicated)

	Actual					Estimate					Projections		
	2004	2005	2006	Historical Average 5/	Standard Deviation 5/	2007	2008	2009	2010	2011	2012	2007-12 Average	2017
<b>Public sector debt 1/</b>	32.6	24.2	18.7	37.6	12.7	17.8	19.5	20.0	21.2	22.3	23.3	20.7	27.9
Of which: foreign-currency denominated	30.4	22.1	16.5	34.4	11.6	15.7	14.5	13.6	13.4	13.1	12.7	13.8	11.3
Change in public sector debt	-8.3	-8.4	-5.5	-4.1	4.6	-0.9	1.7	0.5	1.2	1.1	1.0	0.8	0.9
Identified debt-creating flows	-8.7	-4.5	-4.5	-3.9	5.1	1.2	1.7	0.5	1.2	1.1	1.0	1.1	0.9
Primary deficit	1.3	1.9	2.1	1.8	1.6	2.3	2.9	2.5	2.5	2.3	1.9	2.4	1.5
Revenue and grants	15.5	15.7	15.8	16.7	1.2	17.5	17.4	17.4	17.5	17.8	18.2	17.6	20.0
Of which: grants	0.5	0.4	0.5	1.5	1.3	0.9	1.1	0.7	0.5	0.5	0.4	0.7	0.3
Primary (noninterest) expenditure	16.8	17.7	17.9	18.5	1.4	19.9	20.3	19.9	20.0	20.1	20.1	20.1	21.5
Automatic debt dynamics	-10.0	-6.5	-7.1	-5.3	4.5	-2.3	-2.5	-2.0	-1.4	-1.2	-0.9	-1.7	-0.6
Contribution from interest rate/growth differential	-4.3	-4.6	-3.2	-4.2	1.9	-1.9	-1.8	-1.5	-1.3	-1.1	-0.9	-1.4	-0.6
Of which: contribution from average real interest rate	-0.5	-0.5	-0.4	-0.2	0.3	0.0	-0.2	-0.1	0.0	0.1	0.1	0.0	0.4
Contribution from real GDP growth	-3.8	-4.1	-2.8	-4.2	1.2	-1.9	-1.6	-1.4	-1.3	-1.2	-1.1	-1.4	-1.0
Other identified debt-creating flows	-5.7	-1.9	-3.9	-1.1	3.4	-0.5	-0.7	-0.5	-0.1	-0.1	0.0	-0.3	...
Privatization receipts (negative)	0.0	0.0	0.6	-0.4	0.9	1.2	1.2	0.0	0.0	0.0	0.0	0.4	0.0
Recognition of implicit or contingent liabilities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Debt relief (HIPC and other)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other (Central Bank recapitalization)	0.0	0.6	1.6	0.3	0.6	1.4	1.2	0.0	0.0	0.0	0.0	0.4	0.0
Residual, including asset changes	0.4	-3.9	-1.1	-0.2	2.6	-2.1	0.0	0.0	0.0	0.0	0.0	-0.3	0.0
<b>NPV of public sector debt</b>	...	17.6	13.5	15.6	2.9	11.2	13.3	14.5	15.9	17.3	18.7	15.1	24.7
Of which: foreign-currency denominated	...	15.5	11.3	13.4	3.0	9.0	8.2	8.1	8.1	8.2	8.2	8.3	8.2
Of which: external	9.3	15.5	11.3	13.4	3.0	9.0	8.2	8.1	8.1	8.2	8.2	8.3	8.2
NPV of contingent liabilities (not included in public sector debt)	...	...	...	...	...	...	...	...	...	...	...	...	...
Gross financing need 2/	4.3	3.8	3.4	4.3	2.2	3.5	3.9	3.6	3.8	3.6	3.4	3.6	3.4
NPV of public sector debt-to-revenue and grants ratio (in percent)	...	112.1	85.7	...	...	63.7	76.4	83.3	90.8	97.3	102.9	85.7	123.4
NPV of public sector debt-to-revenue ratio (in percent)	...	115.3	88.2	...	...	67.0	81.5	87.0	93.6	99.9	105.4	89.1	125.1
Of which: external 3/	61.7	101.5	73.9	...	...	54.1	50.6	48.8	47.7	47.1	45.9	49.0	41.4
Debt service-to-revenue and grants ratio (in percent) 4/	12.0	10.3	7.1	7.9	3.1	5.3	4.3	5.1	5.5	6.1	6.6	5.5	7.8
Debt service-to-revenue ratio (in percent) 4/	12.4	10.6	7.3	8.4	2.9	5.5	4.6	5.3	5.7	6.3	6.7	5.7	8.0
Primary deficit that stabilizes the debt-to-GDP ratio	9.6	10.4	7.6	9.2	1.4	3.2	1.3	2.0	1.4	1.2	0.9	1.6	0.6
<b>Key macroeconomic and fiscal assumptions</b>													
Real GDP growth (in percent)	10.1	14.5	13.3	11.5	3.1	11.1	10.0	8.0	7.0	6.0	5.0	7.9	4.0
Average real interest rate on domestic currency debt (in percent)	6.2	10.5	6.1	14.1	16.9	8.7	3.4	3.4	3.4	3.4	3.4	4.3	3.4
Real exchange rate depreciation (in percent, + indicates depreciation)	-16.8	-7.3	-20.4	-5.0	11.0	-3.3	...	...	...	...	...	...	...
Inflation rate (GDP deflator, in percent)	5.9	3.3	4.7	3.3	2.4	4.2	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Growth of real primary spending (deflated by GDP deflator, in percent)	1.5	20.4	14.7	6.9	9.7	23.4	12.4	6.1	7.4	6.6	5.0	10.2	5.9

Sources: Armenian authorities; and Fund staff estimates and projections.

1/ Refers to central government's gross debt. The central government balance is consolidated with the balance of the State Fund for Social Insurance.

2/ Gross financing need is defined as the primary deficit plus debt service plus the stock of short-term debt at the end of the last period.

3/ Revenues excluding grants.

4/ Debt service is defined as the sum of interest and amortization of medium and long-term debt.

5/ Historical averages and standard deviations are derived over the past 7 years.

Table 2. Armenia: Sensitivity Analysis for Key Indicators of Public Debt 2007-2027

	Projections							
	2007	2008	2009	2010	2011	2012	2017	2027
<b>NPV of Debt-to-GDP Ratio</b>								
<b>Baseline</b>	11	13	15	16	17	19	25	39
<b>A. Alternative scenarios</b>								
A1. Real GDP growth and primary balance are at historical averages	11	12	12	13	13	14	16	19
A2. Primary balance is unchanged from 2007	11	13	14	15	17	18	28	46
A3. Permanently lower GDP growth 1/	11	13	15	17	19	21	33	71
A4. Gas import prices increase to the regional level in 2009	11	13	17	20	22	24	31	45
<b>B. Bound tests</b>								
B1. Real GDP growth is at historical average minus one standard deviations in 2008-2009	11	14	15	17	18	20	27	42
B2. Primary balance is at historical average minus one standard deviations in 2008-2009	11	14	16	17	19	20	26	39
B3. Combination of B1-B2 using one half standard deviation shocks	11	13	14	16	17	18	24	38
B4. One-time 30 percent real depreciation in 2008	11	16	17	18	19	21	27	40
B5. 10 percent of GDP increase in other debt-creating flows in 2008	11	22	22	23	25	26	31	44
<b>NPV of Debt-to-Revenue Ratio 2/</b>								
<b>Baseline</b>	64	76	83	91	97	103	123	162
<b>A. Alternative scenarios</b>								
A1. Real GDP growth and primary balance are at historical averages	64	69	71	73	74	76	82	82
A2. Primary balance is unchanged from 2007	64	73	79	86	93	101	139	194
A3. Permanently lower GDP growth 1/	64	77	86	96	105	115	163	298
A4. Gas import prices increase to the regional level in 2009	65	79	103	119	132	139	157	190
<b>B. Bound tests</b>								
B1. Real GDP growth is at historical average minus one standard deviations in 2008-2009	64	79	86	95	102	108	133	177
B2. Primary balance is at historical average minus one standard deviations in 2008-2009	64	79	91	98	104	109	129	164
B3. Combination of B1-B2 using one half standard deviation shocks	64	75	81	89	96	101	122	160
B4. One-time 30 percent real depreciation in 2008	64	93	98	104	109	114	134	169
B5. 10 percent of GDP increase in other debt-creating flows in 2008	64	124	128	134	138	142	157	186
<b>Debt Service-to-Revenue Ratio 2/</b>								
<b>Baseline</b>	5	4	4	5	5	6	7	11
<b>A. Alternative scenarios</b>								
A1. Real GDP growth and primary balance are at historical averages	5	4	4	3	3	3	5	7
A2. Primary balance is unchanged from 2007	5	4	4	4	5	5	9	14
A3. Permanently lower GDP growth 1/	5	4	5	5	6	7	11	26
A4. Gas import prices increase to the regional level in 2009	5	4	5	6	7	8	9	13
<b>B. Bound tests</b>								
B1. Real GDP growth is at historical average minus one standard deviations in 2008-2009	5	4	5	5	6	6	8	12
B2. Primary balance is at historical average minus one standard deviations in 2008-2009	5	4	5	6	6	7	7	11
B3. Combination of B1-B2 using one half standard deviation shocks	5	4	4	5	5	6	7	10
B4. One-time 30 percent real depreciation in 2008	5	4	5	5	6	6	8	11
B5. 10 percent of GDP increase in other debt-creating flows in 2008	5	4	12	12	13	13	10	15

Sources: Armenian authorities; and Fund staff estimates and projections.

1/ Assumes that real GDP growth is at baseline minus one standard deviation divided by the square root of 20 (i.e., the length of the projection period).

2/ Revenues are defined inclusive of grants.

Table 3. Armenia: External Debt Sustainability Framework, Baseline Scenario, 2004-2027 1/  
(In percent of GDP, unless otherwise indicated)

	Actual			Projections										
	2004	2005	2006	Historical Average 6/	Standard Deviation 6/	2007	2008	2009	2010	2011	2012	2007-12 Average	2017	2027
<b>External debt (nominal) 1/</b>	33.3	27.3	22.7	38.4	8.0	18.3	16.5	16.4	16.4	16.4	16.3	16.7	15.2	9.7
<i>Of which: public and publicly guaranteed (PPG)</i>	33.3	22.4	18.9	37.5	9.6	15.6	14.1	13.7	13.4	13.2	12.8	13.8	11.4	6.2
Change in external debt	-5.8	-6.0	-4.6	-1.3	4.4	-4.4	-1.8	-0.1	0.0	0.0	-0.1	-1.1	-0.3	-0.5
Identified net debt-creating flows	-9.8	-10.4	-10.3	-0.1	8.7	-3.2	-1.9	-0.9	-0.3	-0.1	0.0	-1.1	-0.2	-0.4
<b>Non-interest current account deficit</b>	4.3	2.8	0.4	8.6	6.5	3.2	3.5	4.1	4.3	4.1	4.0	3.9	2.8	1.8
Deficit in balance of goods and services	14.9	13.2	15.8	23.0	6.8	17.2	17.5	18.4	18.3	18.0	17.6	17.8	15.7	12.2
Exports	27.7	27.3	21.8	24.5	4.6	19.2	18.0	18.1	17.8	17.8	17.7	18.1	18.0	18.5
Imports	42.6	40.5	37.6	47.5	6.1	36.3	35.4	36.5	36.2	35.8	35.3	35.9	33.7	30.6
Net current transfers (negative = inflow)	-9.3	-8.3	-10.9	-9.4	1.7	-10.0	-10.2	-10.7	-10.6	-10.4	-10.2	-10.3	-9.4	-7.5
<i>Of which: official</i>	-1.7	-1.4	-1.3	-4.0	2.8	-0.3	-0.2	-0.2	-0.1	-0.1	-0.1	-0.2	-0.1	0.0
Other current account flows (negative = net inflow)	-1.3	-2.0	-4.6	-4.4	2.2	-4.0	-3.7	-3.6	-3.5	-3.5	-3.5	-3.6	-3.4	-2.9
<b>Net FDI (negative = inflow)</b>	-6.1	-5.1	-5.3	-5.6	2.4	-5.3	-4.6	-4.4	-4.2	-4.0	-3.9	-4.4	-3.5	-2.8
<b>Endogenous debt dynamics 2/</b>	-8.0	-8.1	-5.4	-3.8	3.4	-1.1	-0.8	-0.6	-0.4	-0.2	0.0	-0.5	0.4	0.5
Contribution from nominal interest rate	0.3	1.1	1.0	0.9	0.4	0.8	0.7	0.6	0.6	0.7	0.7	0.7	1.0	0.9
Contribution from real GDP growth	-3.1	-3.5	-2.8	-3.1	1.3	-1.9	-1.5	-1.2	-1.0	-0.9	-0.8	-1.2	-0.6	-0.4
Contribution from price and exchange rate changes	-5.1	-5.7	-3.6	-1.5	2.7	...	...	...	...	...	...	...	...	...
<b>Residual (3-4) 3/</b>	3.9	4.4	5.7	-1.2	5.3	-1.2	0.1	0.8	0.3	0.2	-0.2	0.0	-0.1	-0.1
<i>Of which: exceptional financing</i>	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NPV of external debt 4/	...	...	15.1	15.1	...	11.7	10.7	10.8	11.0	11.4	11.6	11.2	11.9	7.9
In percent of exports	...	...	69.5	69.5	...	61.2	59.3	59.7	61.9	64.0	65.4	61.9	66.0	42.8
<b>NPV of PPG external debt</b>	...	...	11.3	11.3	...	9.0	8.2	8.1	8.1	8.1	8.1	8.3	8.2	4.4
In percent of exports	...	...	52.1	52.1	...	47.1	45.8	44.8	45.2	45.8	45.9	45.8	45.3	24.0
<b>Debt service-to-exports ratio (in percent)</b>	...	...	73.9	73.9	...	54.1	50.6	48.6	47.5	46.9	45.7	48.9	41.3	18.7
<b>PPG debt service-to-exports ratio (in percent)</b>	9.7	9.7	10.0	11.5	3.6	8.1	7.3	6.8	6.8	7.2	7.6	7.3	8.7	9.2
<b>PPG debt service-to-revenue ratio (in percent)</b>	9.7	4.6	4.2	10.4	4.7	3.1	2.8	2.6	2.5	2.6	2.6	2.7	2.4	3.3
<b>PPG debt service-to-revenue ratio (in percent)</b>	17.9	8.3	6.0	15.7	5.0	3.5	3.1	2.8	2.6	2.6	2.6	2.9	2.2	2.6
Total gross financing need (billions of U.S. dollars)	0.0	0.0	-0.2	0.1	0.1	0.0	0.0	0.1	0.2	0.2	0.2	0.1	0.2	0.3
Non-interest current account deficit that stabilizes debt ratio	10.1	8.8	5.0	10.5	4.6	7.5	5.3	4.2	4.3	4.1	4.1	4.9	3.2	2.3
<b>Key macroeconomic assumptions</b>														
Real GDP growth (in percent)	10.1	14.5	13.3	9.5	4.3	11.1	10.0	8.0	7.0	6.0	5.0	7.9	4.0	4.0
GDP deflator in U.S. dollar terms (change in percent)	15.0	20.5	15.0	5.3	8.8	21.4	10.2	3.0	3.4	2.4	2.4	7.1	2.4	1.5
Effective interest rate (percent) 5/	0.9	4.6	4.8	2.6	1.5	4.8	4.5	4.2	4.1	4.5	4.8	4.5	6.8	9.6
Growth of exports of G&S (U.S. dollar terms, in percent)	9.0	35.7	4.0	15.1	14.6	18.8	13.8	12.0	9.0	8.2	7.0	11.5	6.8	6.7
Growth of imports of G&S (U.S. dollar terms, in percent)	7.7	31.1	21.0	10.9	12.1	30.4	18.3	14.6	9.6	7.4	6.0	14.4	5.5	4.6
Grant element of new public sector borrowing (in percent)	...	...	...	...	...	48.4	42.5	43.1	40.1	31.5	27.1	38.8	14.6	14.6
Aid flows (in billions of U.S. dollars) 7/	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<i>Of which: Grants</i>	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0
<i>Of which: Concessional loans</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Grant-equivalent financing (in percent of GDP) 8/	...	...	...	...	...	1.6	1.8	1.3	1.1	0.8	0.7	1.2	0.4	0.2
Grant-equivalent financing (in percent of external financing) 8/	...	...	...	...	...	67.4	65.8	62.8	56.9	51.2	51.1	59.2	40.4	36.0
<b>Memorandum items:</b>														
Nominal GDP (billions of U.S. dollars)	3.6	4.9	6.4	2.9	1.6	8.6	10.4	11.6	12.9	14.0	15.0	12.1	20.5	38.3
(NPV:NPVt-1)/GDPE-1 (in percent)	0.8	1.0	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.6	0.6	0.8	0.4	-0.1

Source: Staff simulations.

1/ Includes both public and private sector external debt starting in 2005.

2/ Derived as  $(r - g - t(1+g))/(1+g+r)$  times previous period debt ratio, with  $r$  = nominal interest rate;  $g$  = real GDP growth rate, and  $t$  = growth rate of GDP deflator in U.S. dollar terms.

3/ Includes exceptional financing (i.e., changes in arrears and debt relief); changes in gross foreign assets; and valuation adjustments. For projections also includes contribution from price and exchange rate c

4/ Assumes that NPV of private sector debt is equivalent to its face value.

5/ Current-year interest payments divided by previous period debt stock.

6/ Historical averages and standard deviations are derived over the past 7 years.

7/ Defined as grants, concessional loans, and debt relief.

8/ Grant-equivalent financing includes grants provided directly to the government and through new borrowing (difference between the face value and the NPV of new debt).



Table 4. Armenia: Sensitivity Analyses for Key Indicators of Public and Publicly Guaranteed External Debt, 2007-27  
(In percent)

	Projections							2027
	2007	2008	2009	2010	2011	2012	2017	
<b>NPV of debt-to-GDP ratio</b>								
<b>Baseline</b>	9	8	8	8	8	8	8	4
<b>A. Alternative Scenarios</b>								
A1. Key variables at their historical averages in 2008-27 1/	9	10	10	10	10	10	9	6
A2. New public sector loans on less favorable terms in 2008-27 2/	9	9	9	9	9	9	10	7
A3. Gas import prices increase to the regional level in 2009	9	8	8	9	9	9	12	10
<b>B. Bound Tests</b>								
B1. Real GDP growth at historical average minus one standard deviation in 2008-09	9	8	8	8	8	8	8	4
B2. Export value growth at historical average minus one standard deviation in 2008-09 3/	9	9	9	9	9	9	9	5
B3. U.S. dollar GDP deflator at historical average minus one standard deviation in 2008-09	9	9	10	9	10	10	10	5
B4. Net non-debt creating flows at historical average minus one standard deviation in 2008-09 4/	9	11	13	13	13	13	11	5
B5. Combination of B1-B4 using one-half standard deviation shocks	9	11	12	12	12	12	11	5
B6. One-time 30 percent nominal depreciation relative to the baseline in 2008 5/	9	11	11	11	11	11	11	6
<b>NPV of debt-to-exports ratio</b>								
<b>Baseline</b>	47	46	45	45	46	46	45	24
<b>A. Alternative Scenarios</b>								
A1. Key variables at their historical averages in 2007-26 1/	47	56	56	56	56	54	51	33
A2. New public sector loans on less favorable terms in 2007-26 2/	47	48	49	51	52	53	55	36
A3. Gas import prices increase to the regional level in 2009	47	46	45	46	48	49	60	53
<b>B. Bound Tests</b>								
B1. Real GDP growth at historical average minus one standard deviation in 2008-09	47	46	45	45	46	46	45	24
B2. Export value growth at historical average minus one standard deviation in 2008-09 3/	47	50	54	54	55	55	52	27
B3. U.S. dollar GDP deflator at historical average minus one standard deviation in 2008-09	47	46	45	45	46	46	45	24
B4. Net non-debt creating flows at historical average minus one standard deviation in 2008-09 4/	47	60	73	72	72	71	63	29
B5. Combination of B1-B4 using one-half standard deviation shocks	47	55	59	59	59	59	54	26
B6. One-time 30 percent nominal depreciation relative to the baseline in 2008 5/	47	46	45	45	46	46	45	24
<b>NPV of debt-to-revenue ratio</b>								
<b>Baseline</b>	54	51	49	47	47	46	41	19
<b>A. Alternative Scenarios</b>								
A1. Key variables at their historical averages in 2007-26 1/	54	61	61	59	57	54	46	26
A2. New public sector loans on less favorable terms in 2007-26 2/	54	53	53	53	54	53	50	28
A3. Gas import prices increase to the regional level in 2009	55	51	52	53	55	55	60	44
<b>B. Bound Tests</b>								
B1. Real GDP growth at historical average minus one standard deviation in 2008-09	54	51	49	48	47	46	42	19
B2. Export value growth at historical average minus one standard deviation in 2008-09 3/	54	53	56	54	53	51	45	20
B3. U.S. dollar GDP deflator at historical average minus one standard deviation in 2008-09	54	57	57	56	55	54	48	22
B4. Net non-debt creating flows at historical average minus one standard deviation in 2008-09 4/	54	66	79	76	73	71	57	22
B5. Combination of B1-B4 using one-half standard deviation shocks	54	66	71	69	67	65	54	22
B6. One-time 30 percent nominal depreciation relative to the baseline in 2008 5/	54	70	67	65	64	63	57	26

Table 4. Armenia: Sensitivity Analyses for Key Indicators of Public and Publicly Guaranteed External Debt, 2007-27 (continued)  
(In percent)

	2007	2008	2009	Projections		2012	2017	2027
				2010	2011			
<b>Debt service-to-exports ratio</b>								
<b>Baseline</b>	3	3	3	2	3	3	2	3
<b>A. Alternative Scenarios</b>								
A1. Key variables at their historical averages in 2008-27 1/	3	3	3	3	2	2	2	2
A2. New public sector loans on less favorable terms in 2008-27 2/	3	3	3	3	3	3	3	5
A3. Gas import prices increase to the regional level in 2009	3	3	3	3	3	3	4	8
<b>B. Bound Tests</b>								
B1. Real GDP growth at historical average minus one standard deviation in 2008-09	3	3	3	2	3	3	3	3
B2. Export value growth at historical average minus one standard deviation in 2008-09 3/	3	3	3	3	3	3	3	4
B3. U.S. dollar GDP deflator at historical average minus one standard deviation in 2008-09	3	3	3	2	3	3	3	3
B4. Net non-debt creating flows at historical average minus one standard deviation in 2008-09 4/	3	3	3	3	3	3	5	4
B5. Combination of B1-B4 using one-half standard deviation shocks	3	3	3	3	3	3	4	4
B6. One-time 30 percent nominal depreciation relative to the baseline in 2008 5/	3	3	3	2	3	3	3	3
<b>Debt service-to-revenue ratio</b>								
<b>Baseline</b>	4	3	3	3	3	3	2	3
<b>A. Alternative Scenarios</b>								
A1. Key variables at their historical averages in 2008-27 1/	4	3	3	3	2	2	2	2
A2. New public sector loans on less favorable terms in 2008-27 2/	4	3	3	3	3	3	3	4
A3. Gas import prices increase to the regional level in 2009	4	3	3	3	3	3	4	6
<b>B. Bound Tests</b>								
B1. Real GDP growth at historical average minus one standard deviation in 2008-09	4	3	3	3	3	3	3	3
B2. Export value growth at historical average minus one standard deviation in 2008-09 3/	4	3	3	3	3	3	3	3
B3. U.S. dollar GDP deflator at historical average minus one standard deviation in 2008-09	4	3	3	3	3	3	3	3
B4. Net non-debt creating flows at historical average minus one standard deviation in 2008-09 4/	4	3	3	3	3	3	4	3
B5. Combination of B1-B4 using one-half standard deviation shocks	4	3	3	3	3	3	4	3
B6. One-time 30 percent nominal depreciation relative to the baseline in 2008 5/	4	4	4	4	4	4	4	4
<i>Memorandum item:</i>								
Grant element assumed on residual financing (i.e., financing required above baseline) 6/	24	24	24	24	24	24	24	24

Source: Staff projections and simulations.

1/ Variables include real GDP growth, growth of GDP deflator (in U.S. dollar terms), non-interest current account in percent of GDP, and non-debt creating flows.

2/ Assumes that the interest rate on new borrowing is by 2 percentage points higher than in the baseline., while grace and maturity periods are the same as in the baseline.

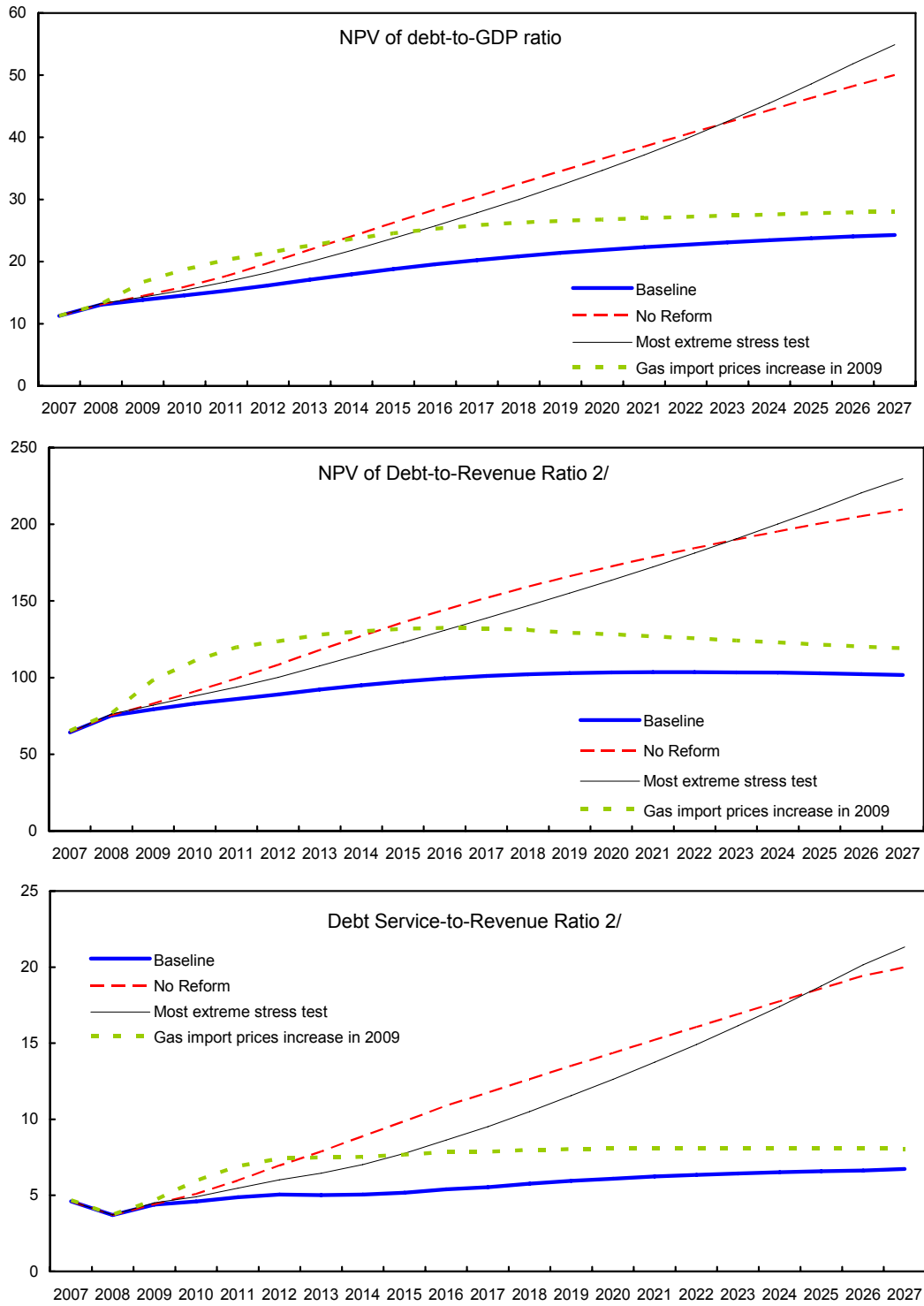
3/ Exports values are assumed to remain permanently at the lower level, but the current account as a share of GDP is assumed to return to its baseline level after the shock (implicitly assuming an offsetting adjustment in import levels).

4/ Includes official and private transfers and FDI.

5/ Depreciation is defined as percentage decline in dollar/local currency rate, such that it never exceeds 100 percent.

6/ Applies to all stress scenarios except for A2 (less favorable financing) in which the terms on all new financing are as specified in footnote 2.

Figure 2. Armenia: Indicators of Public Debt Under Alternative Scenarios, 2007-2027 1/

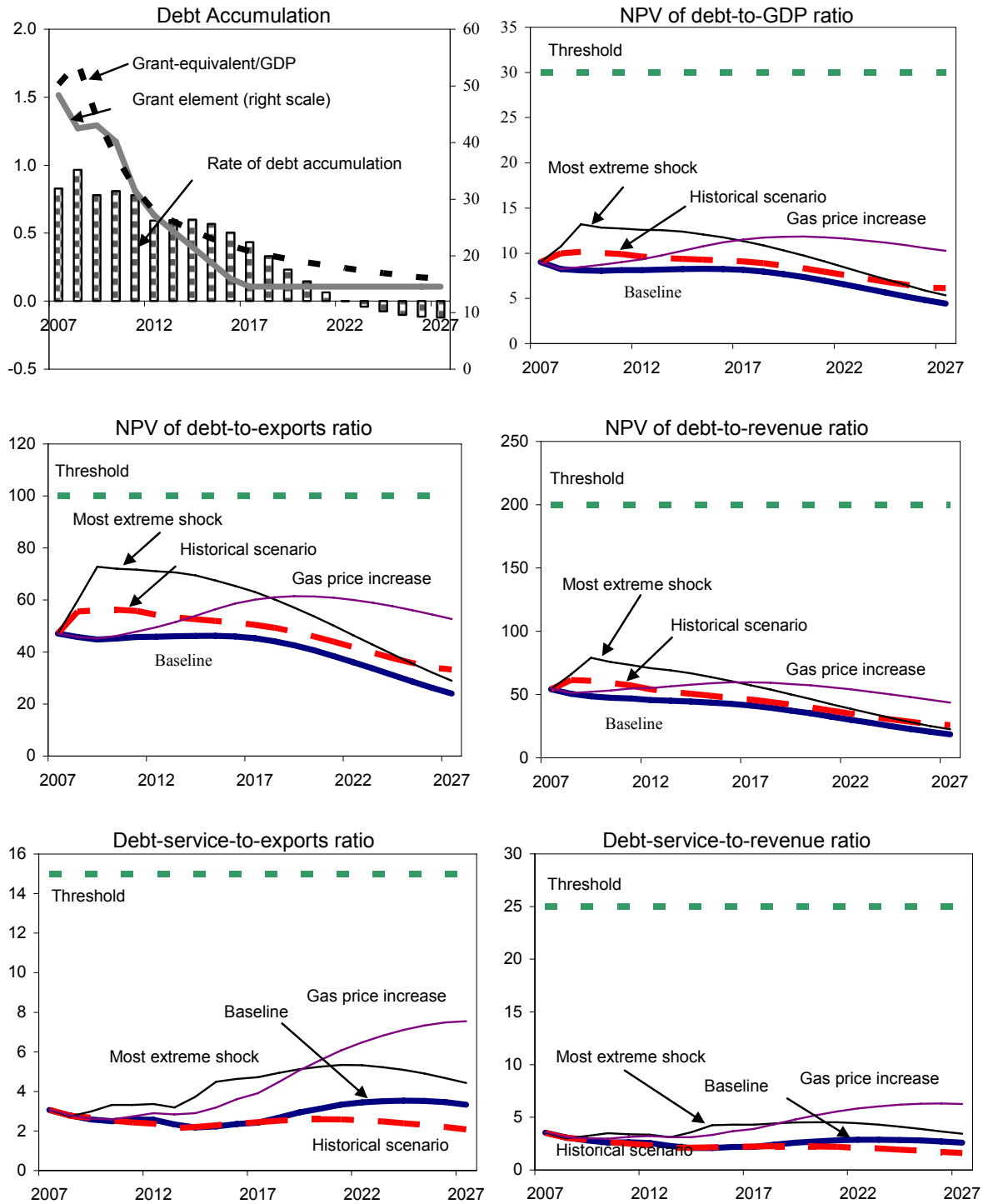


Source: Staff projections and simulations.

1/ Most extreme stress test is test that yields highest ratio in 2017.

2/ Revenue including grants.

Figure 3. Armenia: Indicators of Public and Publicly Guaranteed External Debt Under Alternative Scenarios, 2007-2027



Source: Staff projections and simulations.



Press Release No. 07/276  
FOR IMMEDIATE RELEASE  
November 26, 2007

International Monetary Fund  
Washington, D.C. 20431 USA

**IMF Executive Board Completes Fifth Review Under Armenia's PRGF Arrangement  
and Approves US\$5.2 Million Disbursement**

The Executive Board of the International Monetary Fund (IMF) has completed the fifth review of Armenia's economic performance under the three-year Poverty Reduction and Growth Facility (PRGF) arrangement (see [Press Release No. 05/123](#)). The Executive Board also approved a request for modifying the end-December 2007 structural performance criterion on the tax filing process. The completion of the review enables the release of an amount equivalent to SDR 3.28 million (about US\$5.2 million) under the arrangement, bringing the total amount drawn under the arrangement to an amount equivalent to SDR 19.68 million (about US\$31.4 million).

The PRGF is the IMF's concessional facility for low-income countries. PRGF-supported programs are based on country-owned poverty reduction strategies adopted in a participatory process involving civil society and development partners and articulated in the country's Poverty Reduction Strategy Paper. This is intended to ensure that PRGF-supported programs are consistent with a comprehensive framework for macroeconomic, structural, and social policies to foster growth and reduce poverty. PRGF loans carry an annual interest rate of 0.5 percent and are repayable over 10 years with a 5½ -year grace period on principal payments.

Following the Executive Board's discussion on Armenia, Mr. Murilo Portugal, Deputy Managing Director and Acting Chair, stated:

“Armenia continues to benefit from a double-digit rate of growth, moderate inflation, a low fiscal deficit, and a comfortable reserves position. Moreover, good progress has been made in reducing poverty. Strong remittance inflows have dampened the impact of rapidly rising imports on the current account deficit. The medium-term outlook is positive, with a favorable outlook for investment.

“Sound fiscal and monetary policies will remain key to macroeconomic stability and external competitiveness, against the background of large-scale foreign exchange inflows and rising

inflationary risks. The Central Bank of Armenia is committed to tightening monetary policy to keep inflation low, while maintaining a flexible exchange rate regime.

“Emerging expenditure pressures associated with pension reform and a potential hike in gas import prices create medium-term fiscal risks, calling for improved revenue mobilization and expenditure prioritization. Increasing the tax-to-GDP ratio in a transparent and nondiscretionary manner will be particularly important, to provide resources for the country’s infrastructure needs and efforts to reduce poverty further.

“The authorities intend to press ahead with their structural reform agenda to remove remaining bottlenecks to broad-based growth. Policies aimed at boosting domestic competition and productivity are essential to improve external competitiveness. The tax administration modernization program will contribute to reducing tax evasion and strengthening the business environment,” Mr. Portugal said.

**Statement by Yuriy G. Yakusha, Alternate Director for Republic of Armenia  
November 26, 2007**

On behalf of the authorities I would like to thank staff for their extremely helpful advice and assistance to Armenia. Since the peculiarities of the program implementation are described very well in the staff report, I will mainly focus on the recently emerged challenges and will try to present the accomplishments under the program in some perspective.

**Recent Developments**

Discussions with the authorities on the fifth review under the current three-year PRGF have allowed for a mutual understanding of the key macro parameters for 2008 as well as the measures to deal with inflationary pressures, which, unfortunately, indeed recently materialized in Armenia due to the global trend of food price increases. The authorities already took the appropriate monetary policy actions in order to prevent the reemergence of inflationary expectations and to limit second round effects. They are taking inflationary threats seriously, treating them as both economic and political challenges and as a threat to their, so far, rather successful poverty reduction efforts. The CBA has started to mop up surplus liquidity and to raise policy rates (since June) well before the acceleration of inflation in October, while the dram continued to appreciate vis-à-vis the U.S. dollar and other major currencies. The authorities are now also targeting a tighter than initially planned fiscal stance.

The accumulated nominal dram appreciation against the dollar is well above 60 percent since the appreciation begun in earnest a few years ago. The exchange-rate channel has proven to be helpful in targeting inflation, which the CBA has been doing since 2006 (an implicit inflation targeting framework was adopted, not yet a full-fledged IT). Since the start of the appreciation trend in 2004, economic growth continued to be in the double-digit territory, and inflation, as well as current account developments, remained well under control. The current account has been helped by a steady inflow of remittances that have proven to be rather resilient.

The adjustment of the economy to such an important constraint as the strengthening of the currency was helped by a vigorous structural reform. According to the Doing Business Report by the World Bank, Armenia's ranks continued to improve, and the country is currently 39<sup>th</sup> in the ease of doing business category, above some of the new EU member-countries, while in the property registration category Armenia is ranked second-best among the 178 economies. The most notable recent improvements were related to the starting and closing of businesses, access to credit, and international trade. The economy had to undergo structural changes, with some new or revived industries taking off to compensate for losses in sectors that were less successful in adjusting to the new environment. Continuing restrictions on cross-border trade imposed by two out of four neighboring countries have substantially complicated the adjustment process.

Staff correctly describes the fiscal policy as rather prudent and supportive of macroeconomic stability. Tax revenues increased by 25 percent year-on-year in the first half of 2007. The

authorities are realizing some savings creating additional fiscal space for planned pension increases that are necessary given the low level of pensions. Even after these increases, the average pension will remain well below 50 percent of the modest average wages. Pension increases will allow for the next step in overall poverty reduction and, hopefully, will contribute to eradication of the remaining extreme poverty cases (4 percent of households). The authorities remain committed to further increasing the tax-to-GDP ratio and also to saving part of any revenue overperformance, if needed, to guard against inflationary pressures.

### **Program relations with the Fund in historical perspective**

The current PRGF has been successful, as was the case with all previous Fund programs. Armenia started its program relations with the Fund in the mid 1990s, while it was in extremely bad macroeconomic shape in the aftermath of devastating earthquakes and regional conflicts, and due to the difficult systemic transformation from a central planning to a market economy.

The starting point of the cooperation was marred by hyperinflation, rampant twin deficits, and widespread poverty. The year the first Fund program was approved (1994), Armenia experienced an inflation of 28 percent (monthly!), a 16 percent budget deficit and a 35 percent current account deficit, while foreign exchange reserves were practically non-existent. Average monthly wages were under US\$10, and there were widespread interruptions of basic services, as well as a massive emigration from the country.

Today, the country is experiencing immigration, albeit still modest. In the course of the last five years the average GDP growth rate has been above 12 percent a year, the annual average inflation stood at about 3 percent and the average current account deficit was about 4 percent of GDP, which is manageable and relatively seamlessly financeable. The dollar GDP has increased by 13-fold since the start of program relations with the Fund and foreign exchange reserves are now measured in months of imports, not days or weeks.

The Fund can justifiably claim success in the case of Armenia. The authorities recently again repeated their interest in continuing program relations with the Fund. I completely share their assessment of the need to address the many remaining challenges in close cooperation with the Fund. A future program with Armenia will most likely be as successful as previous ones, and it will be as necessary as previous programs to further reduce the remaining vulnerabilities in the Armenian economy.

### **Challenges ahead**

As recently as 5 years ago Armenia was still classified by the Fund as one of the four heavily indebted poor countries in the CIS region. Now debt sustainability has been firmly established, as is convincingly shown in the joint staff debt sustainability analysis. Nevertheless, alongside most other emerging economies in the region, Armenia will likely experience a temporary worsening of the current account due to a catching up and convergence of incomes. Being a small, land-locked market located in a region that has not been without problems recently, the attractiveness of the country to large scale FDIs may remain unstable until regional conflicts are completely resolved. The expiration of tax



incentives for investors and limited possibilities for further privatization (practically everything has already been privatized) are additional challenges to be dealt with.

A more specific forthcoming external challenge is the expected adjustment of prices for imported energy and possibly, again, food prices that has to be managed with a well coordinated adjustment of the policy mix. Dealing with inflationary pressures under unstable money demand is going to be particularly challenging, especially if one takes into account the still rather low level of financial deepening in Armenia. Recently, credit growth has accelerated, but the credit-to-GDP ratio of 12 percent is still among the lowest for transition countries. Armenia can benefit from the Fund's advice and TA in the development of its domestic financial markets, which will help to establish firm monetary transmission, thus making adjustments in inflation objectives unnecessary. Foreign financial institutions have finally started to be more active in Armenia; the country may even become to some extent the regional financial center. That will bring new opportunities as well as new and unfamiliar challenges, in which case the Fund can be very helpful.

Dependence on remittances not only reflects an unfinished poverty reduction effort, but also poses a fiscal challenge as a substantial part of the economic growth has been coming from construction activities financed by such inflows, and these activities are often difficult to get into a tax net. According to the World Bank's Doing Business Report, the tax administration remains among the few problematic areas of structural reform in Armenia. Implementation of the new unified Tax Code, addressing problems with the timeliness of VAT refunds typical for many countries, and also better targeting of expenditures are additional areas where a Fund program will be helpful.

A future program with the Fund (to be negotiated after the presidential elections scheduled for next February) is not only necessary, but also appropriate because of the strong ownership by the authorities and their proven ability to deliver. Building a liberal market economic system is the cornerstone of the officially adopted national security strategy of the country. Armenia has accomplished a lot under Fund programs, but given the utterly unfavorable starting point, it can benefit from yet another program that will pave the way to a successful exit from program relations with the Fund.